

Prepared By: The Ontario Clean Water Agency

Prepared for: The Township of McGarry

## SYSTEM OVERVIEW

April 1 to June 30, 2024

REVISED

### HIGHLIGHTS

#### Virginiatown-Kearns Drinking Water System

- Looking at the Langelier Index, which is an indicator of corrosivity, through jar testing which will guide process changes at the plant. We have recommended they install a corrosion control system in order to reduce the negative impacts to infrastructure. Adjusting the pH of the water could save the township a significant amount of money and time in water main repairs and replacement. OCWA is compiling information to provide to the Township

#### McGarry Wastewater Treatment Lagoon

- No significant issues

### CAPITAL PLAN PROGRESS

The list of approved capital expenditures for 2024 was provided by the Township. Approved items are in the planning stages if not already underway.

Status of capital work completed in 2024.

CAPITAL WORK – WATER TREATMENT SYSTEM	STATUS
Minor capital Non-routine sampling 2023 Tower pumphouse comm failure	Billed in May

CAPITAL WORK - WASTEWATER LAGOON SYSTEM	STATUS
Minor capital Pro-mag flow meter Rebuild jockey pump and keep as spare	Billed in May

### INCIDENTS

#### Virginiatown DWS:

April 9 Loss of pressure to 27<sup>th</sup> Street during planned repair of service line; MOH issued a BWA which was lifted on April 11  
AWQI 164763

McGarry Lagoon:

APRIL 12      Connell Ave – overflow due to heavy rain  
April 12 at 05:28 to April 13 at 11:40 (30 hrs)  
SAC Ref 1-5OGUB3

APRIL 12      Kearns SPS spill due to heavy rain  
SAC Ref 1-5P9Y80  
April 12 at 11:05 to April 16 at 11:53 (96h 48 m)

APRIL 2024      Event # 1-7PWRMU- Total Phosphorous Loading – April average loading is 0.682 kg/d, which exceeds the average limit of 0.6 kg/d  
The high loading value is attributed to high average flows of 2,969 m<sup>3</sup>.

## **COMPLAINTS**

---

No complaints were documented this quarter.

## **CALL-OUT SUMMARY**

---

<b>Number of Call-outs this Quarter:</b>	2
<b>Total Call-outs to Date (2024):</b>	2
<b>Annual Call-out Allowance:</b>	8
<b>Details of the Call-outs:</b>	Refer to Appendix A for a call-out summary.

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

## **REGULATORY**

---

Inspections

- There were no regulatory inspections during the quarter

Quality & Environmental Management System (QEMS)

- There were no audits during the reporting period

Sampling, Testing and Monitoring

- Refer to Appendix A for Quarterly Data Summaries.

Reporting

- No reporting was required this quarter.

