

# Tri-County Water Board of Management Agenda

January 28, 2025, 7:00 p.m.

Council Chambers

160 Main Street

West Lorne

Pages

1. **Call to Order**

2. **Appoint Chair and Vice-Chair for 2025**

Recommendation:

That Tri County Water Board hereby appoint \_\_\_\_\_ as Chair,  
and \_\_\_\_\_ as Vice-Chair, for 2025.

3. **Adoption of Agenda**

Recommendation:

That Tri-County Water Board hereby adopts the Agenda for January 28, 2025  
as presented.

4. **Disclosure of Pecuniary Interest**

5. **Minutes**

1

Recommendation:

That the Tri-County Water Board hereby adopts the minutes of December 17,  
2024, as presented.

6. **Business Arising from Minutes**

7. **Staff Reports**

Recommendation:

That the Tri-County Water Board hereby accept the Tri-County Drinking Water System Operations Report, Fourth Quarter, 2024, from Sam Smith, Senior Operations Manager, Ontario Clean Water Agency, for information purposes.

**8. Adjournment**

Recommendation:

That the Tri-County Water Board hereby adjourn at \_\_\_\_\_ pm, to meet again at 7:00pm, on Tuesday, April 15, 2025, or at the Call of the Chair.

# Tri-County Water Board of Management

## Minutes

Date: December 17, 2024, 9:00 a.m.

Location: Electronic Participation Meeting via Zoom

- Present:** Allan Mayhew, Southwest Middlesex  
Mike Hentz, Dutton Dunwich  
Amarilis Drouillard, Dutton Dunwich  
Corey Pemberton, Dutton Dunwich  
Don McCallum, Southwest Middlesex  
Mike Sholdice, Southwest Middlesex  
Darren Galbraith, Chatham-Kent  
Heather Dougherty, West Elgin
- Regrets:** Taraesa Tellier, West Elgin  
Bill Denning, West Elgin  
Kevin Derbyshire, Newbury  
Ryan Statham, West Elgin  
Richard Leatham, West Elgin
- Staff Present:** Cathy Case, Clerk/Treasurer, Newbury  
Sam Smith, OCWA  
Tracey Johnson, CAO/Treasurer, Dutton Dunwich  
Terri Towstiuc, Recording Secretary/Clerk, West Elgin  
Sam Sianas, OCWA  
Magda Badura, CAO/Treasurer
- Regrets:** Dale Le Britton, OCWA  
Maegan Garber, OCWA  
Robin Trepanier, OCWA
- Also Present:** Amanda Gubbels, CAO, Southwest Middlesex  
Mack Meloche, Treasurer, Southwest Middlesex

### 1. Call to Order

Chair Corey Pemberton called the meeting to order at 9:05 am.

**2. Adoption of Agenda**

**Moved:** Mike Sholdice, Southwest Middlesex

**Seconded:** Allan Mayhew, Southwest Middlesex

That Tri-County Water Board hereby adopts the Agenda for December 17, 2024, as presented.

**Disposition: Carried**

**3. Disclosure of Pecuniary Interest**

No disclosures

**4. Minutes**

**Moved:** Darren Galbraith, Chatham-Kent

**Seconded:** Amarilis Drouillard, Dutton Dunwich

That the Tri-County Water Board hereby adopts the minutes of November 19, 2024, as presented.

**Disposition: Carried**

**5. Business Arising from Minutes**

None.

**6. Staff Reports and Items of Discussion**

**6.1 2025 Tri-County Insurance Renewal**

The board discussed insured amounts for the infrastructure and feel that it is not in line with today's dollar. The board asked for a valuation report to be brought back in the new year.

Mr. Mayhew asked about cyber insurance, which is not included on the current policy. This will be brought back for review in the year.

**Moved:** Allan Mayhew, Southwest Middlesex

**Seconded:** Amarilis Drouillard, Dutton Dunwich

That Tri-County Water Board proceed with acceptance of the insurance policy and request staff make inquiry to insurance representatives in regard to proper asset value, question cyber security insurance, and bring back to the board.

**Disposition: Carried**

## **6.2 2025 Tri-County Budget**

**Moved:** Allan Mayhew, Southwest Middlesex

**Seconded:** Mike Hentz, Dutton Dunwich

That Tri-County Water Board hereby approve the 2025 Budget and Multi-Year Forecast, as presented.

**Disposition: Carried**

## **6.3 2025 Meeting Schedule**

Quarterly meetings scheduled for January 28, April 15, July 15 and October 21. Additional budget meeting scheduled for November 18.

**Moved:** Allan Mayhew, Southwest Middlesex

**Seconded:** Darren Galbraith, Chatham-Kent

That Tri-County Water Board hereby acknowledge receipt of the 2025 Meeting Schedule.

**Disposition: Carried**

## **6.4 Appointment of Chair and Vice-Chair, 2025**

Deferred until January 2025.

## **7. Announcement - Southwest Middlesex**

Mr. Mayhew advised that Southwest Middlesex hired Watson and Associates to complete a water and wastewater rate study, which has resulted in an increase to water and wastewater rates. Mr. Mayhew is confident that the vast majority of residents will understand the rationale, to provide sustainable water distribution plan and address infrastructure.

Mr. Mayhew also advised the board that he would like to see Tri-County Water Board become a corporation in 2025, and the benefits far outweighs the disadvantages, and the board would like to see a legal opinion, to pursue this route.

