

The Township of McGarry Water and Wastewater Systems Quarterly Operations Report

April 1 to June 30, 2026

SUBMITTED BY

Ontario Clean Water Agency
15 Government Road East
Kirkland Lake, ON P2N 3J5

August 18, 2026 Rev. 0

Prepared by the Ontario Clean Water Agency

Table of Contents

1	Introduction	1
2	Regulatory Compliance	1
2.1	Summary of Reportable Events	1
2.1.1	Drinking Water Systems	1
2.1.2	Wastewater Systems	2
2.2	Third Party Inspections/Audits and Findings	3
2.3	Quality and Environmental Management System (QEMS)	4
3	Monitoring Program.....	5
3.1	Monitoring Data.....	5
3.2	Flows	5
3.2.1	Virginiatown-Kearns Water Treatment Plant (Tower Flows)	5
3.2.2	McGarry Lagoon.....	6
4	Asset Management	7
5	Capital & Major Maintenance Projects.....	7
6	Call-out Summary.....	7
7	Complaints.....	8
8	Health and Safety.....	8
8.1	Incidents.....	8
8.2	Workplace Inspections.....	8
8.3	Training	8

Appendix A: Quarterly Data Reports

Appendix B: Summary of Call-outs

1 Introduction

The Quarterly Operations Report summarizes regulatory compliance, quality management and system monitoring information. It provides a list of completed capital and major work projects, a total of minor capital expenditures accrued during the second quarter and any call-outs that occurred after hours. It also includes complaints received and Health and Safety activities that occurred during the quarter.

2 Regulatory Compliance

2.1 Summary of Reportable Events

2.1.1 Drinking Water Systems

There were no reportable incidents or Adverse Water Quality Incidents (AWQIs) during Q2 2026.

Facility	Date	AWQI/Event No.	Event/Non-compliance	Corrective Action
Virginiatown DWS	May 17	172533	There was a power outage in town from 8:57 pm. to 10:02 pm. on May 16, 2026. During this period, all backup generators(well house pump) were operational except for the generator at the tower (didn't started automatically), which resulted in no data being recorded for that location. The chlorine residual level at the tower chlorine analyzer was 1.32 mg/L at 8:57 pm. and 1.17 mg/L at 10:02 pm. The plant continued to operate normally throughout the event, with no new water introduced into the system. Consequently, there was no loss of pressure and no additional impacts to the system were observed.	No Samples were required by the Health Unit. The generator settings were fixed and configured to automatic mode. Additionally, UPS Battery was also changed just for greater accuracy and specificity.
Virginiatown DWS	June 29	1 – 9JRF5C	Upon Startup of the Well #1 (DUTY) the flow was in excess of the MAX 1460 L/min. The flow ran from 22:22 on June 27 th till 10:06 on June 28 th (off and on) above the MAX before	At 10:06 on June 28 th was successful at reducing the #1well flow below 1420

Facility	Date	AWQI/Event No.	Event/Non-compliance	Corrective Action
			able to decrease the flow. This exceedance was related to mechanical issue of surge anticipation of valve caused excess water consumption.	L/min. Install a pressure relief valve on the blow offline and return back to normal operations

2.1.2 Wastewater Systems

The following events were reported during Q2 2026:

Facility	Date	MECP Event No.	Event/Non-Compliance	Corrective Action
McGarry Lagoon	April 16, 2026 – April 21, 2026	1-QJ509D	Rain and snowmelt causing overflow at Sewage Pumping Station	Chlorinated and sampled, monitored until terminated
McGarry Lagoon	April 16, 2026 – April 21, 2026	1-QL340C	Snow melt causing Overflow at Sewage Pumping Station	Chlorinated and sampled, monitored until terminated
McGarry Lagoon	April, 2026	1-2N5AXM	TAN Results (mg/L): April 2 = 6.09, April 9 = 5.4, April 16 = 2.09, April 23 = 1.08, April 30 = 0.33. TAN Average monthly Loading Results: April 2026 = 8.57 kg/d, [(TAN Average)*(Monthly Average Effluent discharge)/1000 = Tan Loading] [2.9	Alum dosages have been monitored closely and have been adjusted as necessary to optimize the treatment performance.

