Iroquois Wastewater System

Waterworks # 120000159

Annual Report

Prepared By The Municipality of South Dundas

Reporting Period of January 1st – December 31st 2025

Issued: March 4th, 2026

Revision: 0

Operating Authority:

The Municipality of SOUTH DUNDAS

This report has been prepared to meet the requirements set out in:

Document	Document #	Issue Date	Issue Number
Facility ECA	9689-8MQHNK	October 25, 2011	N/A
ECA for Municipal Sewage Collection System	165-W601	June 2, 2023	1.0

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1 Revision History

Date	Rev#	Revisions	Revised By
March 04, 2026	0	Annual Report Issued	Chelsea Fletcher, PCT Municipality of South Dundas

2 Operations and Compliance Reliability Indices

Compliance Event	# of Events
Ministry of Environment Inspections	No MECP inspections in 2025
Ministry of Labour Inspections	No MOL inspections in 2025
Non-Compliance	No Non-compliance events in 2025
Community Complaints	No complaints were received in 2025
Spills	No spill events in 2025
Overflows/Bypass	No bypass or overflow event in 2025
Sewer main blockages	No sewer main blockage in 2025

3 Process Description

Iroquois's sewage collection system is a gravity fed sanitary sewage collection system. There are two pumping stations which pump wastewater from the collection system to the wastewater treatment facility.

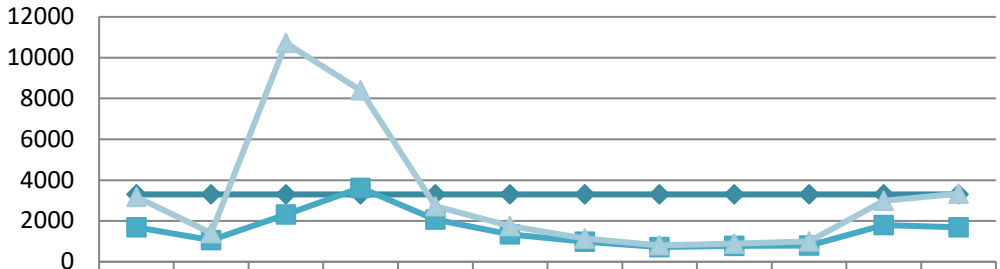
The Iroquois Wastewater Treatment Plant (WWTP) is a Class II wastewater treatment facility owned and operated by the Municipality of South Dundas. Raw sewage is pumped to the WWTP by the plant pumping station which is equipped with three submersible pumps. From the pumping station, wastewater passes through the inlet works, including mechanically cleaned fine screens and a grit removal and disposal system. Aluminum Sulphate is added to assist in phosphorous removal. The wastewater then moves through either of two parallel Sequencing Batch Reactors (SBRs) equipped with individual aeration systems, mixers, decanters and sludge removal pumps. Effluent decanted from the SBRs is treated by UV disinfection and subsequently passes through an outfall pipe to the St. Lawrence River.

Sludge removed from the SBRs is transferred to a waste activated sludge tank. From the tank, the sludge enters a rotary drum thickener. Polymer is added to assist with the thickening process. Thickened sludge is pumped to an Autothermal Thermophilic Aerobic Digestion (ATAD) system for stabilization. The ATAD system is equipped with an off-gas scrubber and biofilter to provide odour control. The digested sludge is then pumped to one of three biosolids storage tanks. From the storage tanks, biosolids are hauled off site to be utilized as soil conditioner.

4 Treatment Flows

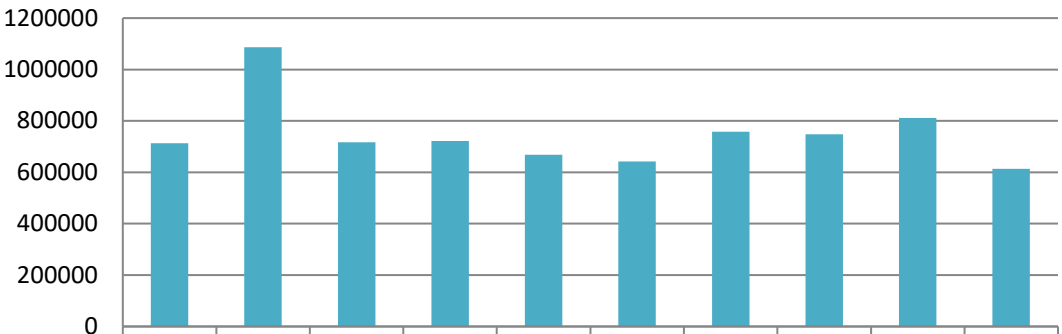
The hydraulic flows reaching the treatment facility in 2025 averaged 1570 m^3/day which represents 48% of the 3,300 m^3/day design. Please see the Performance Assessment Reports attached in Appendix A for details.

4.1 Raw Flow (m3/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (m3/d)	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
Avg (m3/d)	1686	1056	2315	3624	2057	1351	975	721	777	802	1792	1685
Max Flow (m3/d)	3185	1399	10716	8404	2729	1748	1144	803	893	1005	2993	3329

4.1.1 Annual Comparison (m3)



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Annual Flow	713262	1087278	717171	722318	668007	642564	758152	747445	811009	613815

4.2 Imported Sewage

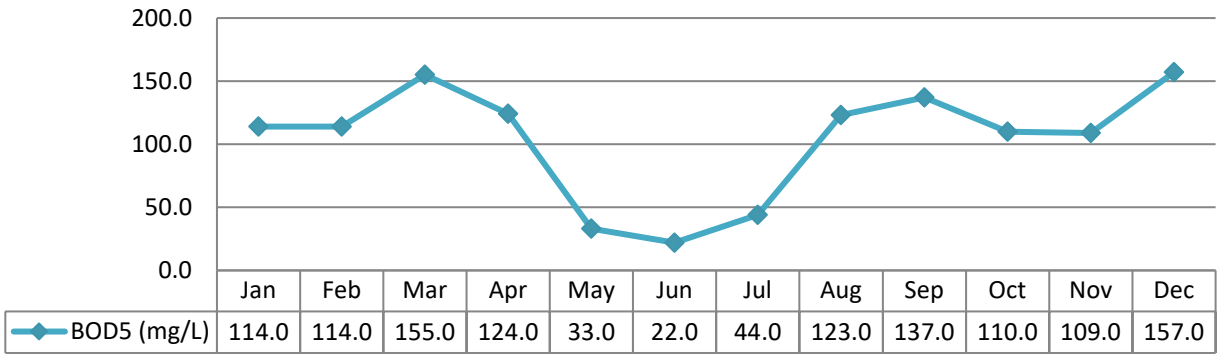
There is no imported sewage accepted at this facility.

5 Raw Sewage Quality

Current year minimum, maximum and averages are available in Appendix A – Performance Assessment Report.

