



Wastewater Annual Report 2025



March 2026, Version 1.0

Annual Wastewater Report

2025

Version 1.0

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Date

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March 30, 2026

Date

Introduction to the Annual Wastewater Report

Under Environmental Compliance Approval (ECA) agreements issued by the Ministry of Environment, Conservation & Parks (MECP), the City is required to annually report on the values/parameters indicated in the ECA and made available to the District Manager by March 31st of the calendar year following the period being reported upon.

The City of Greater Sudbury (CGS) owns and operates ten (10) Wastewater Treatment Plants and four (4) Wastewater Lagoons each having their own distinct annual reporting requirements. To ensure compliance, the city will report on each facility separately. Individual facility annual performance reports are attached at the end of the report an appendix.

The Annual Wastewater Facility Annual Report is available to the public, free of charge by visiting the City of Greater Sudbury’s Website <https://www.greatersudbury.ca/>

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Azilda Wastewater Treatment Annual Performance Report

The Azilda Wastewater Treatment Plant is an extended aeration process plant located at 564 St. Agnes Street, having a rated capacity of 3,300 m³/d discharging its effluent to Pilon Drain (known as Azilda Creek) and eventually into the Whitson River.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

Influent monitoring data, historical trending of sewage characteristics are reviewed monthly by compliance and plant supervisory staff. No abnormalities were observed for the Azilda WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers (ECOs) can be deployed to investigate and react as needed. Below is a table summarizing the yearly averages of recorded monitoring data.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	126	123	134	188	155	131
CBOD ₅ (mg/L)	92	96	109	164	144	106
TSS (mg/L)	160	138	147	157	126	108
TP (mg/L)	3.64	3.59	3.88	4.75	4.39	3.10
TKN (mg/L)	28.37	27.62	23.69	30.38	28.32	25.20

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

All effluent monitoring data is reviewed monthly by compliance and plant supervisory staff. For the Azilda WWTP, all parameters fell within plant design objectives with the exception of Total Ammonia for February, March and May due to low flows, temperature and solids fluctuations. Consistent monitoring and air and solids adjustment brought parameters back to normal.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	1919	1780	2047	1650	1607	2125
CBOD ₅ (mg/L)	2.64	2.75	2.48	2.83	1.95	2.56
TSS (mg/L)	5.14	6.86	6.43	6.82	7.49	8.04
TP (mg/L)	0.21	0.29	0.21	0.19	0.31	0.28
Total Ammonia (mg/L)	2.95	1.27	4.06	2.27	2.26	1.68
E.coli (CFU/100 mL)	36	33	13	16	9	22
pH	6.72	6.60	6.77	6.54	6.8	7.00
Total Chlorine (mg/L) (after dechlorination)	0.004	0.006	0.011	0.014	0.009	NA

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	5.08	6.26	4.97	4.42	3.16	5.91
TSS (kg/d)	10.07	14.76	13.5	10.44	12.54	18.82
TP (kg/d)	0.38	0.57	0.38	0.29	0.5	0.64
Total Ammonia (kg/d)	5.4	3.1	7.09	2.2	3.4	4.0

c. Summary of all operating issues encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
28-Feb-25	Ammonia	Outside ECA Limit	Air maxed - monitor	Temp and low flow	07-Mar-25
17-Mar-25	Total Chlorine Residual	Outside ECA Limit	Adjusted Chemical	Overfeeding chemical	19-Mar-2025
07-Apr-25	Ammonia	Outside ECA Limit	Air maxed - monitor	Temperature	7-Apr-2025
22-Apr-25	Other	Outside ECA Limit	Repaired pump	Mechanical Failure	25-Apr-2025
01 May-25	Ammonia	Outside ECA Limit	Vactored contact chamber, weirs and grit channels	Flow temp and solids fluctuation	9-Jun-2025
17-Aug-25	Total Chlorine Residual	Outside ECA Limit	Review SOP	Staffing/ Training/ Communication	28-Aug-2025

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at the Azilda WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP. See tables below for details.