**8. Adjournment**

**Moved:** Allan Mayhew, Southwest Middlesex

**Seconded:** Amarelis Drouillard, Dutton Dunwich

That the Tri-County Water Board hereby adjourn at 9:52 pm, to meet again at 7:00pm, on Tuesday, January 28, 2024, or at the Call of the Chair.

**Disposition: Carried**

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Corey Pemberton, Chair

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Terri Towstiuc, Recording Secretary



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

Tri County Drinking Water System  
Operations Report  
Fourth Quarter 2024

Ontario Clean Water Agency, Southwest Region  
Sam Smith, Sr. Operations Manager  
Date: Jan 15, 2025

## Facility Description

Facility Name: Tri-County Drinking Water System  
Regional Manager: Sam Sianas (519) 319-2233  
Sr. Operations Manager: Sam Smith (226) 377-1540  
Business Development Manager: Robin Trepanier (519) 791-2922  
Facility Type: Municipal  
Classification: Class 2 Water Distribution, Class 2 Water Treatment  
Title Holder: Municipality

## Service Information

Area(s) Serviced: West Elgin, Dutton/Dunwich, Southwest Middlesex, Newbury and Bothwell  
Population Serviced: 9,985  
No. of Connections:  
Water Meters: Commercial / Residential  
In Service Date: 2009

## Capacity Information

Total Design Capacity: 12.160 (1000 m<sup>3</sup>/day)  
Total Annual Flow: 1,381 (1000 m<sup>3</sup>/year)  
Average Day Flow: 3.770 (1000 m<sup>3</sup>/day)  
Maximum Day Flow: 5.380 (1000 m<sup>3</sup>/day)

## Operational Description

Water treatment with intake in Lake Erie, 4 low lift pumps, lifting up to the treatment plant. Membrane filtration followed by injection with Sodium Hypochlorite for primary disinfection and into the 2 Storage Tanks. Pumping to tower & distribution system with 4 high lift pumps.



## **SECTION 1: COMPLIANCE SUMMARY**

### **FIRST QUARTER:**

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

### **SECOND QUARTER:**

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

### **THIRD QUARTER:**

There were no compliance issues to report during the third quarter

### **FOURTH QUARTER:**

There were no compliance issues to report during the fourth quarter

## **SECTION 2: INSPECTIONS**

### **FIRST QUARTER:**

On January 24<sup>th</sup>, a routine inspection was conducted at the Tri-County Drinking Water System by the MECP. All follow-up questions have been answered. The report has not yet been received.

### **SECOND QUARTER:**

There were no Ministry of Environment, Conservation and Parks (MECP) or MOL inspections conducted during the second quarter however, the MECP Inspection Report and Rating were received on May 6<sup>th</sup>, 2024 for the inspection that occurred on January 24<sup>th</sup>. There were no non-compliances identified and the system received a rating of 100%.

### **THIRD QUARTER:**

There were no Ministry of Environment, Conservation and Parks (MECP) or MOL inspections conducted during the third quarter.

### **FOURTH QUARTER:**

There were no Ministry of Environment, Conservation and Parks (MECP) or MOL inspections conducted during the fourth quarter.

## **SECTION 3: QEMS UPDATE**

### **FIRST QUARTER:**

The Municipal Drinking Water License expires on July 15<sup>th</sup>, 2024. The application for the renewal was due January 15<sup>th</sup>, 2024. The application has been sent to the MECP however, the Financial Plan required updates to the meet the requirements of the regulation. Once the Tri-County Water Board has the Financial Plan updated it will be submitted to the MECP.

### **SECOND QUARTER:**

The Essential/Emergency Service and Supply Contact List was updated on April 29<sup>th</sup>, 2024. Changes were made to Client Contacts as well as OCWA Staff. The list is currently in its 36<sup>th</sup> revision.

On June 14<sup>th</sup>, 2024 the signed Municipal Drinking Water License and Drinking Water Works Permit were received from the MECP.

### **THIRD QUARTER:**

On July 24<sup>th</sup>, an internal audit was completed by Maegan Garber that outlined 16 opportunities for improvement (OFI).

On August 6<sup>th</sup> The management review was held for the system in accordance with the Operational Plan, procedure 20. On August 12<sup>th</sup> the operational plan was updated based on internal audit findings discussed during the management review.

On September 6<sup>th</sup> a desktop external audit was conducted by Intertek. There were no OFI identified.

**FOURTH QUARTER:**

On November 1<sup>st</sup> Facility Emergency Plan testing was conducted to satisfy the requirements of OP-18. CP-03 Critical Shortage of Staff was reviewed and tested.