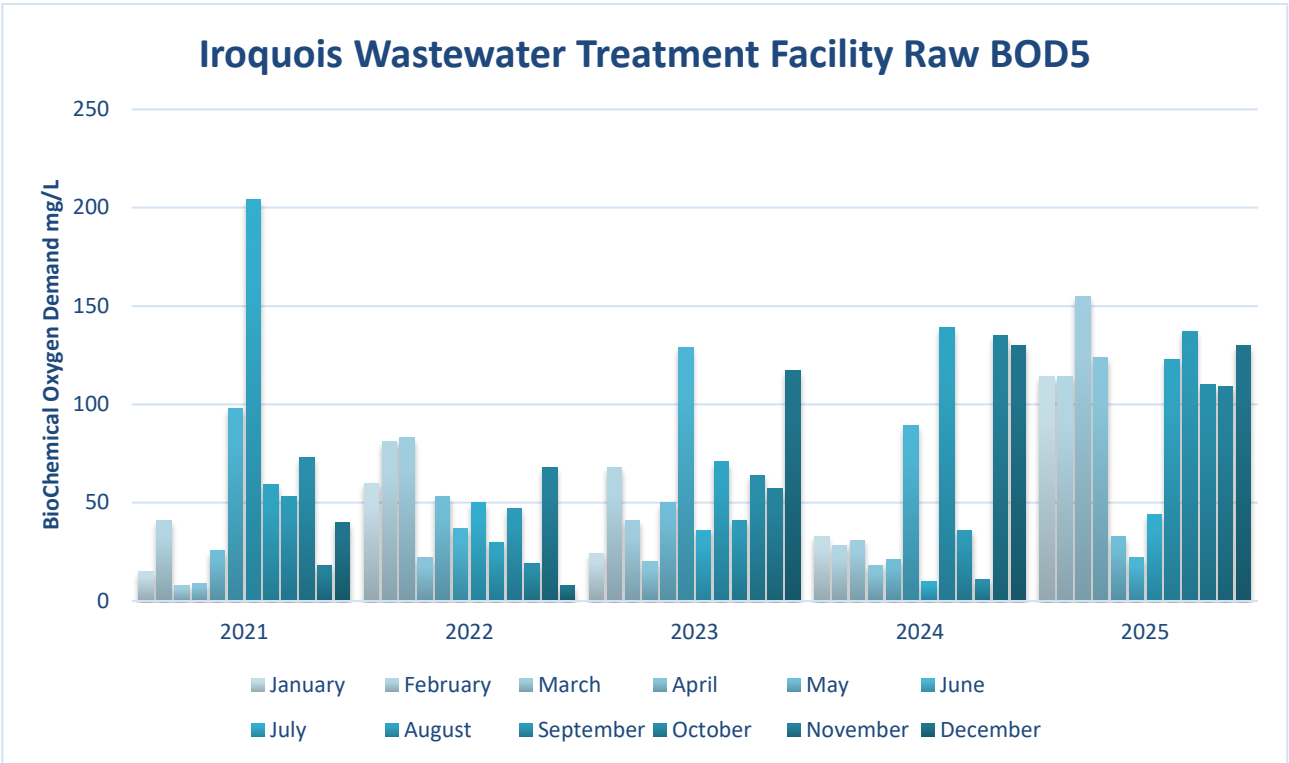
5.1 Influent Trending

5.1.1 BOD5 (mg/L)

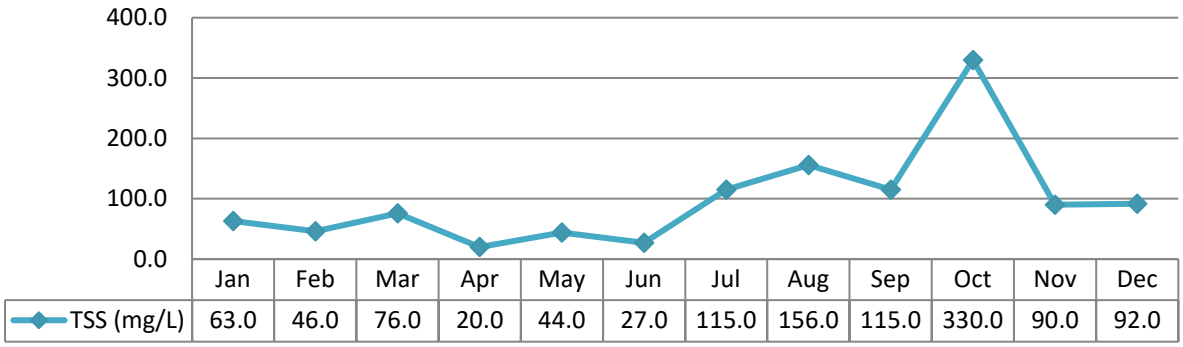


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BOD5 (mg/L)	114.0	114.0	155.0	124.0	33.0	22.0	44.0	123.0	137.0	110.0	109.0	157.0

5.1.2 5-year BOD5 (mg/L)

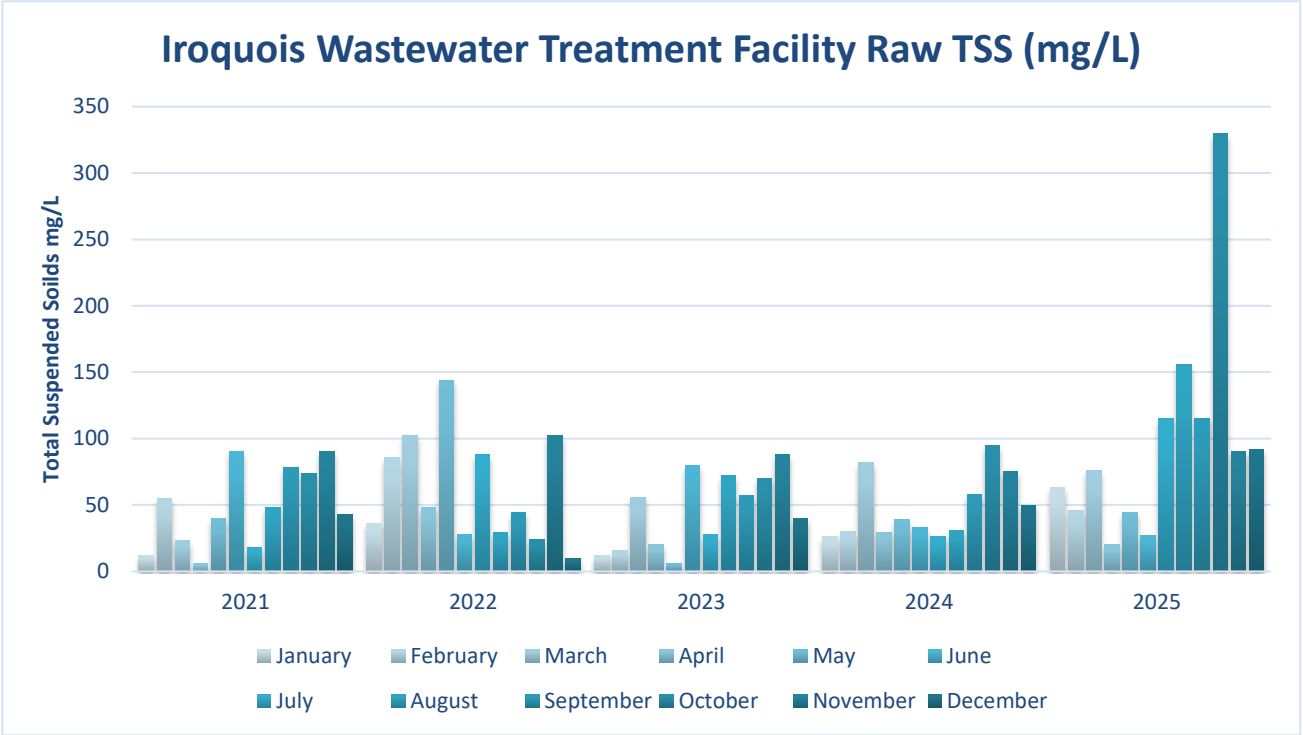


5.1.3 *Total Suspended Solids (mg/L)*

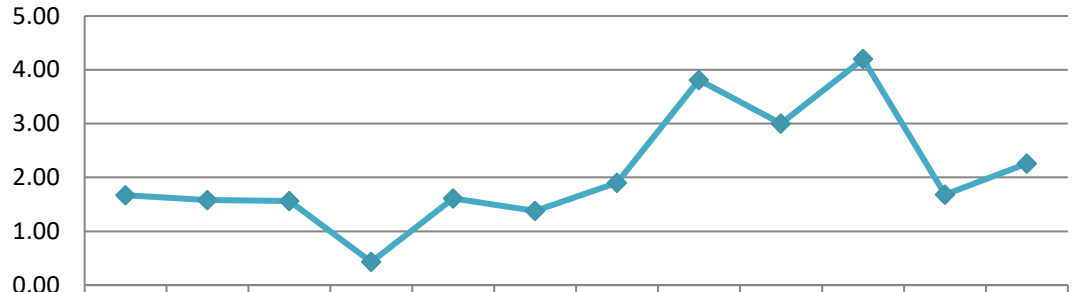


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TSS (mg/L)	63.0	46.0	76.0	20.0	44.0	27.0	115.0	156.0	115.0	330.0	90.0	92.0

