The Township of McGarry Water and Wastewater Systems Quarterly Operations Report

October 1 to December 31, 2025

SUBMITTED BY

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

January 21, 2026, Rev. 0

Prepared by the Ontario Clean Water Agency

SYSTEM OVERVIEW | October 1 to December 31, 2025

HIGHLIGHTS

Virginiatown-Kearns Drinking Water System

- Overall the plant is operating well

McGarry Wastewater Treatment Lagoon

- Overall the plant is operating well

CAPITAL PLAN PROGRESS

The Capital Letter which provides a list of recommended capital and major maintenance for 2025 was provided to the Owner in December 2024. Approval or rejection of the capital projects identified in the letter is a requirement under the system's Quality and Environmental Management System.

Status of capital work for this quarter of 2025 is available through OCWA's Senior Operating Manager.

CAPITAL	STATUS
Minor Capital	We are performing work required to keep the plant in operation.
All other capital items	Proceeding with approved items

INCIDENTS

No events held this quarter.

COMPLAINTS

No complaints were documented this quarter.

CALL-OUT SUMMARY

Number of Call-outs this Quarter:	0
Total Call-outs to Date (2025):	2
Annual Call-out Allowance:	8
Details of the Call-outs:	Refer to Appendix A for a call-out summary, if applicable

Note: Not all call backs are billed to the Owner; depends on the nature of the call.

REGULATORY

Inspections

- The MECP conducted an inspection of the drinking water system in October 2025, with no non-compliances being identified.

Quality & Environmental Management System (QEMS)

- The was no Internal Audit conducted in this quarter.

Sampling, Testing and Monitoring

- Refer to Appendix B for Quarterly Data Summaries.

Reporting

- The were no events reported to the Spills Action Center during the quarter.

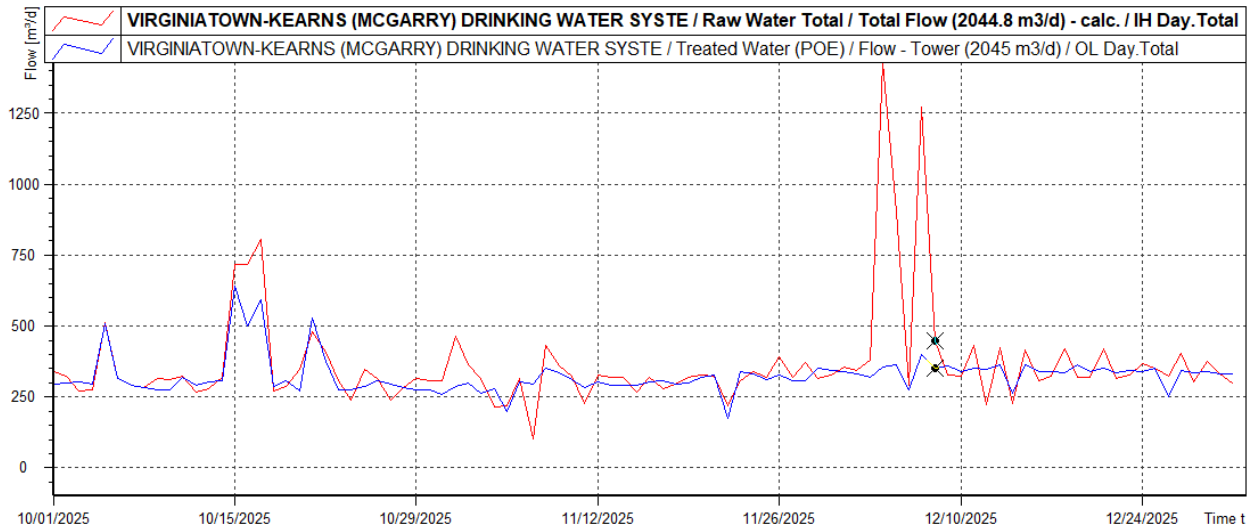
FLOW SUMMARIES

Virginiatown-Kearns Water Treatment Plant (Tower Flows)