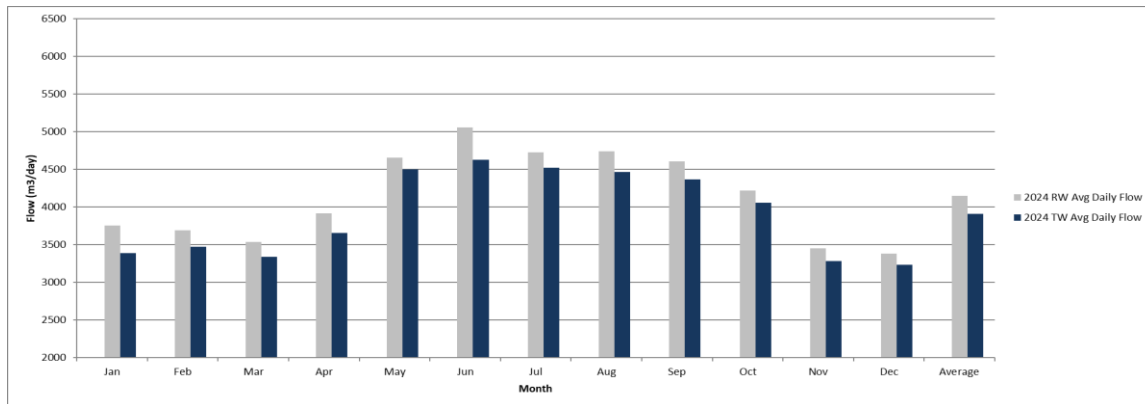
On November 7<sup>th</sup> an onsite re-accreditation audit was conducted by Intertek. The audit report identified two opportunities for improvement that will be discussed during the next Management Review which will be scheduled in August, 2025.

On December 17<sup>th</sup> two Standard Operating Procedures (SOP) for receiving and handling chlorine gas cylinders were revised and a new SOP, for shutting off the chlorine gas system at the end of the season, was created. These changes were made due to a near miss that occurred while shutting down the chlorine gas system at the end of the season.

**SECTION 4: PERFORMANCE ASSESSMENT REPORT**

The Tri-County Drinking Water System is currently operating at 94.33% efficiency with the water taken from Lake Erie that is treated and sent to the distribution systems. Chart 1 below shows the raw water takings compared to the treated water distributed to the distribution system in 2024.

Chart 1: Average daily water takings compared to treated water distributed to the distribution system.



Raw water is sampled on a weekly basis and tested for E. coli and Total coliforms as per regulatory requirements. There are no limits identified in the regulations for E. coli and total coliform found in the raw water source. Table 1 below identifies the sample results for 2024.

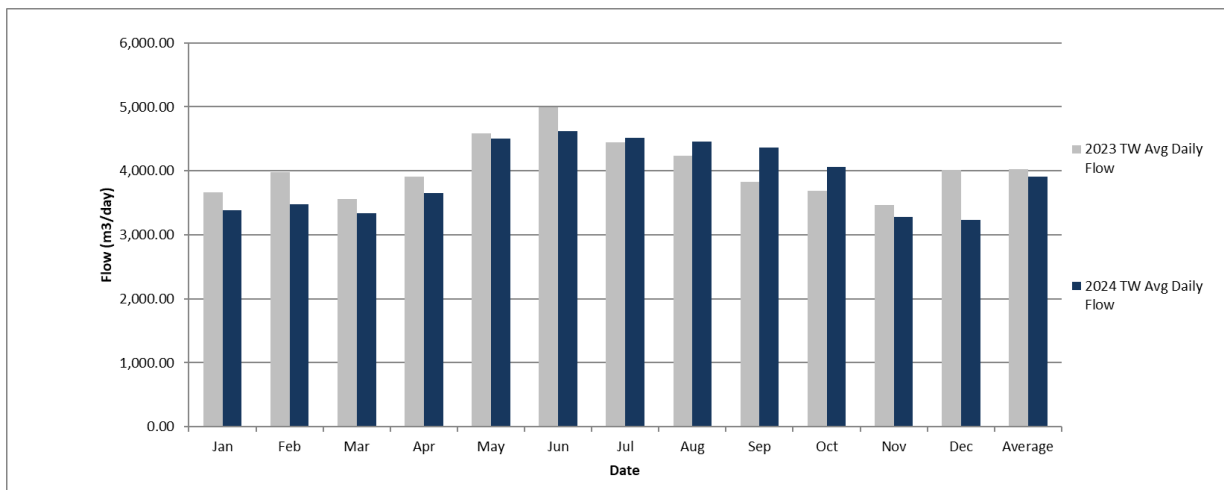
**Table 1: Raw water sample results 2024**

	# Samples	E. Coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)
January	5	<4 - <100	280 – 12400
February	4	<2 – <10	260 – 5600
March	4	<2 - <100	12 – 800
April	5	<2 - <100	26 - 520

May	4	<10 - <100	120 - 13600
June	4	<10 - <100	280 - 2800
July	5	<10 - <110	180 - 2400
August	4	30 - 240	90 - 3400
September	4	30 - 150	220 - 700
October	5	<8 - <100	28 - 1900
November	4	10 - 70	150 - 230
December	5	<2 - <100	2 - 5100

The raw water is treated through membrane filtration and chlorine disinfection. The treated water is distributed to the systems it serves through the high lift pumps. The average daily treated water sent to the distribution in 2024 was 3,908.7m<sup>3</sup>/d. The average treated water flow in the fourth quarter of 2024 is down 5.3% when compared against the average daily flow in the fourth quarter of 2023. The Tri-County Drinking Water System is currently at 32.1% of its rated capacity. Chart 2 below depicts the treated water flow for 2024 compared to 2023 average daily flows.

**Chart 2: Treated water average daily flow in 2024 compared to 2023**



To ensure inactivation of viruses, bacteria and microorganisms the membrane filtration system is required to meet performance criteria for filtered water turbidity of less than or equal to 0.1 NTU in 99% of the measurements each month. The Tri-County Water Treatment Plant has met all regulatory requirements for inactivation in 2024. Table 2 below shows the performance of each filter rack and the overall filter rack performance.