5.1.4 *5-year Total Suspended Solids (mg/L)*

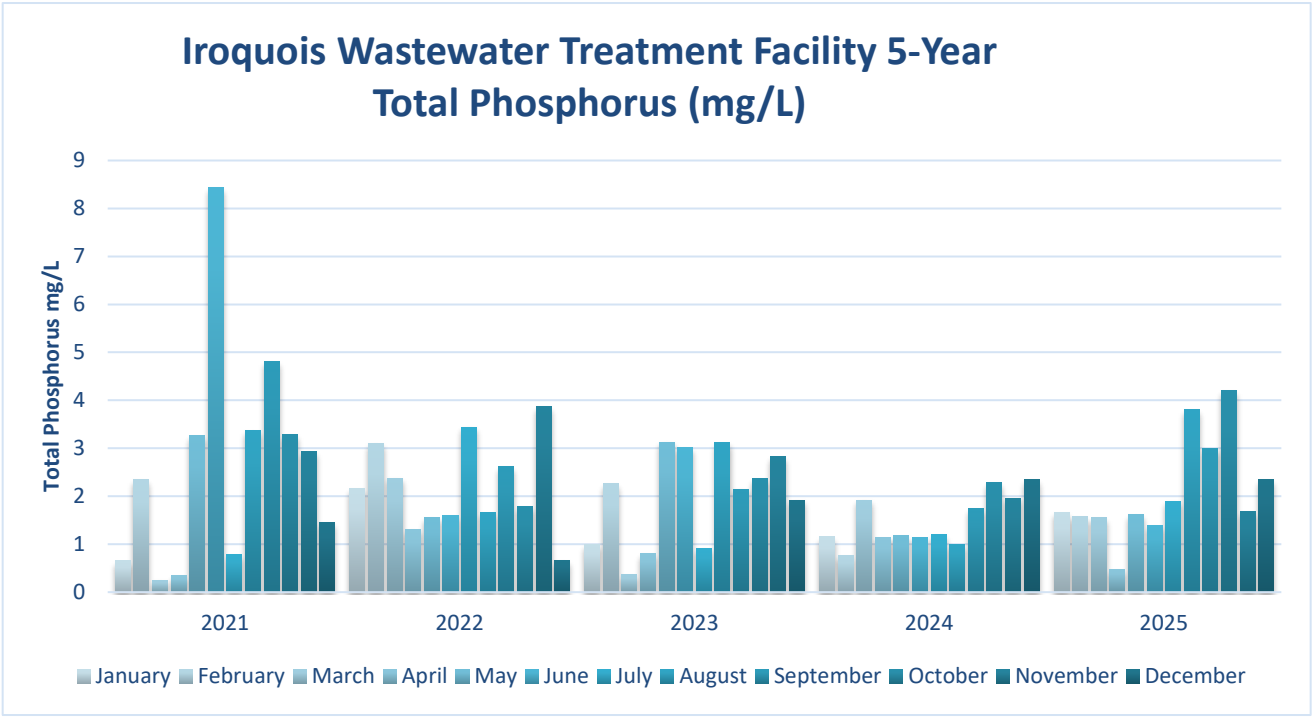


5.1.5 *Total Phosphorus (mg/L)*

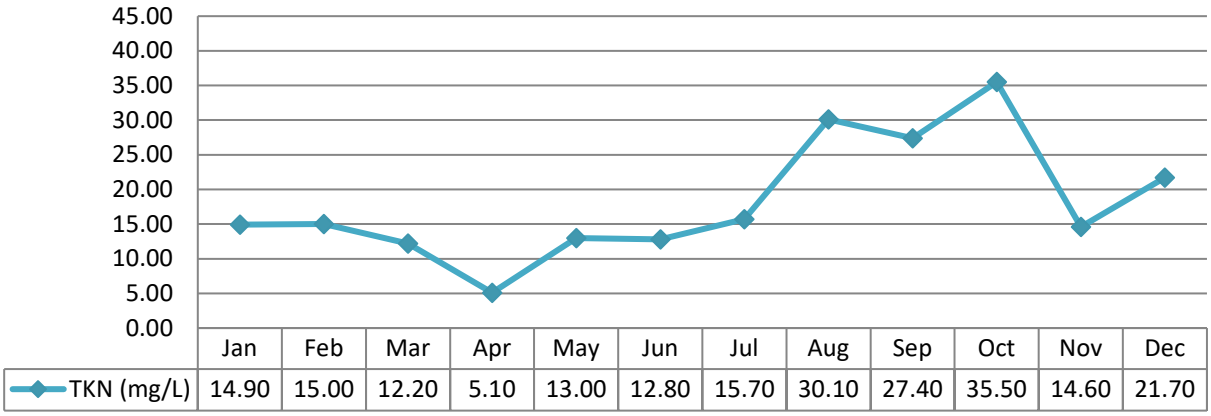


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Phosphorus (mg/L)	1.67	1.58	1.56	0.43	1.61	1.38	1.90	3.81	3.00	4.20	1.68	2.26