	Total Raw Flows (m^3)	**Total Treated Flows** (m^3)	**Average Daily Treated Flow** (m^3/d)	**Maximum Treated Flow** (m^3/d)
October	11131	11131	335	806
November	9334	9334	301	464
December	13304	13304	338	1427
Compliance	-	-	-	2,045

Raw Flow verses Treated Flow

October 1 to December 31, 2025

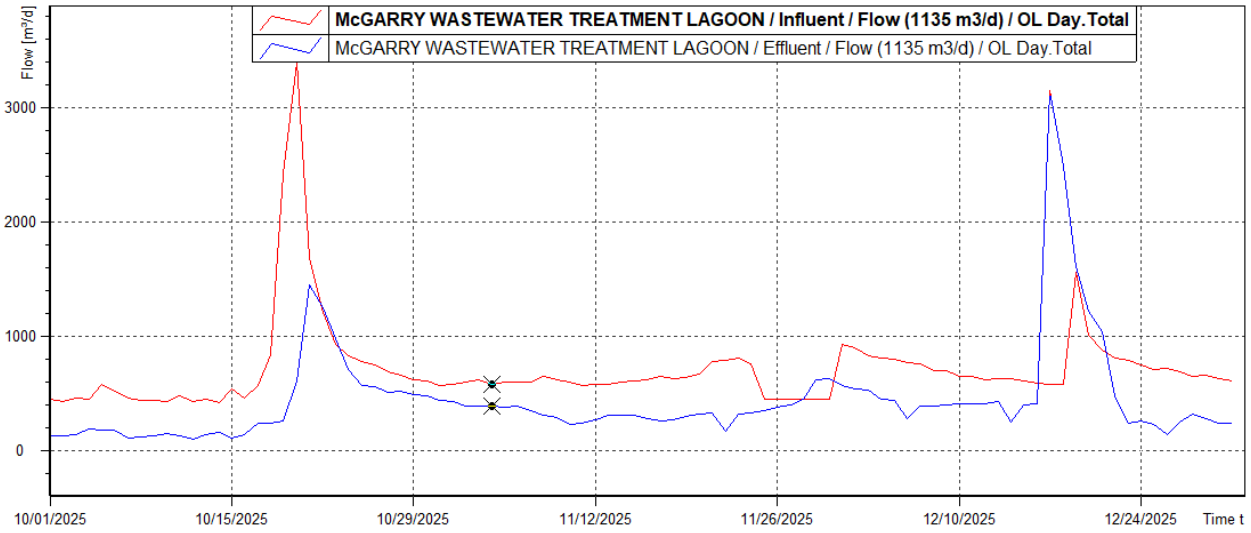


McGarry Lagoon

Year	Total Effluent Flow (m^3)	Total Influent Flow (m^3)	Maximum Influent Flow (m^3/d)	Average Daily Influent Flow (m^3/d)
October	11500	23991	3399	422
November	10384	17981	806	447
December	18913	23229	1562	577
Compliance	-	-	-	1,135

Influent Flow verses Effluent Flow

October 1 to December 31, 2025



HEALTH AND SAFETY

- All safety equipment at the plant was checked monthly to ensure that they are in good working order.
- Health and Safety Training/Sessions completed this quarter include:
    - ✓ ADHD Awareness
    - ✓ Electrical Safety and Lockout
    - ✓ Holiday Safety at Home