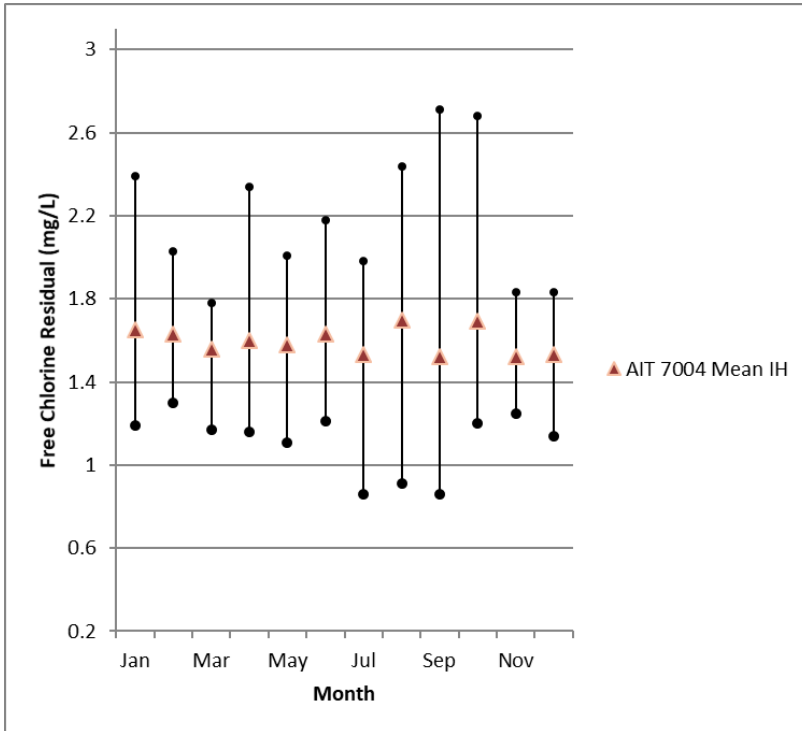
**Table 2: Filter Rack Performance in 2024**

	Rack 1 % Readings <0.1ntu	Rack 2 % Readings <0.1ntu	Rack 3 % Readings <0.1ntu	Rack 4 % Readings <0.1ntu	Overall Filter Performance (% readings <0.1ntu)
January	100.00	100.00	100.00	100.00	100.00
February	100.00	100.00	100.00	100.00	100.00
March	100.00	100.00	100.00	99.90	99.98
April	100.00	100.00	100.00	99.90	99.98

May	100.00	100.00	100.00	99.90	99.98
June	100.00	100.00	100.00	100.00	100.00
July	100.00	100.00	100.00	99.80	99.95
August	99.80	99.90	99.80	99.40	99.73
September	100.00	100.00	100.00	99.60	99.90
October	100.00	100.00	100.00	99.90	99.98
November	100.00	100.00	100.00	99.90	99.98
December	100.00	100.00	100.00	99.90	99.98

Along with turbidity, chlorine residuals are monitored throughout the treatment process by continuous online free chlorine analyzers. Residuals are maintained in order to provide adequate primary disinfection to meet inactivation of viruses, bacteria and microorganisms. The chlorine also provides adequate residuals in the distribution systems the treatment plant serves (secondary disinfection). Chart 3 below provides the online minimum, maximum and average readings of free chlorine provided to the distribution systems. All results have met regulatory requirements.

**Chart 3: Distribution System Free Chlorine Residuals**



On a weekly basis the treated water is tested for E. coli, Total Coliforms and heterotrophic plate count (HPC). The limit for Total Coliform and E. coli is zero. There is no limit specified for heterotrophic plate count (HPC) as this is an operational guide to initiate an action plan if HPC results are continuously high. Table 3 below shows the number of samples taken each month along with the range of results. All samples have met regulatory requirements.

**Table 3: Treated water sample results for 2024**

	# Samples	Total Coliform Range (cfu/100mL)	E. coli Range (cfu/100mL)	HPC (cfu/100mL)
January	5	0 - 0	0 - 0	<10 - <10
February	4	0 - 0	0 - 0	<10 - <10

March	4	0 - 0	0 - 0	<10 – <10
April	5	0 - 0	0 - 0	<10 – <10
May	4	0 - 0	0 - 0	<10 – <10
June	5	0 - 0	0 - 0	<10 – <10
July	5	0 - 0	0 - 0	<10 – <10
August	4	0 - 0	0 - 0	<10 – <10
September	4	0 - 0	0 - 0	<10 – <10
October	5	0 - 0	0 - 0	<10 – <10
November	4	0 - 0	0 - 0	<10 – <10
December	5	0 - 0	0 - 0	<10 – <10

The transmission main (distribution system) is sampled on a weekly basis at two locations for E. coli, Total Coliforms and heterotrophic plate count (HPC) to meet regulatory requirements. As with the treated water the limit for Total Coliform and E. coli is zero, heterotrophic plate count (HPC) doesn't have a limit. This is an operational guide to initiate an action plan if HPC results are continuously high. Table 4 below shows the number of samples taken each month along with the range of results.