Facility	Date	MECP Event No.	Event/Non-Compliance	Corrective Action
			(mg/L)*2955 (m ³ /d)/1000 = 8.57 kg/d]	
			TP Results: April 2 = 0.53, April 9 = 0.406, April 16 = 0.18, April 23 = 0.195, April 30 = 0.225,	
			TP Average monthly Loading Results: April 2026 = 0.907kg/d, [(TP Average)*(Monthly Average Effluent discharge)/1000 = TP Loading] [0.307 (mg/L)*2955 (m ³ /d)/1000 = 0.907 kg/d]	
			The elevated concentrations are attributed to reduced lagoon treatment efficiency resulting from cold weather conditions and ice accumulation over the lagoon cells.	

2.2 Third Party Inspections/Audits and Findings

An external surveillance audit was conducted by Intertek – SAI Global on June 22, 2026. The objective of the audit was to determine whether the Drinking Water Quality Management System (DWQMS) of the Virginiatown/Kearns Drinking Water System conforms to the requirements of the Ontario Ministry of the Environment, Conservation and Parks (MECP) Drinking Water Quality Management Standard (DWQMS V2).

There were no non-conformances identified during the audit. There were, however, two (2) opportunities for improvement (OFIs) identified:

1. Element 5 Document and Records Control – There is an opportunity to:

- ensure document control (e.g., include OP-03A SPCM OP endorsement date to ensure traceability, date [North] Virginiatown and Kearns Distribution Maps, and update OP-09A consistent with OP-09 Asset Management Specialist and Capital Manager additions).
- minimise duplication by stating requirement once and referencing original location, e.g.:

- a. removing QMS Policy text from OP-02 as link to Policy (and associated issue and revision dates) is already there (also ensures revision control).
- b. eliminating OP-08 as the same information is already available in OP-07 and OP-08A Summary of Risk Assessment Outcomes.
- c. removing Top Management roles from OP-03 and OP-20 and referencing OP-09.
- d. removing QMS Policy hardcopy location from OP-12 (i.e., Kirkland Lake Wastewater Treatment Plant and Process and Compliance Office) and referencing OP-05A.
- e. removing Management Review standing agenda items from OP-20 as the inputs are already in the Minutes.

2. Element 21 Continual Improvement – There is an opportunity to ensure, within the Virginiatown-Kearns (McGarry) Drinking Water System - 2025 Summary of Findings:

- i. all findings are documented and addressed (e.g., 2025 System Audit Elements 1 and 16 OFIs; 2025 Internal Audit repeat), and
- ii. overdue actions are addressed (e.g., 2025 Reaccreditation Audit Elements 9 and 14 OFIs).

All OFIs have been added to the system's Summary of Findings and will be reviewed and updated during the next revision of the procedure.

2.3 Quality and Environmental Management System (QEMS)

All QEMS requirements were maintained during the quarter. The Operational Plan was updated on June 4, 2026, with several procedures revised. Details of the revisions are documented in the revision history of each procedure. The updated Plan was submitted to the Owner

2.4 Reporting

A summary of regulatory reports submitted by OCWA on behalf of the township are listed in the tables below.

Water System Reports	Submission Frequency	Submitted to	Submission Date
2025 Annual/Summary Reports for: - Virginiatown DWS	By February 28 th of each year	MECP & Owner	February 27 th , 2026

Sewage System Reports	Submission Frequency	Submitted to	Submission Date
2025 Annual Performance Reports for: -McGarry Lagoon Including necessary updates to capture reporting requirements in CLI ECA 280-W601.	By March 31 st of each year	MECP & Owner	March 30 th , 2026

3 Monitoring Program

3.1 Monitoring Data

Drinking water sampling and testing required by Ontario Regulation 170/03 was completed this quarter and all results complied with their regulatory limits.

Wastewater sampling and testing required by the systems' Environmental Compliance Approvals and the Wastewater Systems Effluent Regulation was completed this quarter. Three (3) non-compliances were reported during the quarter,

Two of them due to the heavy rain and snowmelt caused Overflow at Sewage Pumping Station which was then monitored and terminated.

One (1) non-compliance was reported to the MECP for the McGarry Lagoon. An effluent TAN & TP Loading exceedance occurred during the Spring. Refer to Section 2 – *Regulatory Compliance* for details.

Refer to Appendix A for Quarterly Data Reports and Graphs.

