Ontario Clean Water Agency
Agence Ontarienne Des Eaux
Northeastern Ontario Region

McGarry Water & Wastewater Systems
Quarterly Operations Report

Prepared By: The Ontario Clean Water Agency | Prepared for: The Township of McGarry

SYSTEM OVERVIEW | October 1 to December 31, 2024

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 and await a final decision for corrosion control measures.

McGarry Wastewater Treatment Lagoon

- Leakages and cracks around control gates in-between lagoon cells are causing short-circuits effecting laboratory results on effluent quality. Corrective maintenance is planned and scheduled in coordination with township workers/supervisors.

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 for this quarter of 2024 is captured in Appendix A

Incidents

Virginiatown DWS:

October 8	AWQI 166607 – Loss of Pressure (LOP) during construction resulted in 29 homes being affected.
October 16	AWQI 166658 – LOP, isolation of a water main due to construction.
October 24	AWQI 166736 – LOP, due to water main isolation for a main break event, 19 homes affected.
November 11	AWQI 166876 – LOP, Distribution work required, section of water main was isolated affecting 21 homes.
December 11	AWQI 167054 – LOP, Isolation of water main required to complete service line repairs.

McGarry Lagoon:

No events or exceedances to report in reporting period.

COMPLAINTS

No complaints were documented this quarter.

CALL-OUT SUMMARY

Number of Call-outs this Quarter:	1
Total Call-outs to Date (2024):	5
Annual Call-out Allowance:	8
Details of the Call-outs:	Refer to Appendix B 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

- There were no regulatory inspections during the quarter

Quality & Environmental Management System (QEMS)

- An Internal audit was performed on November 14 by OCWA as part of DWQMS.

Sampling, Testing and Monitoring

- Refer to Appendix B for Quarterly Data Summaries.

Reporting

- No reporting was required this quarter.

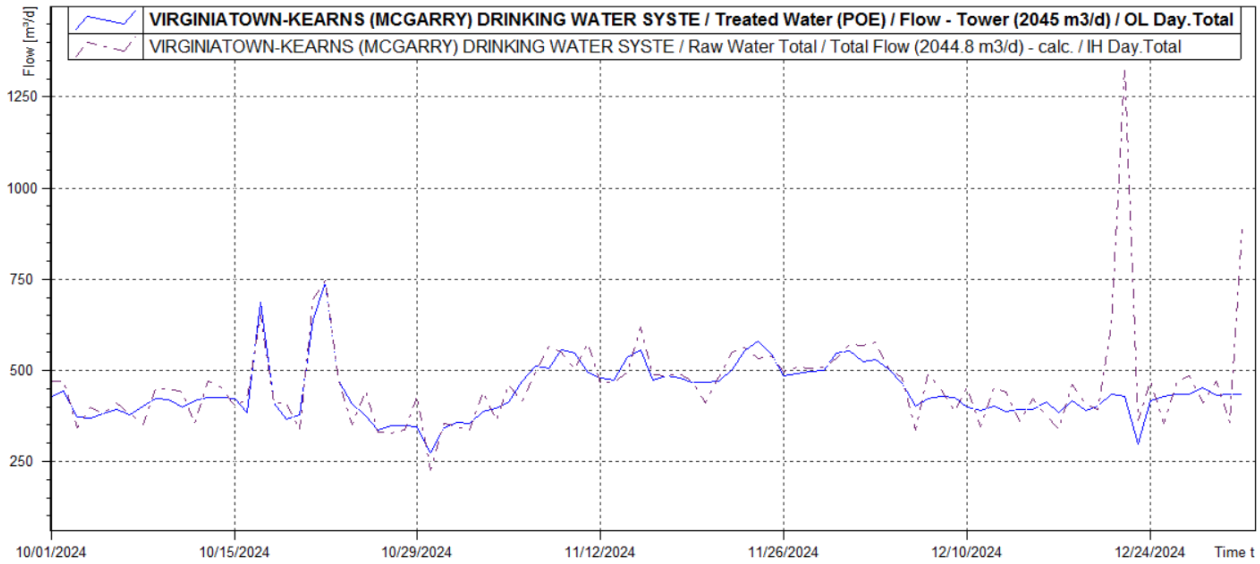
FLOW SUMMARIES

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)
October	13,157	12,940	417	740
November	14,655	14,574	486	581
December	15,025	13,252	427	553
Compliance	-	-	-	2,045