**Table 4: Distribution system sample results for 2024**

	# Samples	Total Coliform Range (cfu/100mL)	E. coli Range (cfu/100mL)	HPC (cfu/100mL)
January	10	0 - 0	0 - 0	<10 – <10
February	8	0 - 0	0 - 0	<10 – <30
March	8	0 - 0	0 - 0	<10 – <30
April	10	0 - 0	0 - 0	<10 – <10
May	8	0 - 0	0 - 0	<10 – <10
June	8	0 - 0	0 - 0	<10 – <10
July	13	0 - 0	0 - 0	<10 – <20
August	8	0 - 0	0 - 0	<10 – <10
September	8	0 - 0	0 - 0	<10 – <10
October	10	0 - 0	0 - 0	<10 – <10
November	8	0 - 0	0 - 0	<10 – <10
December	10	0 - 0	0 - 0	<10 – <10

On a quarterly basis trihalomethanes are tested at two locations in the system. The first location is at the treatment plant prior to the water leaving the facility. The second location is at the end of the system, at the West Lorne Standpipe. Sampling from both locations provides information on how the THMs are forming in the system with retention time. There is an issue with elevated THMs in the distribution systems that the Tri-County Drinking Water System provides water to. Table 5 below provides the running average quarterly results; the running average limit for THMs is 100µg/L. All results are within regulatory requirements. However, THMs increase with increased retention time therefore THMs in the distribution system the WTP serves can be much higher, even reaching the regulatory limit.

**Table 5: Trihalomethane sampling results**

	Limit (µg/L)	Treated Water THM Result (µg/L)	West Lorne Standpipe THM Result (µg/L)
January 2024		19	32

April 2024		14	28
July 2024		26	46
October 2024		52	90
Running Average	100	27.75	49.00

On a quarterly basis Haloacetic Acids (HAAs) are tested as per regulatory requirements. They are sampled at two locations in the system. The first location is at the treatment plant prior to the water leaving the facility. The second location is at the end of the system, at the West Lorne Standpipe. Sampling from both locations provides information on how the HAAs are forming in the system with retention time. Table 6 below provides the current running average quarterly results; the running average limit for HAAs is 80µg/L. All results are within regulatory requirements.

**Table 6: Haloacetic Acid sampling results**

	Limit (µg/L)	Treated Water HAA Result (µg/L)	West Lorne Standpipe HAA Result (µg/L)
January 2024		12.4	18.6
April 2024		5.3	15.1
July 2024		8.0	25.0
October 2024		28	55.2
Running Average	80	13.43	28.48

**SECTION 5: OCCUPATIONAL HEALTH & SAFETY**

**FIRST QUARTER:**

There were no additional Health & Safety issues identified in the first quarter.

**SECOND QUARTER:**

On April 9<sup>th</sup> the annual occupational health and safety inspection was completed. There were no issues identified. There were no additional Health & Safety issues identified in the second quarter.

**THIRD QUARTER**

There were no additional health and safety issues identified in the third quarter

**FOURTH QUARTER**

On December 12<sup>th</sup> while shutting down the chlorine gas system for the winter season, an operator had chlorine gas dispersed in their face. The residual gas in the hose did not cause bodily harm but was noted as a near miss. The standard operating procedures for receiving and handling chemicals has been revised. A new SOP for shutting down the chlorine gas system at the end of the year has also been created and reviewed with all applicable staff.

**SECTION 6: GENERAL MAINTENANCE**

**FIRST QUARTER:**

**JANUARY**

- 16: Gerber Electric on-site to train staff on new procedure for generator run tests.
- 18: Ontario Compressor on-site for routine compressor servicing/inspection.
- 25: Eramosa on-site to recertify our Microsoft office product key on SCADA computer for excel.
- 29: Gerber replaced heater in the low lift. Unit is working and on.
- 31: Nevtro replaced storage tank T-6010 6" drain valve.

## FEBRUARY

- 19: Installed new actuator on flow control valve-3301 due to it failing multiple times over the weekend.
- 26: While investigating valve 3315 it appears that when the valve is open it takes a while for the system to recognize it's open and sending out an error signal. Replaced actuator position sensor with spare.
- 27: Gerber on-site to look at faulting drain pump and install new heater in low lift building and chlorine gas building.

## MARCH

- 4: SCG Flowmetrix on-site for annual flow meter calibration and verifications.
- 5: SCG Flowmetrix on-site for annual flow meter calibration and verifications.
- 6: SCG Flowmetrix on-site for annual flow meter calibration and verifications.
- 11: Nevtro on-site to take Process drain pump 9010 out for inspection and possible replacement.
- 11: Martins Lift Truck on-site for annual forklift inspection and service.
- 12: Watech on-site at standpipe for graffiti removal.
- 21: Martins Lift Truck on-site to service forklift.
- 27: Southwest Mechanical on-site at standpipe to repair leaking copper line for pressure sensor.
- 28: Gerber on-site for quarterly HVAC inspection.