3.2 Flows

3.2.1 Virginiatown-Kearns Water Treatment Plant (Tower Flows)

Month (2026)	Total Raw Flow (m ³)	Total Treated Flow (m ³)	Average Daily Treated Flow (m ³)	Maximum Treated Flow (m ³)
April	13040	12861	429	719
May	12836	12615	407	606
June	12184	11421	381	450
Compliance	-	-	-	2,045

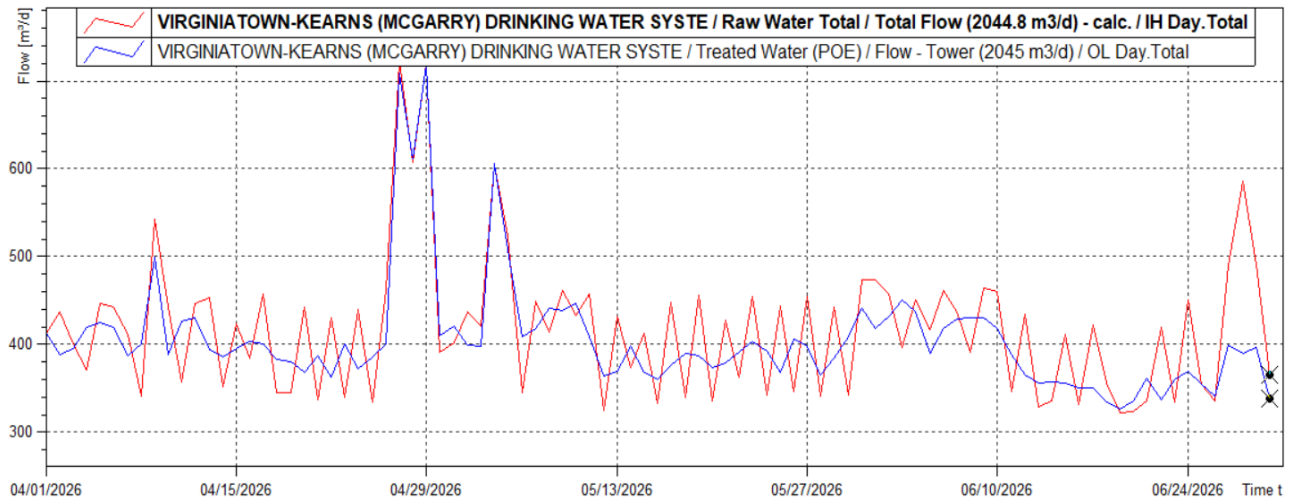


Figure 1: Virginiatown-Kearns WTP – Raw Water vs Treated Water Flow (April to June 2026)

3.2.2 McGarry Lagoon

Month (2026)	Total Effluent Flow (m³)	Total Influent Flow (m³)	Maximum Influent Flow (m³/d)	Average Daily Influent Flow (m³/d)
April	88663	90634	8281	3021
May	57946	58110	3561	1874
June	24802	25235	1082	841

Notes:

1. There is no effluent flow meter within the plant. As a result, effluent flows are assumed equal to the influent flows.
2. Average and Maximum Daily Flows were exceeded in April due to heavy snow melt. It is important to note that average daily flows are based on an annual average, which will naturally return to normal operating levels as the year continues.