5.1.6 *5-year Total Phosphorus (mg/L)*

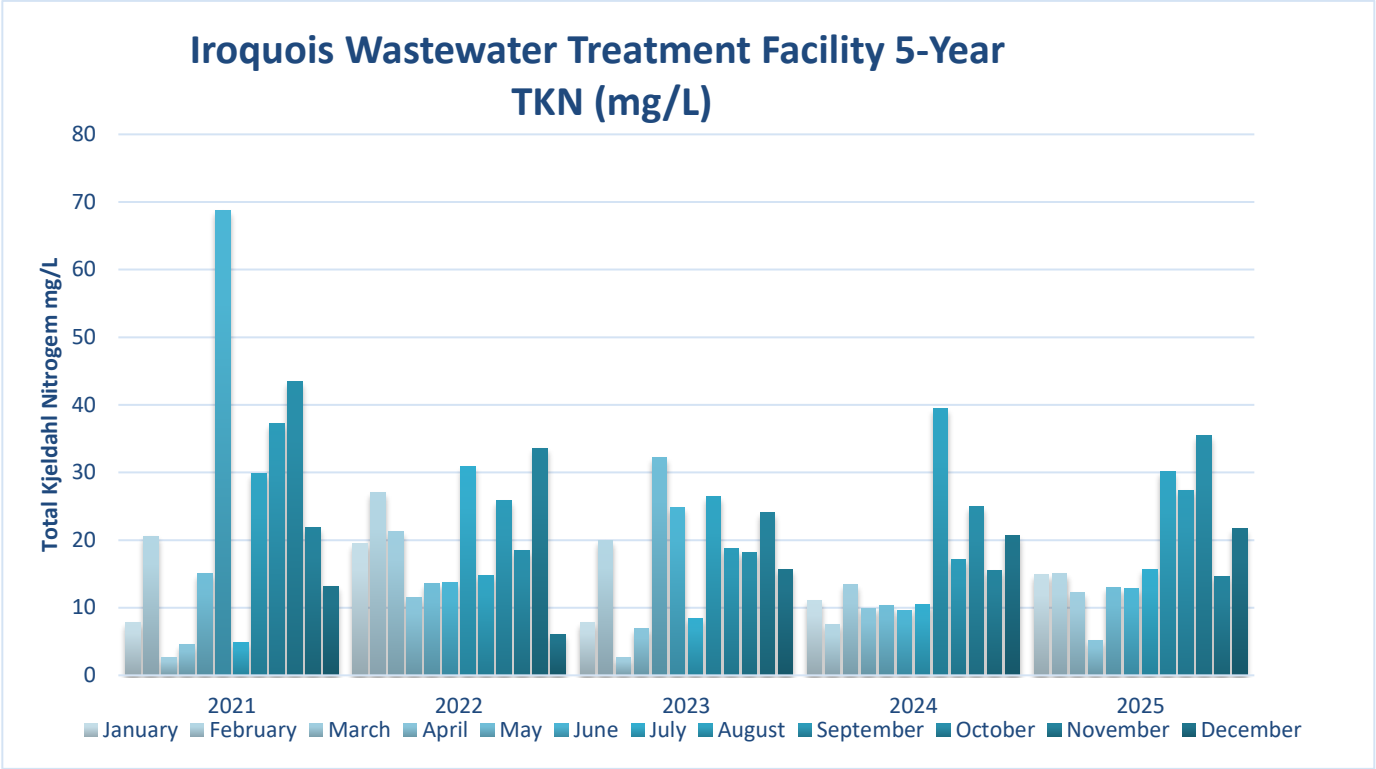


5.1.7 *Total Kjeldahl Nitrogen (TKN) (mg/L)*



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TKN (mg/L)	14.90	15.00	12.20	5.10	13.00	12.80	15.70	30.10	27.40	35.50	14.60	21.70

5.1.8 *5-year Total Kjeldahl Nitrogen (TKN) (mg/L)*



5.2 Imported Waste Quality

There is no imported sewage accepted at this facility.

6 Effluent Quality

The monthly average concentrations of carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), total ammonia nitrogen (TAN) remained below the effluent objectives and limits outlined in the facility's Certificate of Approval during 2025. The geometric mean density of E. coli in the effluent also remained below the ECA limit and objective in 2025. In addition, the effluent pH remained within the limits and objectives throughout the year. The monthly average for total phosphorus (TP) remained below the effluent limit outlined in the facility's Certificate of Approval in 2025.

Effluent results from the WWTP for 2025 are tabulated below. Additional data can be found in the Performance Assessment Reports attached in Appendix A.

6.1 Effluent Quality Assurance and Control Measures Taken

This system is part of the Municipality of South Dundas. Operational Services are delivered by staff employed by the Municipality. The systems are operated to meet compliance with applicable regulations. The system has comprehensive manuals detailing operations, maintenance, instrumentation, and emergency procedures. All procedures are treated as active documents and are updated as required.

The process is reviewed and maintained by certified operators. These operators complete in-house rounds and testing to monitor the process. All Sampling and analysis follow approved methods and protocols for sampling, analysis and recording as specified in the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works", the Ministry's publication, "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" and the publication, "Standard Methods for the Examination of Water and Wastewater".

All final effluent samples collected during the reporting period to meet legislated sampling requirements are submitted to Caduceon Ottawa for analysis, with the exception of pH and temperature. Caduceon Ottawa has been deemed accredited by the Canadian Association for Laboratory Accreditation (CALA), meeting strict provincial guidelines including an extensive quality assurance/quality control program. By choosing this laboratory, South Dundas is ensuring appropriate control measures are undertaken during sample analysis. The pH and temperature parameters are analyzed in the field at the time of sample collection by certified operators, to ensure accuracy and precision of the results obtained.

South Dundas uses a data management system maintained by staff, which includes:

- SharePoint – Municipality of South Dundas Water/Wastewater Site.
  - This online database consolidates all operational data from a variety of sources including field data, online instrumentation, and electronic receipt of lab test results for reporting, tracking and analysis.

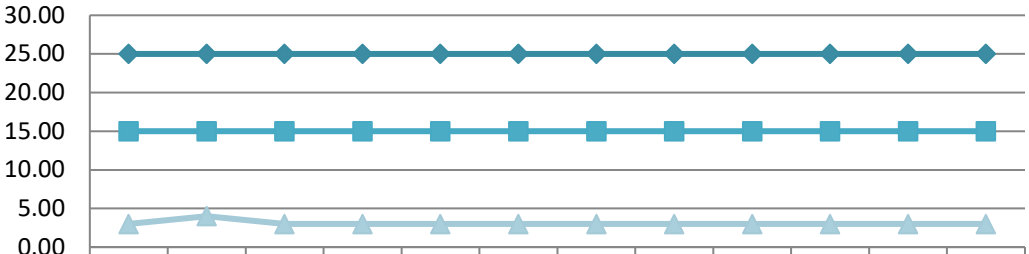
The operations team also has access to in-house Operational Compliance and Process Technicians (PCTs) to assist with emerging process issues. This aids in establishing additional control measures to ensure a quality effluent product.

Detailed individual sample results for both raw sewage and final effluent can be requested from the operating authority.

6.2 CBOD5 (mg/L)

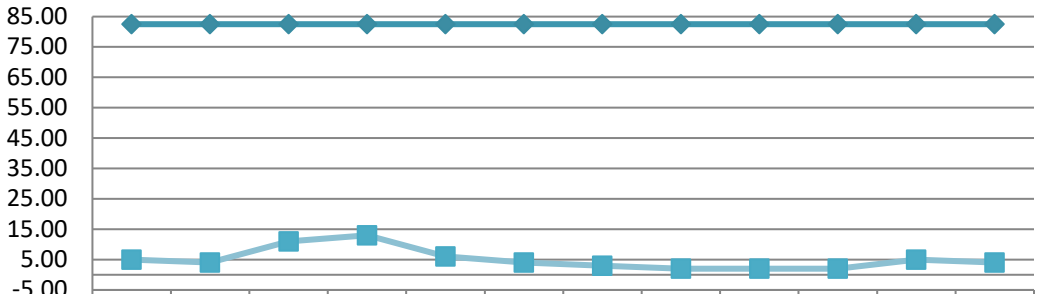
Compliance Limit and Objective for this parameter was met in 2025.

6.2.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
ECA Objective	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Average (mg/L)	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

6.2.1.1 Loading (kg/d)

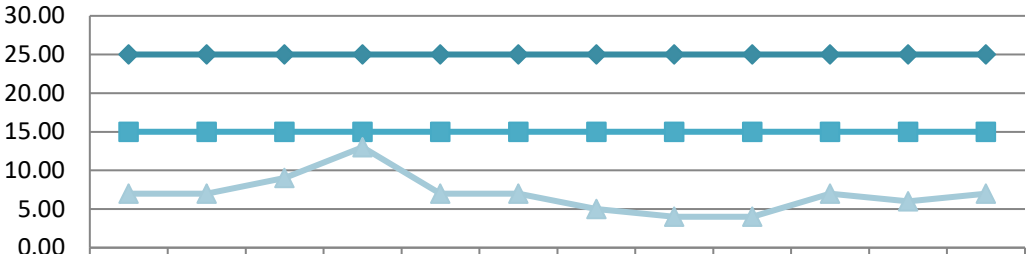


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50
Average (kg/d)	5.00	4.00	11.00	13.00	6.00	4.00	3.00	2.00	2.00	2.00	5.00	4.00

6.3 Total Suspended Solids (mg/L)

Compliance Limit and Objective for this parameter was met in 2025.