## **SECOND QUARTER:**

### APRIL

- 3: Courtney from Eramosa onsite, confirmed standpipe PLC Is no longer functioning.
- 3: Courtney from Eramosa onsite to fix programming issue with high lift pumps not running in pressure mode as we cannot see level due to PLC failure.
- 5: Brian from Gerber onsite for PLC upgrades at Standpipe.
- 5: Eramosa onsite for PLC upgrades at Standpipe.
- 8: Gerber onsite to investigate issue with Low Lift generator randomly turning on and not shutting down.
- 8: Alberts generator onsite, Alberts found chewed wire ribbons in the control box of the generator and thinks this is the possible issue. Alberts will get us a quote on new ribbons.
- 9: Courtney from Eramosa onsite to fix issue with Standpipe data trending not showing.
- 9: Courtney from Eramosa investigated Silver Clay comm loss and found controller had lost comms causing it to lose its code, Courtney reprogrammed code.
- 11: Ontario Compressor onsite for routine compressor servicing/inspection.
- 16: Southwest mechanical onsite for barbed wire fence installation.
- 24: Southwest mechanical onsite to repair leaking line on altitude valve in Standpipe

### MAY

- 8: Alberts generator onsite to fix wiring issue with low lift generator.
- 10: Southwest Mechanical onsite to look at blower exhaust fan for low lift chlorine building.
- 28: Nevtro on-site for pre work before high lift header replacement.
- 28: SCG Flowmetrix onsite to trouble shoot storage tank level transducer issue. Had to reprogram T-6010 milltronics.
- 29: Martins lift truck on-site to inspect issue with forklift.
- 30: Martins delivered rental forklift and took ours to their shop to inspect.

## JUNE

- 3: Took SCBA tank and masks to Levitt Safety for inspection/certification.
- 6: Nevtro onsite to replace high lift header piping.
- 7: Miller dropped off large dumpster bin for next week's rack removal.
- 11: Aria Filter onsite to guide OCWA team with replacing rack 2 filter modules.
- 12: Aria Filter onsite to guide OCWA team with replacing rack 2 filter modules.
- 13: Aria Filter onsite to help finish with rack 2 filter module replacement.
- 19: Stephan from Gerber electric onsite to troubleshoot issue with UV MCP power issue. Gerber found no issue. Eramosa called in to troubleshoot issue. They made an edit to the programming to bypass issue of UV inlet and outlet motive valves not showing open and let the plant start running.
- 20: Gerber and Eramosa back onsite to troubleshoot UV MCP/UV inlet & outlet valves issue. Found a failed PLC card and Eramosa will order a new one.
- 21: Courtney from Eramosa onsite to replace faulty PLC card. Replaced card and reverted programming edits made on June 19.
- 26: SCG onsite for flow meter calibrations.
- 27: SCG onsite for flow meter calibrations.

## **THIRD QUARTER:**

### JULY

- 2: Trojan onsite for annual UV servicing.
- 8: Gerber electric onsite to remove chlorine analyzer AIT-2003 in preparation for new CI-17 analyzer to be installed.
- 8: Gerber electric onsite to help trouble shoot issue with high lift rotork valves not opening.
- 10: Gerber onsite to disconnect AIT-2006 turbidimeter and move it to a different location to make more room for the CI-17 analyzer filters
- 12: Mani from Eramosa onsite for CL-17 upgrades on SCADA
- 16: Keith Douglas onsite for annual backflow preventer inspections.
- 16: Gerber onsite to install signal wire for new CL17 analyzer by the raw strainers to connect to SCADA.
- 17: Waddick fuels delivered 3029.1L of diesel to the WTP generator
- 18: Lavo onsite for bulk CI delivery.
- 23: Greatario onsite for ROV inspections on the treated storage tanks
- 24: Greatario starting ROV inspection at standpipe.

### AUGUST

- 8: Alberts generator onsite for low lift and WTP generator inspection.
- 13: Ontario compressor onsite for servicing
- 23: Gerbers onsite to inspect issue with UV 1 having no power, replaced the relay
- 29: Gerbers on-site to inspect faulty wire/no power to UV 1, replaced the relay

### SEPTEMBER

- 25: Gerbers onsite to replace lowlift exhaust fan.

## **FOURTH QUARTER:**

### OCTOBER

- 03: Gerbers onsite for quarterly inspection.
- 04: Chubb onsite to inspect fire alarms.
- 07: Received bulk liquid chlorine delivery from Lavo.
- 16: Elgin Fire on site for extinguisher inspection.
- 16: As per SOM, shut down UV AOP system and peroxide.



- 22: Received chemical tote delivery from Univar.
- 22: Received chlorine gas delivery from Brenntag.
- 29: Replaced faulty pH probe at low lift sample line.
- 31: Ontario Compressor on site for routine maintenance.

#### NOVEMBER

- 7: SAI/Intertek onsite for audit, Hetek onsite for sensor calibrations
- 12: Elgin Fire on site to fix exit signs
- 19: Syntech on site to look at SRV1037
- 26: Eramosa onsite to reprogram silver clay meter chamber PLC

#### DECEMBER

- 6: Ontario compressor onsite to trouble shoot why they were going into high temp
- 18: Gerber electric onsite to replace light bulbs and adjust an exhaust fan

### SECTION 7: ALARM SUMMARY

#### FIRST QUARTER:

##### JANUARY

- 19: Alarm call for Rack 1 HIHI turbidity shut down. Operator arrived on-site and found unit reading okay. Likely due to debris coming loose following an air scrub on rack.
- 23: Alarm call for storage tank T-6020 LOLO. Due to suspected fog causing false low reading on milltronics.
- 30: Alarm call for Rodney Tower HIHI Cl. Operator reviewed remotely and saw Cl reading was coming down. Continued to monitor and Cl returned to normal readings.

