

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 27th Street during planned repair of service line; MOH issued a BWA which was lifted on April 11
 AWQI 164763

McGarry Lagoon:

- APRIL 12 Connel 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 m³.

COMPLAINTS

No complaints were documented this quarter.

CALL-OUT SUMMARY

Number of Call-outs this Quarter:	2
Total Call-outs to Date (2024):	2
Annual Call-out Allowance:	8
Details of the Call-outs:	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.

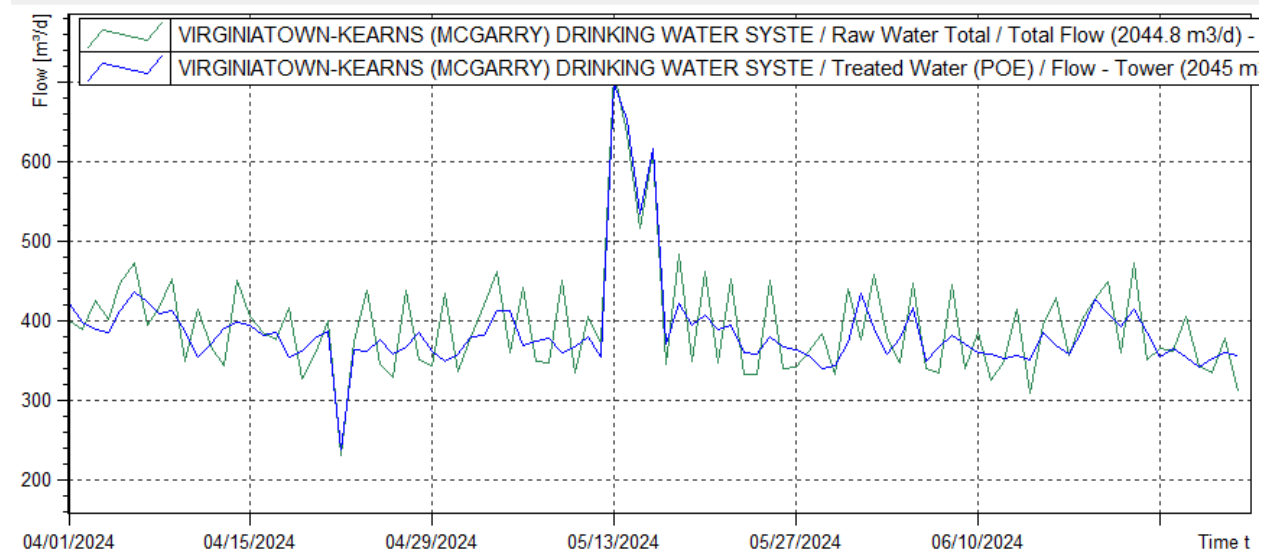
FLOW SUMMARIES

Virginiatown-Kearns Water Treatment Plant (Tower Flows)

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

Raw Flow versus Treated Flow

April 1 to June 30, 2024

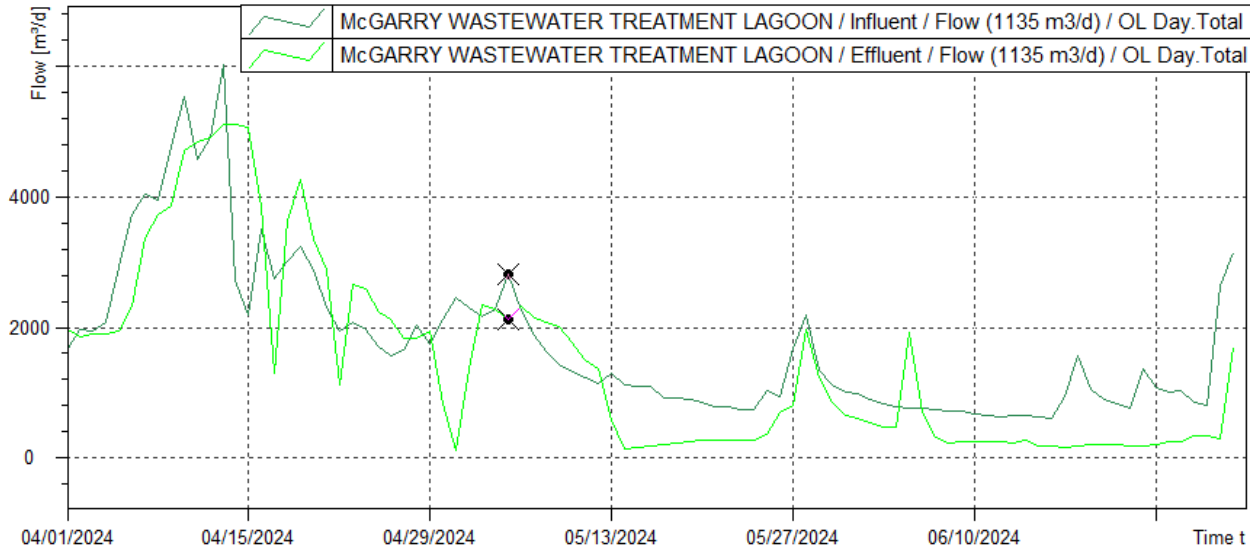


McGarry Lagoon

Year	Total Effluent Flow (m ³)	Total Influent Flow (m ³)	Maximum Influent Flow (m ³ /d)	Average Daily Influent Flow (m ³ /d)
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

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

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification	COMPLIANCE
GL Account:	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

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



Virginiatown-Kearns Drinking Water System		April	May	June	Compliance
Flows					
Total Raw Flow - Max. Daily Volume	m ³ /d	472	713	472	Max. = 2044.8
Well 1 Flow - Maximum Daily Volume	m ³ /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 ³ /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 ³ /d	20.58	36.06	9.18	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	0.23	0.3	0.53	N/A
Well 2 Turbidity - Maximum	NTU	0.71	1.59	4.59	N/A
Treated Water					
Free Chlorine Residual - Minimum	mg/L	0.93	0.52	0.52	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	0.06	-	-	Max. = 10
Nitrite	mg/L	<0.05	-	-	Max. = 1
Distribution Water					
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 ²

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 ³
Lead – Maximum	µg/L	2025/26	-	-	Max. = 10 µg/L ⁴
Alkalinity - Maximum	mg/L	67 – 68	-	-	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.

McGARRY WASTEWATER SYSTEM

Quarterly Data Report

Q1: April 1 to June 30, 2024



McGarry Waste Water System		April	May	June	Compliance
Flows					
Influent – Average Daily Flow	m ³ /d	2919	1403	988	Average = 1135
Influent – Maximum Daily Flow	m ³ /d	6034	2811	3144	N/A
Effluent – Average Daily Flow	m ³ /d	2968	1003	392	Average = 1135
Effluent – Maximum Daily Flow	m ³ /d	5113	2340	1921	N/A
Influent					
BOD ₅ – 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
Effluent					
cBOD ₅ – Average	mg/L	0.9	2.3	7.125	Monthly Average = 25
cBOD ₅ 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