Raw Flow verses Treated Flow

October 1 to December 31, 2024

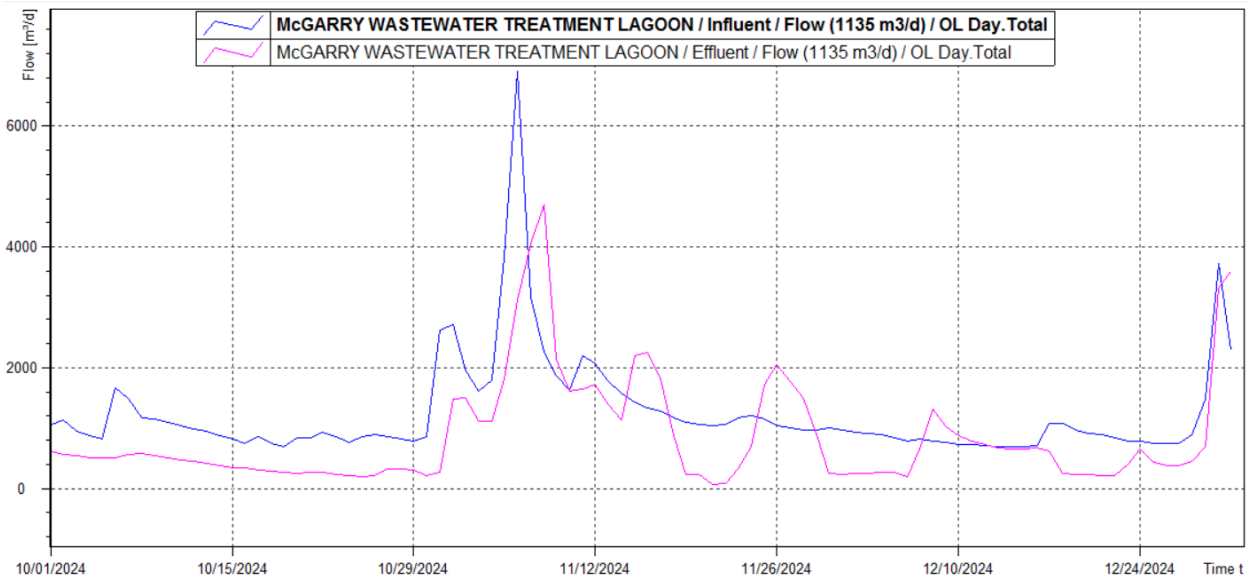


McGarry Lagoon

Year	Total Effluent Flow (m^3)	Total Influent Flow (m^3)	Maximum Influent Flow (m^3/d)	Average Daily Influent Flow (m^3/d)
October	11,770	31,086	2,626	1,003
November	45,597	53,367	6,912	1,779
December	21,544	30,639	3,731	988
Compliance	-	-	-	1,135

Influent Flow verses Effluent Flow

October 1 to December 31, 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:
  - ✓ Lockout/Tagout Program Training
  - ✓ Asbestos Awareness
  - ✓ Holiday Safety

APPENDIX A

Capital Plan Progress

Capital Plan Progress Update (based on information kept on file by Eric Nielson, Regional Hub Manager)

Project Number	Project Name	Maximo WO#	Capital Letter	Estimated Completion Date	Billing Date	Quotation	Billed Revenue
MCGARN5085-23ZZ	capital work				26-Feb-24		$308.85
MCGARN5085-23ZZ	capital work				30-May-24		$1,590.46
MCGARN1022-23ZZ	capital work				26-Feb-24		$17,940.03
MCGARN5085-23ZZ	non-routine sampling 2023	3204689			30-May-24		$4,423.14
MCGARN5085-24ZZ	tower pumphouse comm failure	3761705	no		30-May-24		$1,960.00
MCGARN1022-23ZZ	pro-mag flow meter	3526924	yes		30-May-24		$1,766.01
MCGARN1022-23ZZ	rebuild jockey pump and keep as spare	3575875	yes		30-May-24	$22,000	$16,544.28
MCGARN5085-24ZZ	replace chlorine analyzer	3952868	yes		11-Sep-24	$12,000	$9,794.91
MCGARN1022-24ZZ	soft start for lagoon effluent pump	3806922	yes		11-Sep-24	$1,100	$1,087.29
MCGARN1022-24ZZ	card for Kearns PS starter	3764998	yes		11-Sep-24	$4,100	$3,271.45
MCGARN5085-24ZZ	water main break 28th street	3847867	no	March	11-Sep-24	$800	$750.81
MCGARN5085-24ZZ	water main break March 29	3851777	no	March	11-Sep-24	$1,100	$3,487.27

MCGARN5085-24ZF	lifting device inspections	3901441	yes	April	11-Sep-24	$700	$700.00
MCGARN5085-24ZZ	genset maintenance	3949735	yes	June	11-Sep-24	$2,000	$2,305.66
MCGARN5085-24ZZ	additional sampling	3802562	no		1-Oct-24	$500	$2,034.76
MCGARN1022-24ZF	Godwin pump mobilize for flooding	3904407	no		24-Oct-24	$3,600	$3,663.36
MCGARN5085-24AS	Tower inspection	4090505	yes		5-Dec-24	$500	$591.25
MCGARN1022-24ZZ	auto sampler replacement	4141820	yes	October	5-Dec-24	$12,000	$12,153.17
MCGARN1022-24ZZ	markers and pens for chart recorders	4237748	yes	November	5-Dec-24		$163.10
MCGARN5085-24ZZ	third party DWQMS audit	4193634	yes	October	18-Dec-24	$1,300	$1,018.11
MCGARN5085-24AS	BWA 166445	4195511	no	October	18-Dec-24	$500	$231.60
MCGARN5085-24ZZ	capital work				31-Dec-24		$7,566.65
MCGARN1022-24ZZ	capital work				31-Dec-24		$1,918.21
MCGARN5085-24ZZ	tower chlorine analyzer install	4052164	yes		31-Dec-24	$500	$1,490.00
PEDCON5085-24AC	sampling for Pederson project	4144850	no		31-Dec-24	$5,600	$5,245.57
MCGARY5085-21OM	chemical upset limit				31-Dec-24		$10,048.25