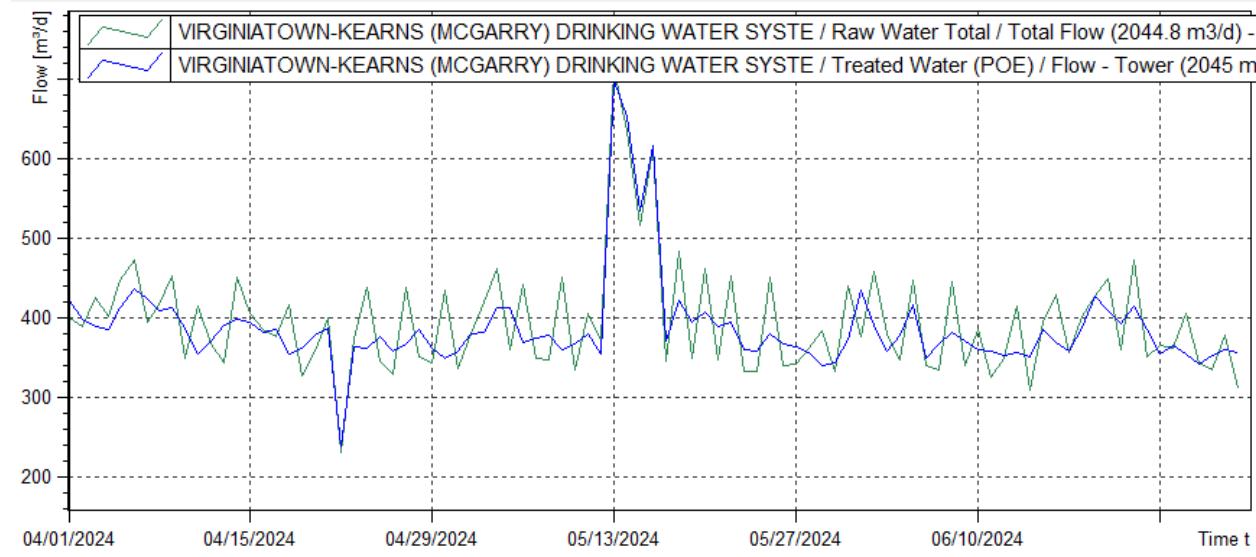
## FLOW SUMMARIES

### Virginiatown-Kearns Water Treatment Plant (Tower Flows)

	<b>Total Raw Flows (m<sup>3</sup>)</b>	<b>Total Treated Flows (m<sup>3</sup>)</b>	<b>Average Daily Treated Flow (m<sup>3</sup>/d)</b>	<b>Maximum Treated Flow (m<sup>3</sup>/d)</b>
April	11677	11391	379	436.4
May	12884	12644	407.88	697
June	11389	11236	374.56	434
Compliance	-	-	-	2,045

### Raw Flow verses Treated Flow

April 1 to June 30, 2024

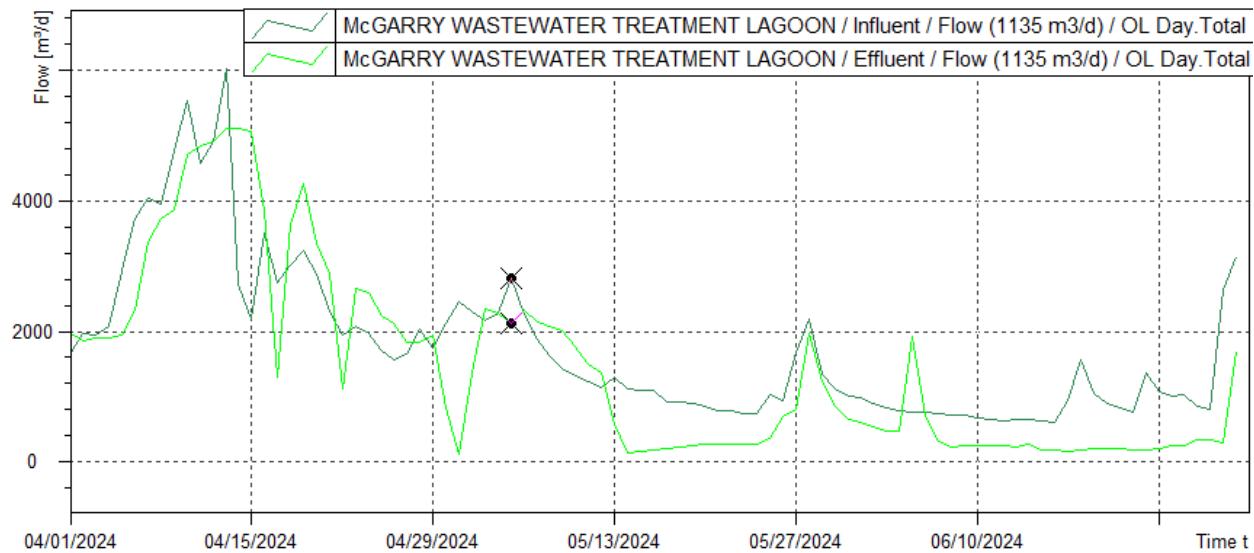


### McGarry Lagoon

<b>Year</b>	<b>Total Effluent Flow (m<sup>3</sup>)</b>	<b>Total Influent Flow (m<sup>3</sup>)</b>	<b>Maximum Influent Flow (m<sup>3</sup>/d)</b>	<b>Average Daily Influent Flow (m<sup>3</sup>/d)</b>
April	89,057	87,572	6,034	2,919
May	31,094	43,502	2,811	1,403
June	11,772	29,657	3,144	988
Compliance	-	-	-	1,135

Influent Flow versus Effluent Flow

April 1 to June 30, 2024



**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:
  - ✓ Hoisting and Rigging
  - ✓ Facility Emergency Plan
  - ✓ Environmental Hazards

## **APPENDIX A**

### Call Out Summary

## Work Order Call Back Details Report

3901705: ALARM - High level SPILL @ Kearns SPS 1022

**Asset:** 0000115827

METER LEVEL PS

**Location:** 1022-WLVT-P-PC

1022, V Town Pumping Station, Process, Process Controls

<b>Page Time:</b>	04/13/2024 10:30 AM
<b>Arrive time:</b>	04/13/2024 11:00 AM
<b>Leave time:</b>	04/13/2024 03:00 PM
<b>Finish Time:</b>	04/13/2024 03:00 PM
<b>Report Date:</b>	4/14/24
<b>Reported By:</b>	Steven Gerl
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	CLOSE
<b>Classification:</b>	COMPLIANCE
<b>GL Account:</b>	MCGARY1022-210M