##### FEBRUARY

- 2: Received call from spectrums for suction header chlorine fault, verified analyzer is reading correctly and increased cl dosage set point from 1.85 to 2.00.
- 4: Received alarm from spectrums for Rodney tower fault. Arrived on-site and found Rodney tower Cl holding a max value of 4.90 and had a signal error alarm active. The system suddenly got connection again and all alarms cleared had SWM operator go to site to verify.
- 17: Received alarm for PALL system critical failure. Alarm is for too few racks due to rack 2 disabling from high high pressure because of Rack 2 inlet flow control valve-3201 smart positioner failing. Replaced pilot system on smart positioner.
- 18: Received alarm for PALL system critical failure. Alarm is for too few racks due to rack 3 disabling from high high pressure because of Rack 3 inlet valve flow control valve-3301 smart positioner failing. Performed calibration on rack #3 flow control valve-3301 smart positioner.
- 26: Received alarm from spectrums for PALL system critical failure. Found that Clean in Place return valve 3315 had failed, placed rack into manual and exercised valve multiple times. Placed valve back into auto and appears to be running normally, will monitor throughout the day.

##### MARCH

- 1: Received alarm call for filtrate storage tank fault. Two low lift pumps now running and keeping up with demand.
- 2: Received alarm call for filtrate storage tank fault. Confirmed with SOP, changed tank 6010 LO set point from 7-6.4.
- 9: Received alarm call from Spectrum for All Systems Critical Failure. Observed a suspected PLC glitch that disabled the rack, placed back in duty and rack now on and running.
- 23: Received alarm for PALL critical failure rack 3 had disabled due to high pressure, put rack in manual and

opened vent valve which brought pressure down, cleared alarms, placing rack back into forward flow.  
30: Received alarm from spectrums for pall system critical failure. Adjusted actuator sensor and rack now running fine.

## **SECOND QUARTER:**

### APRIL

13: Received call from spectrums for pall critical process failure. Logged onto SCADA found PALL system disabled air compressor 1 and 2 faulted. Suspected power flicker due to strong winds in area, cleared alarms and reset air compressors and was able to put plant back online.

### MAY

20: Received alarm call for caustic containment high level. Found onsite small drip leak. Cleaned up spill in sump and laid out absorbent pad.  
20: Received alarm call for power flicker. Arrived onsite for inspection and cleared faulted equipment.  
24: Received alarm call due to CP-2000 UPS failure. Replaced with spare until new batteries can be ordered.  
25: Received alarm call for duty storage tank T-6010 fault. Reading was incorrect due to programming issue. Placed T-6020 milltronics reading in duty and will discuss with programmers on Monday.  
28: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment.  
29: Received alarm call for too few racks due to Rack 3 shut down caused by valve V-3302 failure. Changed air card with used spare and issue resolved.  
31: Received alarm call for duty storage tank LO level. Found duty 2 low lift pump did not start when commanded likely due to PLC glitch. Reset commands and duty 2 started and plant is catching up.

### JUNE

2: Received alarm call for too few racks due to Rack 3 shut down caused by HIFI feed and filtrate pressure. Decreased low lift pump VFD speeds down from 95 to 90%. Increased rack inlet valve % open during raw strainer backwash.  
4: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment.  
16: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment.  
17: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment. Power flickered several more times while onsite. Discussed with ORO and turned on generator for the night to prevent hard shutdowns on equipment.  
18: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment.  
18: Received alarm call for power flicker. Arrived onsite and reset faulted out equipment. Discussed with ORO and switched to generator power for a few hours before switching back to utility power.  
24: Received alarm call for too few racks. Arrived onsite and found racks 1 and 2 filtrate turbidimeters were faulted and in error mode. Reset comms connection to units and readings returned to normal.  
25: Received alarm call for too few racks due to Rack 3 being in idle due to air scrub watchdog timer, caused by raw strainers constantly going through backwash. Removed basket from strainer STR-2010 for night. Daytime operators will have to clean all strainer baskets in morning.

## **THIRD QUARTER:**

### JULY

03: Received call from spectrums for main generator running  
07: received call from spectrums for main generator running.  
08: Received alarm call for main generator running  
11: Received alarm call from spectrum for strainer inlet fault, Logged on remotely and saw that a power flicker had occurred

- 12: Received alarm call for strainer inlet fault, suspected power flicker. logged on remotely and saw that a power flicker occurred
- 12: Received alarm call for power flicker, will go to site and switch to generator until high usage is done. Arrived on-site, had to reset high lift pump 2
- 13: Received alarm call from spectrum for Rodney tower comms fail, notified West Elgin Oncall operator. Rodney tower comms fail likely due to internet outage in area.
- 13: Received alarm call for generator running, high lift pump is faulted, cannot clear remotely, heading to site
- 13: Received alarm call for Rodney tower chlorine alarm, logged on remotely and saw CL level was coming out of LO level, no longer in alarm
- 14: Received alarm call for main generator running
- 15: Received call from spectrums for main generator running
- 16: Received alarm for high lift pump fault, logged on remotely and appeared to have been a power flicker. Will need to go to site to reset pump.
- 30: Received alarm call for main generator running, will head to site, Received call for West Lorne and Wallacetown standpipe comms fail, Arrived on-site, found generator is now off and back to utility power, had to reset all system modes as PALL system is down, will bring back online and start to filter water.
- 31: Received alarm call from spectrum for main generator running, Logged on remotely and nothing appeared to be faulted, generator is now off and back on utility power.