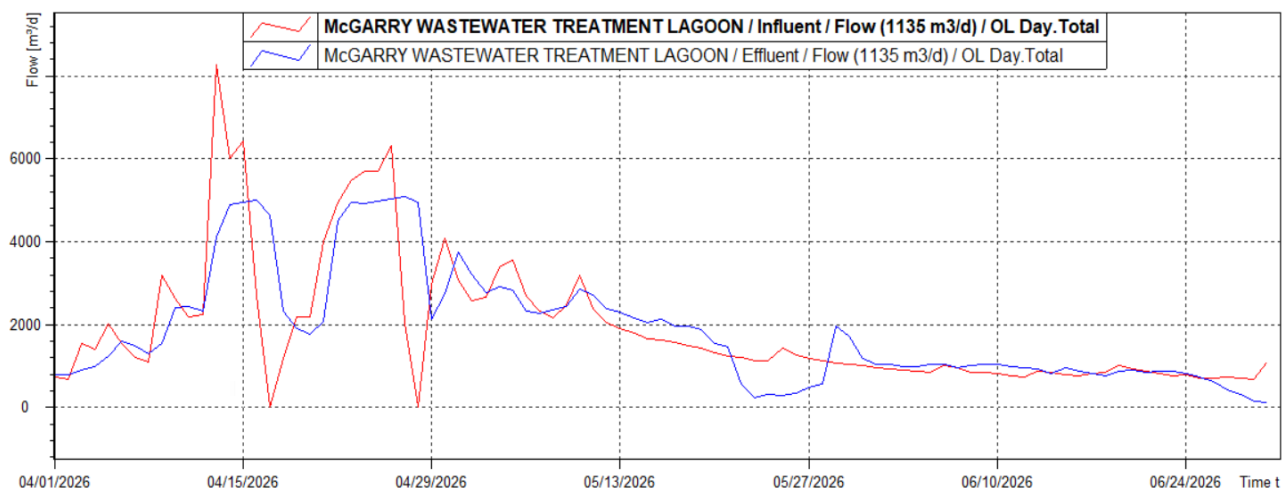


Figure 2: McGarry Lagoon – Influent Flows vs Effluent Flows (April to June 2026)

4 Asset Management

Preventative maintenance and equipment calibrations are scheduled, assigned and tracked using OCWA's Workplace Management System (Maximo). All monthly and quarterly work orders scheduled for this quarter were completed.

Corrective and emergency maintenance are also managed using Maximo. A summary of emergency and corrective work orders along with detailed maintenance reports can be made available upon request.

5 Capital & Major Maintenance Projects

The Capital Letter, which outlines the recommended capital and major maintenance projects for 2026, was submitted to the Owner in December 2025. In accordance with the system's Quality and Environmental Management System (QEMS), the Owner is required to review and formally approve or reject the proposed projects identified in the letter. The current status of capital projects and major maintenance activities for this quarter of 2026 is available through consultation with OCWA's Senior Operations Manager.

6 Call-out Summary

Number of Call-outs this Quarter:	1
Total Call-outs to Date (2026):	1
Annual Call-out Allowance:	8
Details of the Call-outs:	Refer to Appendix A for a call-out summary.

*Note: Not all callouts are billed to the Owner; depends on the nature of the call.
Refer to Appendix B for a detailed after-hour callback summary.

7 Complaints

There were no complaints received in the second quarter of 2026.

8 Health and Safety

8.1 Incidents

Number of Health and Safety Incidents reported this quarter = 0

8.2 Workplace Inspections

All inspections were completed and the following actions were recommended.

8.3 Training

Health and Safety training sessions completed this quarter include:

- April – Working Alone Requirements
- May – Ladder Safety
- June – Summer Safety on the Job



APPENDIX A

Quarterly Data Reports

Virginiatown-Kearns Drinking Water System		April	May	June	Compliance
Flows					
Total Raw Flow - Max. Daily Volume	m ³ /d	723	605	586	Max. = 2044.8
Well 1 Flow - Maximum Daily Volume	m ³ /d	720	605	584	Max. = 2044.8
Well 1 Flow - Maximum Flow Rate	L/min	1612	1660	2544	Max. = 1420
Well 2 Flow - Maximum Daily Volume	m ³ /d	117	120	107	Max. = 1500
Well 2 Flow - Maximum Flow Rate	L/min	1077	1264	1080	Max. = 1105
Tower Flow - Maximum Daily Volume	m ³ /d	719	606	450	Max. = 2045
Raw Water					
Well 1 Total Coliforms - Maximum	c/100mL	0	0	0	N/A
Well 1 <i>E.coli</i> - Maximum	c/100mL	0	0	0	N/A
Well 2 Total Coliforms - Maximum	c/100mL	0	0	0	N/A
Well 2 <i>E.coli</i> - Maximum	c/100mL	0	0	0	N/A
Well 1 Turbidity - Maximum	NTU	0.29	0.22	1.29	N/A
Well 2 Turbidity - Maximum	NTU	0.90	0.85	1.46	N/A
Treated Water					
Free Chlorine Residual - Minimum	mg/L	1.29	1.41	1.36	Min. = 0.10 (CT) ¹
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
<i>E. coli</i> - Maximum	c/100mL	0	0	0	Max. = 0
Nitrate	mg/L	<0.10	-	-	Max. = 10
Nitrite	mg/L	<0.01	-	-	Max. = 1
Distribution Water					
Free Chlorine Residual - Minimum	mg/L	0.80	0.99	0.75	Min. = 0.05
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
<i>E. coli</i> - Maximum	c/100mL	0	0	0	Max. = 0
Trihalomethanes (THMs)	µg/L	1.90	-	-	N/A
Running average	ug/L	3.1	-	-	Max. = 100 µg/L ²
Haloacetic Acids (HAAs)	µg/L	10	-	-	N/A
Running average	ug/L	8.8	-	-	Max. = 80 µg/L ³