6.3.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
ECA Objective	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Average (mg/L)	7.00	7.00	9.00	13.00	7.00	7.00	5.00	4.00	4.00	7.00	6.00	7.00

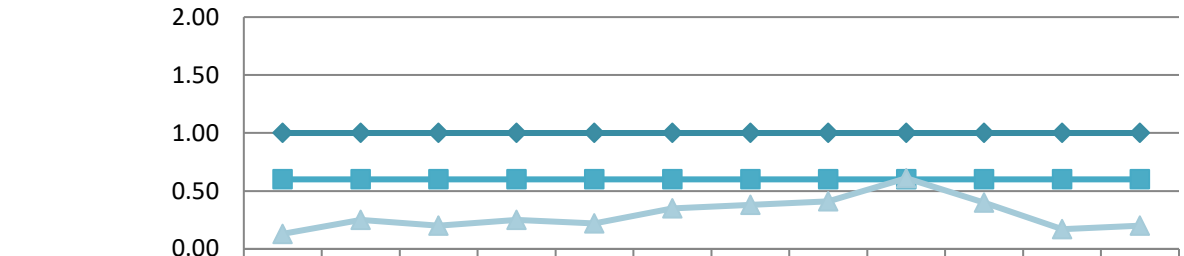
6.3.2 Loading (kg/d)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50
Average (kg/d)	12.00	7.00	38.00	43.00	14.00	10.00	6.00	3.00	3.00	5.00	9.00	10.00

6.4 Total Phosphorus (mg/L)

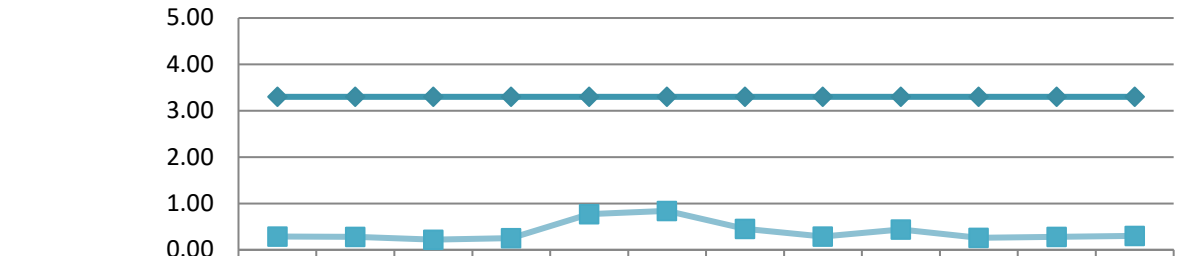
Compliance Limit for this parameter was met in 2025.

6.4.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ECA Objective	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Average (mg/L)	0.13	0.25	0.20	0.25	0.22	0.35	0.38	0.41	0.61	0.40	0.17	0.20

6.4.2 Loading (kg/d)

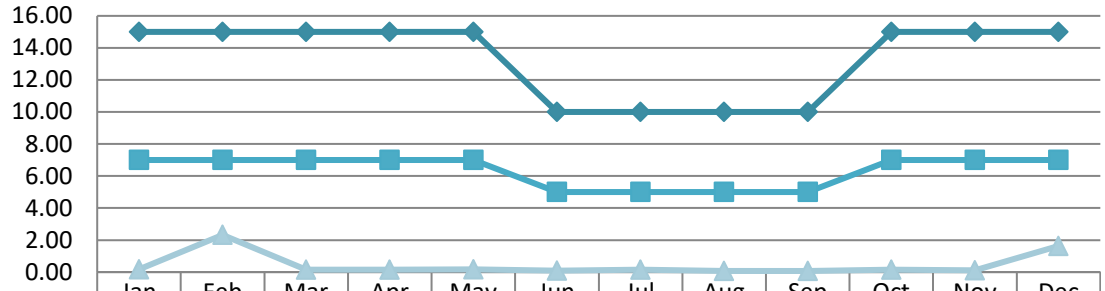


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Objective	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
Average (kg/d)	0.29	0.28	0.22	0.25	0.77	0.84	0.45	0.29	0.44	0.26	0.28	0.30

6.5 Total Ammonia Nitrogen (mg/L)

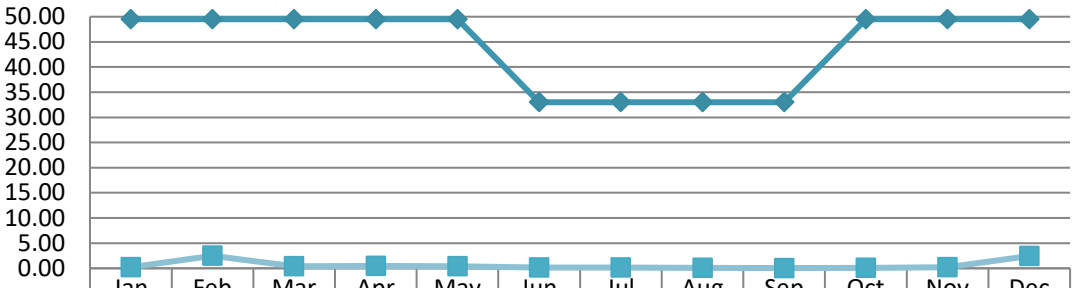
Compliance Limit and Objective for this parameter was met in 2025.

6.5.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit (mg/L)	15.00	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00	15.00	15.00	15.00
ECA Objective (mg/L)	7.00	7.00	7.00	7.00	7.00	5.00	5.00	5.00	5.00	7.00	7.00	7.00
Average (mg/L)	0.17	2.32	0.15	0.15	0.18	0.09	0.16	0.08	0.07	0.15	0.11	1.64

6.5.2 Loading (kg/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	49.50	49.50	49.50	49.50	49.50	33.00	33.00	33.00	33.00	49.50	49.50	49.50
Average (kg/d)	0.24	2.48	0.42	0.49	0.38	0.13	0.17	0.06	0.05	0.10	0.19	2.45

6.6 Acute Lethality

One effluent sample was collected in 2025 and tested for acute lethality to Rainbow Trout and Daphnia Magna. Results are displayed as % mortality. An adverse result is indicated by a > 50% mortality rate.

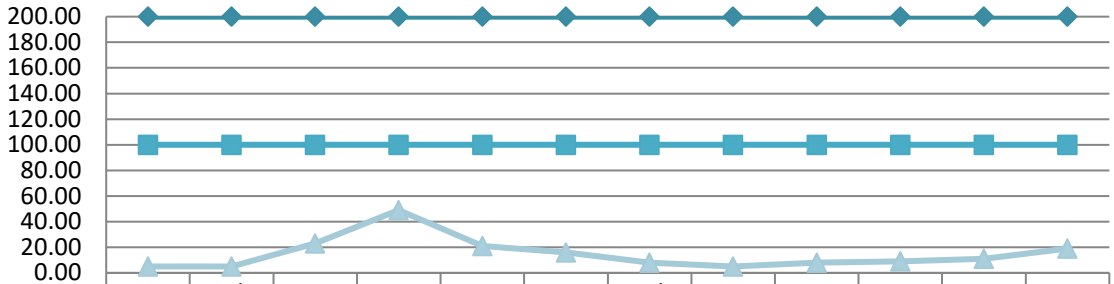
Compliance Limit for this parameter was met in 2025.