APPENDIX A

Call Out Summary

APPENDIX B

Quarterly Data Summaries

VIRGINIATOWN-KEARNS (McGarry) **DRINKING WATER SYSTEM**

Quarterly Data Report

October 1 to December 31, 2025

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Virginiatown-Kearns Drinking Water System		October	November	December	Compliance
Flows					
Total Raw Flow - Max. Daily Volume	m^3/d	806	464	1427	Max. = 2044.8
Well 1 Flow - Maximum Daily Volume	m^3/d	806	464	1427	Max. = 2044.8
Well 1 Flow - Maximum Flow Rate	L/min	2134	2209	1998	Max. = 1420[6]
Well 2 Flow - Maximum Daily Volume	m^3/d	104	117	105	Max. = 1500[6]
Well 2 Flow - Maximum Flow Rate	L/min	1186	1216	1312	Max. = 1105
Tower Flow - Maximum Daily Volume	m^3/d	484	463	1265	Max. = 2045
Raw Water					
Well 1 Total Coliforms - Maximum	c/100mL	0	0	0	N/A
Well 1 *E.coli* - Maximum	c/100mL	0	0	0	N/A
Well 2 Total Coliforms - Maximum	c/100mL	0	0	0	N/A
Well 2 *E.coli* - Maximum	c/100mL	0	0	0	N/A
Well 1 Turbidity - Maximum	NTU	0.16	0.35	1.26	N/A
Well 2 Turbidity - Maximum	NTU	0.45	1.41	1.58	N/A
Treated Water					
Free Chlorine Residual - Minimum	mg/L	0.62	1.10	1.0	Min. = 0.10 (CT)[1]
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
E. coli - 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	0.26	0.50	0.36	Min. = 0.05
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
E. coli - Maximum	c/100mL	0	0	0	Max. = 0
Trihalomethanes (THMs)	µg/L	3.3	-	-	N/A
Running average	ug/L	3.8	-	-	Max. = 100 µg/L [2]
Haloacetic Acids (HAAs)	µg/L	8	-	-	N/A

VIRGINIATOWN-KEARNS (McGarry) DRINKING WATER SYSTEM

Quarterly Data Report

October 1 to December 31, 2025

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Virginiatown-Kearns Drinking Water System		October	November	December	Compliance
Running average	ug/L	8	-	-	Max. = 80 µg/L [3]
Lead – Maximum	µg/L	2025/26	-	-	Max. = 10 µg/L [4]
Alkalinity - Maximum	mg/L	-	-	-	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 ug/L (Four Quarter Running Average).

3 Maximum Allowable Concentration (MAC) for Haloacetic Acids (HAAs) = 80 ug/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.

6 Internal system electronic communication issues have been causing false flow rate values for source water wells at the Pump-house. Distorted data is displaying values above the Permit to Take Water limitations. This issue is believed to be caused by power fluctuations from, a Hydro-Transformer failure that occurred on December 31st, 2024. Ministry and Town-foreman has been made aware system error, and troubleshooting and corrective actions underway. Well #1 and Well #2 show normal flow rates when data is not effected by electronic distortion.

McGARRY WASTEWATER SYSTEM
Quarterly Data Report
October 1 to December 31, 2025

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

McGarry Waste Water System		October	November	December	Compliance
Flows					
Influent – Average Daily Flow	m^3/d	774	599	749	Average = 1135
Influent – Maximum Daily Flow	m^3/d	3399	806	1562	N/A
Effluent – Average Daily Flow	m^3/d	371	346	610	Average = 1135
Effluent – Maximum Daily Flow	m^3/d	1447	628	3149	N/A
Influent					
BOD_5 – Average	mg/L	3.6	1.9	1.6	N/A
Total Kjeldahl Nitrogen (TKN) – Average	mg/L	9.3	0.6	2.1	N/A
Total Phosphorus (TP) – Average	mg/L	0.26	0.16	0.2	N/A
Total Suspended Solids (TSS) – Average	mg/L	6.7	3	3	N/A
Effluent					
$cBOD_5$ – Average	mg/L	2.94	1.55	3.24	Monthly Average = 25
$cBOD_5$ Loading	kg/d	1.44	0.56	2.41	Monthly Average = 28.4
TSS – Average	mg/L	6.7	3	3	Monthly Average = 25
TSS Loading	kg/d	<1.22	<0.33	1.61	Monthly Average = 28.4
TP – Average	mg/L	0.26	0.16	0.2	Monthly Average = 0.5
TP Loading	kg/d	0.15	0.08	0.22	Monthly Average = 0.6
Total Ammonia Nitrogen (TAN) – Average	mg/L	2.66	4.94	5.08	Monthly Average = 5
TAN Loading	kg/d	1.47	1.75	3.95	Monthly Average = 5.7