Virginiatown-Kearns Drinking Water System		April	May	June	Compliance
Lead – Maximum	µg/L	<10	-	-	Max. = 10 µg/L ⁴
Alkalinity - Maximum	mg/L	69	-	-	N/A ⁵

Notes:

- ¹ CT is the concentration of chlorine in the water times the time of contact that the chlorine has with the water. It is used to demonstrate the level of disinfection treatment in the water. CT calculations are performed for the Virginiatown-Kearns water plant if the free chlorine residual level drops below 0.10 mg/L to ensure primary disinfection is achieved. Primary disinfection was achieved this quarter.
- ² Maximum Allowable Concentration (MAC) for Trihalomethanes (THMs) = 100 µg/L (Four Quarter Running Average).
- ³ Maximum Allowable Concentration (MAC) for Haloacetic Acids (HAAs) = 80 µg/L (Four Quarter Running Average).
- ⁴ Lead testing required every 3 years.
- ⁵ Alkalinity testing required twice per year. Sampling is done in March/April and September/October of each year.

McGarry Waste Water System		April	May	June	Compliance
Flows					
Influent – Average Daily Flow	m ³ /d	3021	1875	841	Average = 1135
Influent – Maximum Daily Flow	m ³ /d	8281	3561	1082	N/A
Effluent – Average Daily Flow	m ³ /d	2955	1869	827	Average = 1135
Effluent – Maximum Daily Flow	m ³ /d	5078	3754	1053	N/A
Influent					
BOD ₅ – Average	mg/L	5.80	2.50	2.60	N/A
Total Kjeldahl Nitrogen (TKN) – Average	mg/L	2	2.30	4.20	N/A
Total Phosphorus (TP) – Average	mg/L	0.26	0.17	0.53	N/A
Total Suspended Solids (TSS) – Average	mg/L	2.70	<0.67	3	N/A
Effluent					
cBOD ₅ – Average	mg/L	4.24	2.45	2.20	Monthly Average = 25
cBOD ₅ Loading	kg/d	8.56	3.90	1.89	Monthly Average = 28.4
TSS – Average	mg/L	4.01	2.58	<2.08	Monthly Average = 25
TSS Loading	kg/d	9.84	4.27	<1.74	Monthly Average = 28.4
TP – Average	mg/L	0.31	0.18	0.16	Monthly Average = 0.5
TP Loading	kg/d	0.70	0.26	0.14	Monthly Average = 0.6
Total Ammonia Nitrogen (TAN) – Average	mg/L	3	0.16	1.24	Monthly Average = 5
TAN Loading	kg/d	5.96	0.27	0.98	Monthly Average = 5.7

APPENDIX B

Summary of Call-outs

Work Order Call Back Details Report

5249052: ALARM - High Raw flow from #1 Duty Well 5085

Asset: 0000090367 VALVE GATE 1 DISCHARGE PUMP HOUSE
Location: 5085-WTMG-P 5085, McGarry WTP Pump House, Process

Page Time:	06/28/2026 06:30 AM
Arrive time:	06/28/2026 07:00 AM
Leave time:	06/28/2026 11:00 AM
Finish Time:	06/28/2026 11:00 AM
Report Date:	6/28/26
Reported By:	Steven Gerl
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	COMP
Classification	COMPLIANCE
GL Account:	MCGARY5085-210M

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Steven Gerl	00:00	04:00

Log		
Date	Created By	Description
6/28/26	Steven Gerl	ALARM - High Raw flow from #1 Duty Well 5085
Upon WW review I found the Well #1 raw flow over 1460		