Date	Rainbow Trout	Daphnia Magna
01-07-2025	0%	0%

6.7 E-coli (cfu/100mL)

Compliance Limit and Objective for this parameter was met in 2025.

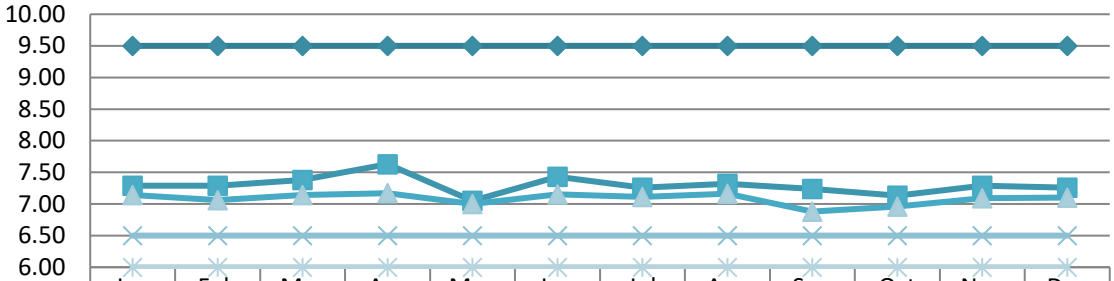
6.7.1 Geometric Mean (cfu/100mL)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit (mg/L)	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
ECA Objective (mg/L)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Average (mg/L)	5.00	5.00	23.00	49.00	21.00	16.00	8.00	5.00	8.00	9.00	11.00	19.00

6.8 pH

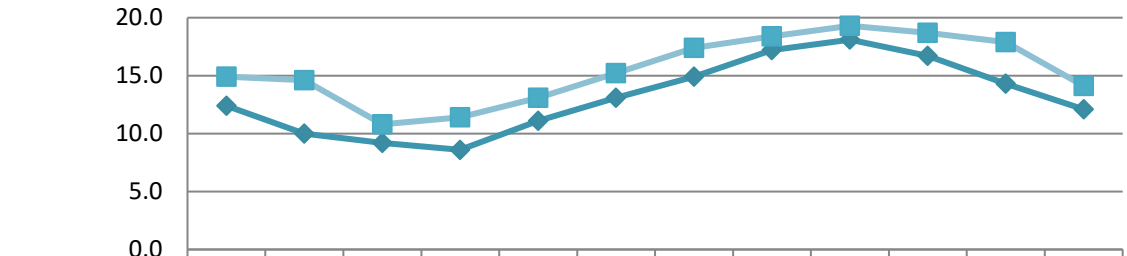
Compliance Limit range for this parameter is 6.0 – 9.5. The parameter was met in 2025. Each instance the pH is outside of that range is reported as a non-compliance.
Compliance Objective range for this parameter is 6.5-9.5. The parameter was met in 2025.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Limit/Objective	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
Maximum	7.29	7.29	7.38	7.63	7.05	7.43	7.26	7.32	7.24	7.13	7.29	7.26
Minimum	7.14	7.06	7.14	7.17	7.00	7.15	7.11	7.16	6.88	6.96	7.09	7.10
Min Objective	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Min Limit	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

6.9 Temperature

There are no compliance limits or objectives defined for Effluent



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum	12.4	10.0	9.2	8.6	11.1	13.1	14.9	17.2	18.1	16.7	14.3	12.1
Maximum	14.9	14.6	10.8	11.4	13.1	15.2	17.4	18.4	19.3	18.7	17.9	14.1

7 Operating Issues

There were no operating issues in 2025.

7.1 Effluent Quality Non-Compliance Summary

Date	Exceedance of	Limit	Value	Corrective Action
No Non-Compliance for the reporting period of 2025				

7.2 Summary of Abnormal Sewage Discharge Events

Abnormal Discharge Events include Bypass', Overflows, Diversions and Spills of Sewage. Summary Details are included in Appendix B.

7.3 Spills (Other than Sewage)

Date	Location	Details	Volume (m3)	Start Date and Time	End Date and Time
There were no spills of sewage to report in 2025					

8 Maintenance

Routine planned maintenance activities:

- Inspect, adjust and calibrate process control equipment to ensure proper operation of water distribution systems, pumps, chemical feeders, and all other equipment installed at the facilities.
- Carry out a routine maintenance program including greasing and oiling as specified in the lubrication schedule.
- Perform day-to-day maintenance duties to equipment including checking machinery and electrical equipment when required.
- Maintain an equipment inventory

Unplanned maintenance is conducted as required.

8.1 Normal Maintenance and Repairs

Maintenance/Repairs
- SCADA upgrades - Annual Transfer Switch Inspection - UV system upgrades and preventative maintenance - Process equipment cleanouts and oil changes - Annual Flow Meter and Level Transmitter Calibrations and Verifications - SCADA Maintenance - Biosolids Hauling and Disposal - Annual Generator Service Maintenance and Inspection - SBR Dissolved Oxygen Sensor Calibrations

8.2 Emergency Maintenance and Repairs

Maintenance/Repairs
January 30th, 2025 – DCV-403 Effluent discharge valve failed to open due to fault in gearbox. The actuator was found to be faulty and was replaced with a new actuator from ROTROK on February 28th, 2025.

8.3 Flow Meter Calibrations and Maintenance

Location	Date of Calibration	Additional Maintenance
FIT-401 Waste Sludge Basin 1	May 22, 2025	None.
FIT-402 Waste Sludge Basin 2	May 22, 2025	None.
FIT-305 Raw Sewage Influent Channel 1	May 22, 2025	None.
FIT-306 Raw Sewage Influent Channel 2	May 22, 2025	None.
FIT-304 Raw Waste Water Flow	May 22, 2025	None.
FIT-302 P.S. Inlet Sewage Flow	May 22, 2025	None.
FIT-301 Inlet Sewage Plant Pump Station Flow	May 22, 2025	None.
FIT-303 Supernatant	May 22, 2025	None.
FIT-501 UV Channel Flow	May 22, 2025	None.

8.4 Authorized Alterations in Collection System

Alteration	Details	Significant Drinking Water Threat (Y/N)
No alterations made to the collection system in 2025		

8.5 Notice of Modifications

Date	Process	Modification	Status
January 2025	Flowrate Study being conducted by EVB Engineering on behalf of the Municipality for	2 Blu-Siren Loggers mounted in 2 manholes	Completed