### Actual Labor

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

### Log

Date	Created By	Description
4/14/24	Steven Gerl	ALARM - High level SPILL @ Kearns SPS 1022 found the collection system surcharged. Had to turn off Raw pumps at Kearns SPS; This caused a SPILL into bear creek Sample/ Chlorinate and call MOH and SAC

# Work Order Call Back Details Report

4050620: Virginiatown-Kearns DWS - AWQI 165682 - 5085

**Asset:**

**Location:** 5085-WTMG 5085, McGarry WTP Pump House

<b>Page Time:</b>	07/21/2024 07:45 PM
<b>Arrive time:</b>	07/21/2024 08:00 PM
<b>Leave time:</b>	07/21/2024 08:30 PM
<b>Finish Time:</b>	07/21/2024 08:30 PM
<b>Report Date:</b>	7/22/24
<b>Reported By:</b>	Ilona Bruneau
<b>Supervisor:</b>	

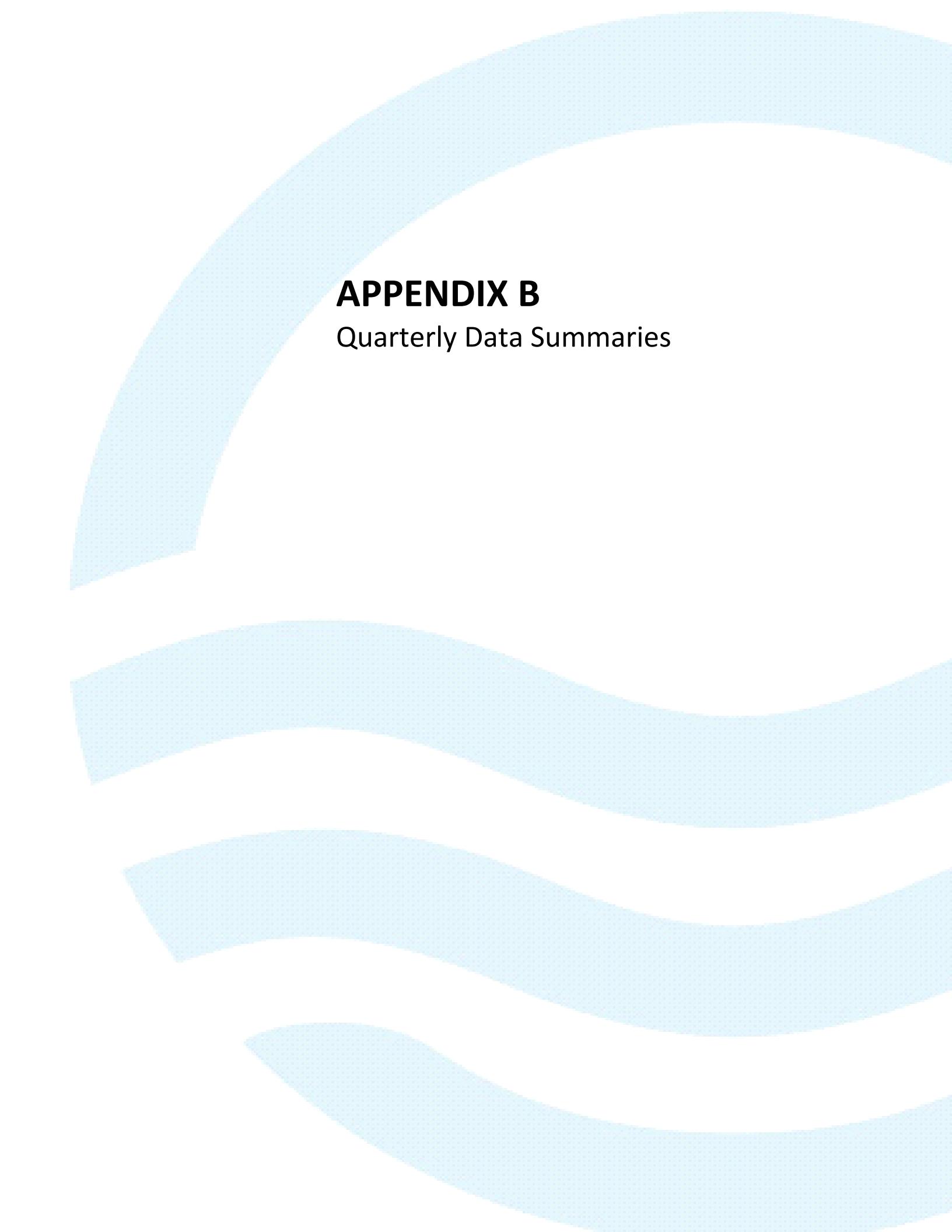
<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	COMPLIANCE
<b>GL Account:</b>	MCGARY5085-210M

**Actual Labor**

Task ID	Craft	Labor	Regular Hours	Premium Hours
	PCT	Ilona Bruneau	00:00	04:00

**Log**

Date	Created By	Description
7/22/24	Ilona Bruneau	Virginiatown-Kearns DWS - AWQI 165682 - 5085
Received a call from Testmark Labs regarding a adverse results on a sample collected at 3 - 27th Street.		
Notified the MOH, SAC, ORO and Public Works.		
Prepared the AWQI Notification Form (2A) and submit within 24 hours.		