## AUGUST

- 1: Received alarm call for main generator running and for West Lorne and Wallacetown standpipe comms fail due to power flicker, received another call for main generator running, went to site and reset faulted out equipment
- 2: Received alarm call for West Lorne and Wallacetown tower comms fault and main generator running due to power flickers, went to site and reset faulted out equipment
- 3: Received multiple calls for main generator running due to power flicker, went to site to reset faulted equipment. Received call for Rodney tower LO chlorine alarm, will notify West Elgin Oncall operator
- 4: Received multiple alarm calls for main generator running due to power flicker, went to site to reset faulted equipment.
- 5: Received multiple calls for main generator running, went to site to reset faulted equipment, received alarm call for standpipe comms fail, now normal
- 11: Received alarm call for Rodney tower chlorine alarm, will notify SWM operator, received alarm for LOLO DO signaling the start of the yellow water event.
- 12: Received alarm from spectrums for distribution turbidity analyzer hi.
- 13: Received alarm for high distribution turbidity AIT-7003, received alarm for PALL critical process alarm, due to yellow water.
- 14: Received call from spectrums for pall system critical failure and main generator running, due to yellow water and power flicker.
- 15: Received call from spectrums for pall system critical failure and main generator running, due to yellow water and power flicker
- 16: Received call from spectrums for surge relive valve stuck open and filtrate storage tank fault, went to site and reset faulted equipment
- 17: Received alarm from spectrums for UV#1 fault, went to site and tried cycling power, received two calls from spectrums for Rodney tower chlorine alarm. notified SWM on call operator.
- 18: Received call from spectrums for Pall system critical process alarm due to high differential strainer pressure, executed super backwashes.
- 22: Received call from spectrums PALL systems critical failure, due to high differential strainer pressure, executed super backwashes.
- 23: Received alarm call for PALL critical failure, Found PALL system and shut down due to high strainer differential pressure, had to reset system modes and bring low lift back online.

- 25: Received alarm call for main generator running due to power flicker, went to site and reset faulted transfer switch
- 26: Received alarm call for main generator running, bulb 5 needs to be replaced in UV 2, UV1 screen is in a grey state not responding. Spoke with SOM, as per SOP WTP-50, shut down AOP system.
- 27: Received two alarm calls for main generator running due to power flickers, went to site and reset faulted equipment.
- 30: Received alarm call for storage tank fault, changed Duty for UV. Received call for generator running due to power flicker
- 31: Received multiple generator running alarm calls, went to site to reset faulted equipment

#### SEPTEMBER

- 1: Received call for UV 1 fault, possible power flicker
- 7: Received call for high lift fault, power flicker. Received call for Rodney tower fault, MV-7011 stuck open, reset it.
- 12: Received call for AIT- 7001 hihi chlorine, tested with handheld and calibrated down from 2.52 to 1.90.
- 14: Received call for generator running, logged on plant was back on utility power, reset MV-7021 and UV.
- 17: Received call for UV2 reactor faulted, logged on and noticed a power flicker had occurred and faulted a couple pumps, went to site and reset them.
- 21: Received call for main generator running, went to site to reset faulted equipment. Received another call for main generator running, reset remotely. Received call for Rodney tower high level, remotely halted highlift.

#### **FOURTH QUARTER:**

#### OCTOBER

- 13: Received call from spectrums for UV 1 fault. Arrived onsite found both UVs faulted. UV 1 appeared to have lost connection to PLC from loose wires in the control panel, unplugged the wires and reconnected them was then able to get UV 1 up and running. Disabled dialer alarm 25 for UV 2. Leaving UV 1 in duty and will work on getting tech out to look at UV 2 during the week.
- 21: Received alarm call for low lift chlorine gas alarm shut off tank 1 and switched to tank 2 in case source of any possible leak, leaving fan on until morning
- 28: Received call for chlorine gas alarm due to cylinder leak, ventilated building and changed tank

#### NOVEMBER

- 10: Received call from Spectrum at for Low Lift Intrusion, door blew open
- 12: Received call for surge relief valve 1037 stuck open, pressure settings need to be adjusted
- 17: Received call for surge relief valve 1037 stuck open, pressure settings need to be adjusted
- 18: Received call for surge relief valve 1037 stuck open, pressure settings need to be adjusted
- 18: Received call from spectrums for high high cl on low lift analyzer, time delay mistake
- 26: Received alarm call for high lift pump fault due to power outage

#### DECEMBER

- 5: Received call generator running, Pall all systems critical failure, compressors over heating
- 7: LIT-9001 loss of echo PDP-9020 faulted, went to site and reset equipment
- 15: Received Call for pall critical process alarm, high strainer differential pressure, performed super backwashes on strainers
- 18: Received call for discharge analyzer fault, high turbidity 7003
- 29: received call for inlet valve fault

#### **SECTION 8: COMMUNITY COMPLAINTS & CONCERNS**

**FIRST QUARTER:**

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

**SECOND QUARTER:**

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

**THIRD QUARTER:**

Multiple complaints received August 12 for coloured water, sodium permanganate system was started, standpipe and storage tanks were flushed.

**FOURTH QUARTER:**

On October 30<sup>th</sup> Received call from Ryan from Dutton about complaints of low pressure in the area they are working after valves were closed. After discussing with ORO, shut down Wallcetown train and opened bypass valves on high lift. There were no other complaints or concerns reported in the fourth quarter.