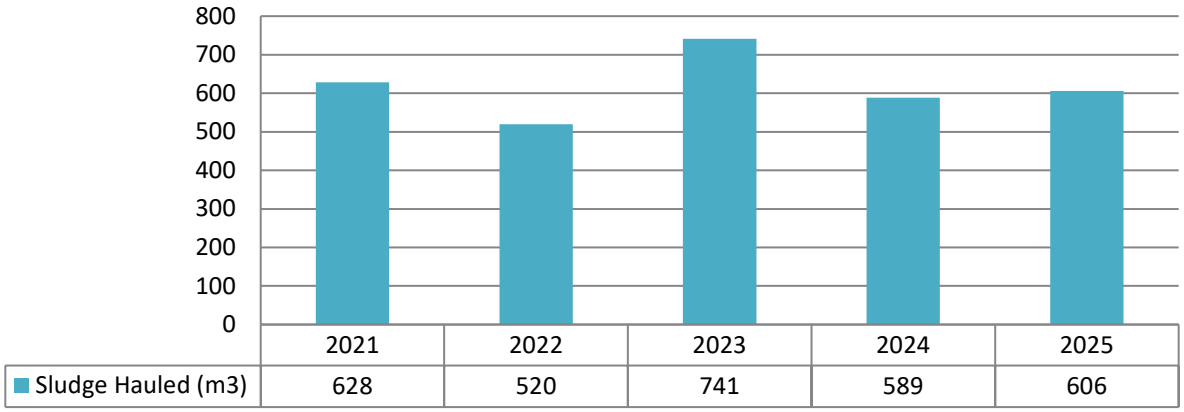
9 Sludge Generation

9.1 Sludge Disposal Summary

Date	Disposal Location	Approval Number	Total Volume (m3)
June 2 – June 4, 2025	D.E.S Digester 12 Bath Road Iroquois, ON	ECA # 5948-7JRMAJ	286.25
October 15-20, 2025	D.E.S Digester 12 Bath Road Iroquois, ON	ECA # 5948-7JRMAJ	320.27

In 2025, a total of 606.52 m^3 of liquid sludge was removed from Iroquois' WWTP. The sludge was removed from the WWTP by GFL in June AND October. There is no NASM plan as all sludge was hauled to a holding tank for mixing. It is anticipated that approximately the same volume of sludge will be generated in 2026.

9.2 5 Year Annual Comparison (m3/year)



It is anticipated that sludge volumes will remain similar to the 2025 volumes.

10 Summary of Complaints

Location	Date	Nature of Complaint	Actions Taken
No Sewer Backups in Iroquois in 2025			

Appendix A

Appendix A - Performance Assessment Report

IROQUOIS WWTP
PERFORMANCE ASSESSMENT REPORT

MUNICIPALITY: SOUTH DUNDAS
PROJECT: IROQUOIS WWTP
WORKS NUM.: 120000159
DESCRIPTION: TWO SEQUENTIAL BATCH REACTORS AND AEROBIC SLUDGE DIGESTION

YEAR: 2025
WATER COURSE: ST. LAWRENC
DESIGN CAPACITY: 3,300 m^3/d

MONTH	RAW			TREATED			RAW				SLUDGE
	Total Flow m^3	Avg Day Flow m^3	Max Day Flow m^3	Total Flow m^3	Avg Day Flow m^3	Max Day Flow m^3	Raw BOD (mg/L)	Raw TSS (mg/L)	Raw PHOS. (mg/L)	Raw TKN (mg/L)	Liquid Sludge Hauled m^3
JAN	51,158	1,115	3,185	50,131	1,687	3,095	114	63	1.67	14.9	0
FEB	29,591	1,056	1,399	29,977	1,070	1,571	114	46	1.58	15.0	0
MAR	114,533	3,925	10,716	109,914	3,767	10,244	155	76	1.56	12.2	0
APR	108,735	3,624	8,404	107,103	3,570	7,762	124	20	0.43	5.1	0
MAY	61,981	2,057	2,817	60,645	2,007	2,827	33	44	1.61	13.0	0
JUN	40,553	1,352	1,748	41,138	1,371	1,861	22	27	1.38	12.8	286
JUL	29,427	975	1,144	29,012	961	1,127	44	115	1.90	15.7	0
AUG	21,660	721	803	21,142	703	857	123	156	3.81	30.1	0
SEPT	23,303	777	893	22,134	737	801	137	115	3.00	27.4	0
OCT	24,884	802	3,069	23,191	748	2,719	110	330	4.20	35.5	320
NOV	53,782	1,792	2,993	51,026	1,700	2,879	109	90	1.68	14.6	0
DEC	50,679	1,685	3,329	44,284	1,479	2,814	157	92	2.26	21.7	0
TOTAL	610,286			589,697							607
AVG		1,672			1,650		104	98	2.09	18.2	
MAX			10,716			10,244					
CRITERIA		**3,300**	**16,800**								
COMPLIANCE		**YES**	**YES**								

2025 - IROQUOIS WWTP EFFLUENT SAMPLING MONTHLY AVERAGES

MONTH	DATE	CBOD (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	E. Coli (CFU/100ml)
January	01/07/2025	< 3	4	0.11	0.05	15
	01/14/2025	< 3	7	0.11	0.08	29
	01/21/2025	< 3	25	0.15	0.08	25
	01/28/2025	< 3	12	0.14	0.47	22
	Monthly Average	3.0	12.0	0.13	0.17	22
	Compliant?	YES	YES	YES	YES	YES
February	02/05/2025	4	8	0.25	1.46	14
	02/11/2025	4	8	0.2	0.77	99
	02/18/2025	4	9	0.28	6.89	1
	02/25/2025	4	6	0.26	0.14	82
	Monthly Average	4.0	7.8	0.25	2.32	18
	Compliant?	YES	YES	YES	YES	YES
March	04/03/2025	< 3	6	0.2	0.29	13
	11/03/2025	< 3	6	0.17	0.12	21
	18/03/2025	< 3	16	0.28	0.12	32
	25/03/2025	< 3	8	0.16	0.05	19
	Monthly Average	3.0	9.0	0.20	0.15	20
	Compliant?	YES	YES	YES	YES	YES
April	01/04/2025	4	20	0.47	0.1	32
	08/04/2025	< 3	5	0.16	0.07	14
	15/04/2025	5	8	0.22	0.14	12
	22/04/2025	< 3	27	0.2	0.06	18
	29/04/2025	< 3	7	0.18	0.39	14
	Monthly Average	3.6	13.4	0.25	0.15	17
	Compliant?	YES	YES	YES	YES	YES
May	06/05/2025	< 3	3	0.48	0.12	26
	13/05/2025	< 3	8	0.22	0.23	36
	20/05/2025	< 3	3	0.21	0.21	26
	27/05/2025	< 3	7	0.25	0.25	42
	Monthly Average	3.0	5.3	0.29	0.20	32
	Compliant?	YES	YES	YES	YES	YES
June	3/06/2025	< 3	7	0.24	0.09	20
	10/06/2025	< 3	7	0.35	< 0.05	12
	17/06/2025	< 3	8	0.37	0.09	14
	24/06/2025	< 3	5	0.42	0.14	18
	Monthly Average	3.0	6.8	0.35	0.09	16
	Compliant?	YES	YES	YES	YES	YES
July	02/07/2025	< 3	8	0.5	0.22	18
	8/07/2025	< 3	7	0.25	0.08	6
	15/07/2025	< 3	5	0.36	0.16	8
	22/07/2025	< 3	3	0.61	0.24	< 4
	29/07/2025	< 3	2	0.18	0.08	4
	Monthly Average	3.0	5.0	0.38	0.16	7
	Compliant?	YES	YES	YES	YES	YES
August	06/08/2025	3	3	0.45	0.14	6
	12/08/2025	< 3	4	0.35	0.09	2
	19/08/2025	< 3	5	0.37	< 0.05	8
	26/08/2025	< 3	4	0.47	< 0.05	2
	Monthly Average	3.0	4.0	0.41	0.08	4
	Compliant?	YES	YES	YES	YES	YES
September	3/09/2025	< 3	5	0.52	< 0.05	6
	09/09/2025	< 3	5	0.55	< 0.05	2
	16/09/2025	< 3	3	0.72	< 0.05	2
	23/09/2025	< 3	5	0.92	0.13	10
	30/09/2025	< 3	4	0.32	0.05	20
	Monthly Average	3.0	4.4	0.61	0.07	5
	Compliant?	YES	YES	YES	YES	YES
October	10/07/2025	< 3	5	0.69	0.18	4
	10/14/2025	< 3	9	0.24	0.21	4
	10/21/2025	< 3	6	0.43	0.12	14
	10/28/2025	< 3	8	0.25	0.08	14
	Monthly Average	3	7.0	0.40	0.15	7
	Compliant?	YES	YES	YES	YES	YES
November	11/04/2025	< 3	6	0.16	< 0.05	8
	11/10/2025	< 3	8	0.16	< 0.05	12
	11/18/2025	< 3	5	0.16	0.08	12
	11/25/2025	< 3	4	0.19	0.19	10
	Monthly Average	3.0	5.8	0.17	0.09	10
	Compliant?	YES	YES	YES	YES	YES
December	12/02/2025	< 3	7	0.18	0.82	12
	12/09/2025	< 3	5	0.21	1.14	18
	12/16/2025	< 3	8	0.23	1.83	24
	12/23/2025	< 3	8	0.2	1.36	24
	12/30/2025	< 3	6	0.2	3.04	6
	Monthly Average	3.0	6.8	0.20	1.64	19
	Compliant?	YES	YES	YES	YES	YES