## APPENDIX B

### Quarterly Data Summaries

# VIRGINIATOWN-KEARNS (McGarry) DRINKING WATER SYSTEM

## Quarterly Data Report

Q1: April 1 to June 30, 2024



Ontario Clean Water Agency  
Agence Ontarienne Des Eaux

Virginiatown-Kearns Drinking Water System		April	May	June	Compliance
<b>Flows</b>					
Total Raw Flow - Max. Daily Volume	m <sup>3</sup> /d	472	713	472	Max. = 2044.8
Well 1 Flow - Maximum Daily Volume	m <sup>3</sup> /d	472	710	472	Max. = 2044.8
Well 1 Flow - Maximum Flow Rate	L/min	1335	1387	1354	Max. = 1420
Well 2 Flow - Maximum Daily Volume	m <sup>3</sup> /d	125	109	130	Max. = 1500
Well 2 Flow - Maximum Flow Rate	L/min	1094	1105	1182	Max. = 1105
Tower Flow - Maximum Daily Volume	m <sup>3</sup> /d	20.58	36.06	9.18	Max. = 2045
<b>Raw Water</b>					
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	0.23	0.3	0.53	N/A
Well 2 Turbidity - Maximum	NTU	0.71	1.59	4.59	N/A
<b>Treated Water</b>					
Free Chlorine Residual - Minimum	mg/L	0.93	0.52	0.52	Min. = 0.10 (CT) <sup>1</sup>
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	0.06	-	-	Max. = 10
Nitrite	mg/L	<0.05	-	-	Max. = 1
<b>Distribution Water</b>					
Free Chlorine Residual - Minimum	mg/L	0.75	0.37	0.74	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	2.6	-	-	Max. = 100 µg/L <sup>2</sup>

# VIRGINIATOWN-KEARNS (McGarry) DRINKING WATER SYSTEM

## Quarterly Data Report

Q1: April 1 to June 30, 2024



Distribution Water		January	February	March	
Haloacetic Acids (HAAs)	µg/L	< 8	-	-	Max. = 80 µg/L <sup>3</sup>
Lead – Maximum	µg/L	2025/26	-	-	Max. = 10 µg/L <sup>4</sup>
Alkalinity - Maximum	mg/L	67 – 68	-	-	N/A <sup>5</sup>

### 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.

# McGARRY WASTEWATER SYSTEM

## Quarterly Data Report

Q1: April 1 to June 30, 2024



Ontario Clean Water Agency  
Agence Ontarienne Des Eaux

McGarry Waste Water System		April	May	June	Compliance
<b>Flows</b>					
Influent – Average Daily Flow	m <sup>3</sup> /d	2919	1403	988	Average = 1135
Influent – Maximum Daily Flow	m <sup>3</sup> /d	6034	2811	3144	N/A
Effluent – Average Daily Flow	m <sup>3</sup> /d	2968	1003	392	Average = 1135
Effluent – Maximum Daily Flow	m <sup>3</sup> /d	5113	2340	1921	N/A
<b>Influent</b>					
BOD <sub>5</sub> – Average	mg/L	9.1	1.9	5.2	N/A
Total Kjeldahl Nitrogen (TKN) – Average	mg/L	3.2	0.6	8.6	N/A
Total Phosphorus (TP) – Average	mg/L	0.394	0.317	1.97	N/A
Total Suspended Solids (TSS) – Average	mg/L	1	4.5	87	N/A
<b>Effluent</b>					
cBOD <sub>5</sub> – Average	mg/L	0.9	2.3	7.125	Monthly Average = 25
cBOD <sub>5</sub> Loading	kg/d	2.67	2.30	2.79	Monthly Average = 28.4
TSS – Average	mg/L	< 1.4	< 8.75	< 6.25	Monthly Average = 25
TSS Loading	kg/d	< 4.15	< 8.77	< 2.45	Monthly Average = 28.4
TP – Average	mg/L	0.394	0.317	1.97	Monthly Average = 0.5
TP Loading	kg/d	0.68	0.322	0.16	Monthly Average = 0.6
Total Ammonia Nitrogen (TAN) – Average	mg/L	0.262	< 0.075	0.493	Monthly Average = 5
TAN Loading	kg/d	0.778	< 0.075	0.193	Monthly Average = 5.7