APPENDIX B

Call Out Summary

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Work Order Call Back Details Report

4333017: ALARM -WTP PumpHouse Power Failure 5085

Asset: 0000090360 PANEL TRANSFER 01 GENSET
Location: 5085-WTMG-F 5085, McGarry WTP Pump House, Facility

Page Time:	12/31/2024 04:45 PM
Arrive time:	12/31/2024 05:00 PM
Leave time:	12/31/2024 10:00 PM
Finish Time:	12/31/2024 10:00 PM
Report Date:	1/3/25
Reported By:	Steven Gerl
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	COMP
Classification	REFURBISH/REPLACE
GL Account:	MCGARY5085-21OM

Actual Labor

Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Steven Gerl	00:00	05:00

Log

Date	Created By	Description
1/3/25	Steven Gerl	ALARM -WTP PumpHouse Power Failure 5085

The hydro power failed at the PumpHouse.
I called Hydro One to repair.
They had to change the transformers.
they restored the hydro.
restart the Well pump run
Normal function resumed.

APPENDIX C

Quarterly Data Summaries

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

Quarterly Data Report

Q4: October 1 to December 31, 2024

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	746	619	1,332	Max. = 2044.8
Well 1 Flow - Maximum Daily Volume	m^3/d	746	619	1,332	Max. = 2044.8
Well 1 Flow - Maximum Flow Rate	L/min	1,377	1,404	1,375	Max. = 1420
Well 2 Flow - Maximum Daily Volume	m^3/d	128	127	290	Max. = 1500
Well 2 Flow - Maximum Flow Rate	L/min	1,082	1,090	1,104	Max. = 1105
Tower Flow - Maximum Daily Volume	m^3/d	739	580	553	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	0.28	0.18	0.39	N/A
Well 2 Turbidity - Maximum	NTU	2.47	0.53	0.16	N/A
Treated Water					
Free Chlorine Residual - Minimum	mg/L	1.29	1.50	1.16	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	0.60	0.87	0.98	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	2.9	-	-	N/A
Running average	ug/L	3.1	-	-	Max. = 100 µg/L [2]
Haloacetic Acids (HAAs)	µg/L	13	-	-	N/A

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

Quarterly Data Report

Q4: October 1 to December 31, 2024

Ontario Clean Water Agency
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Virginiatown-Kearns Drinking Water System		October	November	December	Compliance
Running average	ug/L	10	-	-	Max. = 80 µg/L [3]
Lead – Maximum	µg/L	2025/26	-	-	Max. = 10 µg/L [4]
Alkalinity - Maximum	mg/L	72	-	-	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
Q4: October 1 to December 31, 2024

Ontario Clean Water Agency
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McGarry Waste Water System		October	November	December	Compliance
Flows					
Influent – Average Daily Flow	m^3/d	1,003	1,779	988	Average = 1135
Influent – Maximum Daily Flow	m^3/d	2,626	6,912	3,731	N/A
Effluent – Average Daily Flow	m^3/d	380	1,517	695	Average = 1135
Effluent – Maximum Daily Flow	m^3/d	627	4,705	3,603	N/A
Influent					
BOD_5 – Average	mg/L	1.0	3.9	2.2	N/A
Total Kjeldahl Nitrogen (TKN) – Average	mg/L	3.4	1.8	2.0	N/A
Total Phosphorus (TP) – Average	mg/L	0.25	0.14	0.29	N/A
Total Suspended Solids (TSS) – Average	mg/L	1.0	7.0	26.0	N/A
Effluent					
$cBOD_5$ – Average	mg/L	0.78	1.23	2.45	Monthly Average = 25
$cBOD_5$ Loading	kg/d	0.29	1.52	1.15	Monthly Average = 28.4
TSS – Average	mg/L	2.10	2.55	4.59	Monthly Average = 25
TSS Loading	kg/d	0.77	3.29	2.04	Monthly Average = 28.4
TP – Average	mg/L	0.36	0.26	0.31	Monthly Average = 0.5
TP Loading	kg/d	0.15	0.30	0.13	Monthly Average = 0.6
Total Ammonia Nitrogen (TAN) – Average	mg/L	<0.02	0.04	1.17	Monthly Average = 5
TAN Loading	kg/d	<0.01	0.05	0.48	Monthly Average = 5.7