Appendix B

Appendix B - Details of Abnormal Sewage Discharge Events

Facility Bypass

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
No By-Pass event to report in 2025								

Facility Overflow

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
No facility overflows to report in 2025.								

Collection Overflow

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
No overflows to report in 2025.								

Spills of Sewage

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
No spills of sewage to report in 2025.								

Collection System Monitoring Data

Event Date	Event Location	Volume (m3)	Parameter	mg/L	Source Loading	Any Adverse Impacts & Corrective Actions
There was no collection system overflow or spill to report in 2025.						

Appendix C

Appendix C – Biosolids Quality Report

2025 - IROQUOIS WWTP MONTHLY AEROBIC BIOSOLIDS CONCENTRATION RATIO

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Ammonia	1450	1420	1390	1870	3190	2370	2320	2120	2310	1950	2340	1250
Nitrate	2.6	3.1	0.2	1.8	2.0	0.5	0.4	0.4	0.4	0.4	0.4	1.0
Ammonia + Nitrate	1453	1423	1390	1872	3192	2371	2320	2120	2310	1950	2340	1251
Total Phosphorus	1420	1240	1500	1330	1230	1510	1670	1890	2110	1150	1400	1390
Total Solids	28300	14200	28500	30100	32300	37600	39300	41500	38500	35100	29800	29300
Aluminum	864	1340	1180	906	926.0	640.0	1140	1090	1530	1080	706	888
Arsenic	0.10	0.22	0.20	0.20	0.20	0.20	0.30	0.20	0.30	0.20	0.10	0.10
Cadmium	0.03	0.05	0.04	0.04	0.04	0.03	0.06	0.05	0.07	0.04	0.03	0.03
Chromium	1.57	2.45	2.15	1.76	1.74	1.20	2.06	1.86	2.86	1.83	1.07	1.27
Cobalt	0.08	0.14	0.12	0.12	0.13	0.11	0.15	0.17	0.27	0.16	0.09	0.11
Copper	33.50	50.90	37.60	32.50	28.80	24.70	36.40	35.00	56.50	37.20	20.80	23.40
Lead	0.60	0.90	0.70	0.80	0.70	0.40	0.90	0.90	1.50	1.00	0.50	0.60
Mercury	0.01	0.01	0.01	0.01	0.01	0.07	0.01	0.01	0.01	0.01	0.01	0.01
Molybdenum	0.33	0.49	0.38	0.38	0.38	0.31	0.54	0.46	0.76	0.53	0.33	0.40
Nickel	0.72	1.03	0.87	0.83	0.97	0.81	1.34	1.11	1.70	1.00	0.52	0.63
Selenium	0.10	0.20	0.20	0.10	0.10	0.20	0.30	0.20	0.40	0.20	0.10	0.10
Zinc	19.30	31.00	25.60	23.60	24.10	16.90	32.00	32.50	52.60	34.30	18.80	20.30

Metals ratio = mg metals/kg solids

	Metal/Solids Ratio (Sludge)												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Limit
Arsenic	3.53	15.49	7.02	6.64	6.19	5.32	7.63	4.82	7.79	5.70	3.36	3.41	**170**
Cadmium	1.06	3.52	1.40	1.33	1.24	0.80	1.53	1.20	1.82	1.14	1.01	1.02	**34**
Chromium	55.5	172.5	75.4	58.5	53.9	31.9	52.4	44.8	74.3	52.1	35.9	43.3	**2800**
Cobalt	2.83	9.86	4.21	3.99	4.02	2.93	3.82	4.10	7.01	4.56	3.02	3.75	**340**
Copper	1184	3585	1319	1080	892	657	926	843	1468	1060	698	799	**1700**
Lead	21.2	63.4	24.6	26.6	21.7	10.6	22.9	21.7	39.0	28.5	16.8	20.5	**1100**
Mercury	0.21	0.42	0.25	0.20	0.25	1.86	0.13	0.22	0.26	0.23	0.23	0.27	**11**
Molybdenum	11.66	34.51	13.33	12.62	11.76	8.24	13.74	11.08	19.74	15.10	11.07	13.65	**94**
Nickel	25.4	72.5	30.5	27.6	30.0	21.5	34.1	26.7	44.2	28.5	17.4	21.5	**420**
Selenium	3.53	14.08	7.02	3.32	3.10	5.32	7.63	4.82	10.39	5.70	3.36	3.41	**34**
Zinc	682	2183	898	784	746	449	814	783	1366	977	631	693	**4200**

Sludge is Acceptable	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE

SOME ANALYSIS RESULTS EXPRESSED AS "<" (LESS THAN);HOWEVER, IN ORDER TO COMPLETE THE CALCULATION, ONLY THE NUMERIC VALUE WAS USED; THEREFORE THE AVG. CONC. IS GREATER THAN ACTUAL.

Appendix D

Appendix D - ECA Annual Report Requirements

Facility ECA # 9689-8MQHNK **Section 10.6**	**Section in Report**
(a) A summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;	Treatment Flows, Raw Sewage, Effluent Quality
(b) A description of any operating problems encountered and corrective actions taken;	Operating Issues and Problems
(c) A summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;	Maintenance
(d) A summary of any effluent quality assurance or control measures undertaken in the reporting period;	Effluent Quality
(e) A summary of the calibration and maintenance carried out on all effluent monitoring equipment; and	Flow Meter Calibrations
(f) A description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.	Effluent Quality
(g) A tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;	Sludge Generation
(h) A summary of any complaints received during the reporting period and any steps taken to address the complaints;	Complaints
(i) A summary of all By-pass, spill or abnormal discharge events; and	Appendix B
(j) Any other information the District Manager requires from time to time.	N/A

Collection ECA # 165-W601 **Schedule E**	
4.6.3 If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.	Operating Issues and Problems
4.6.4 Includes a summary of any operating problems encountered and corrective actions taken.	Operating Issues and Problems
4.6.5 Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.	Maintenance
4.6.6 Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.	Summary of Complaints
4.6.7 Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat.	Maintenance
4.6.8 Includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including: a) Dates; b) Volumes and durations; c) If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli; d) Disinfection, if any; and e) Any adverse impact(s) and any corrective actions, if applicable.	Operating Issues and Problems Appendix B

Collection ECA # 165-W601 **Schedule E**	
4.6.9 Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable: a) A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted. b) Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines. c) An assessment of the effectiveness of each action taken. d) An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives. e) Public reporting approach including proactive efforts.	Maintenance Operating Issues and Problems