Corrective (18)		
Wind Sock Damaged Heat trace ferric pipe Steam channel Replace heat trace and insulation Repair coupling on roof drain in MCC Tripped overload	Lights burnt out inside entranceway Replace Float Remove lime mixer and prep for new tote Replace butterfly valve for airdrop Replace butterfly valve sludge tank	Check oil level and motor bearing Pump needs to be rebuilt or replaced Install new threads Prep for winter Replace supernatant box

Regular Scheduled Maintenance (197 Completed)		
Pump Inspection (submersible)	D.O. Meter Calibration	Change Hydraulic filter
Diesel Engine Routine Annual	Clarifier/Aeration Tank and Skimmer	Snow Blower Maint
Pump Inspection (Non-Submersible)	Oil Change Routine	Chemical Pump Monthly Inspection
Flush and Clean	Check Oil	Chemical Pumps Bi-Annual PM
Chlorinator Yearly PM	Clean Cl2 Chamber	Thermography Inspections
Diesel Generator Test (Monthly)	Filter/Belt Maintenance	Dechlor ORP Monthly Insp
Heater Inspection	Cl2 Air Monitor Calibrations	Dechlor HVAC Inspection
Change Battery	Clean and inspection of	Azilda 10 Ton Condenser Annual
Composite Sampler	Tank/Chamber	Cold Weather Preparations
Centrifugal Blower Inspection	Routine Equipment Maintenance	First Aid Box Inspections
Clarifier drive/Gearbox Routine	Piping and Valves Drain Hoses	Lockout Station Inspection
Comminutor Inspection	Spring Runoff Preparations Plants	Emerg. & Exit Lighting Insp.
Load Bank Test	SCBA Inspection (6 months)	Operation Manual Review
Air Compressor Mtce (quarterly)	Composite Sampler Inspection By-	House Cleaning
Air Compressor Mtce (annual)	Annual	Colorimeter Verification (monthly)
Motor Condition Monitoring Elec.	Chlorine Vacuum Regulators Yearly.	Spill Kit Inspection (Quarterly)
Sensor calibration		

Regulated Works Orders (25 Completed)		
Workplace Inspections	Anchor Point Inspection	Operation Manual Review
Lifting Appliance Annual Insp	Monthly Safety Checks	Flow Meter Calibration

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and process monitoring. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to a monthly and annual performance report by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Azilda WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter Raw Tank #2 (FIT-102)	6/6/2025	CO1628-2506-38
Flow Meter Raw Tank #1 (FIT-101)	6/6/2025	CO1628-2506-37
Flow Meter, Bypass	6/5/2025	CO1628-2506-36
Flow Meter, Effluent	6/5/2025	CO1628-2506-35

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- when any of the design objectives is not achieved more than 50% of the time in a year, or
- there is an increasing trend in deterioration of Final Effluent quality when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

For 2025 reporting year the wastewater treatment plant ran at approximately 58% of designed capacity. No increasing trend in deterioration of Final Effluent quality has been noticed when the annual average daily influent flow reaches 80% of the Rated Capacity. Design objectives were reached more than 50% of the time.

h. Tabulation of the volume of sludge generated, 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.

Azilda generated 4,113 m³ of waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	April	May	June
Loads	8	8	10	11	16	8
Vol m ³	306.47	326.12	346.17	280.56	365.23	327.79
	July	Aug	Sept	Oct	Nov	Dec
Loads	8	9	8	10	8	10
Vol m ³	326.89	375.42	340.20	422.05	332.72	363.25

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints recorded for Azilda WWTP for this reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

There were no Bypasses or Overflows for the current reporting year.

k. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There was no Notice of Modifications to Sewage Works completed for this reporting year.

l. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Cleaned out grit channels multiple times as needed. Replaced Chlorine booster pump.

m. Any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

There were no capital projects or construction in 2025.

n. Summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

There were no deviations to the monitoring schedule in the current reporting year, and no monitoring changes required for the next reporting year.

Chelmsford Wastewater Treatment Annual Performance Report

The Chelmsford Wastewater Treatment Plant is a conventional activated sludge plant located at 265 Laurette St Chelmsford; it consists of three separate plants referred to as A plant, B plant and C plant. With rated capacities of 4,000 m³/d for A plant, 4,000 m³/d for B plant and 10,200 m³/d for C plant for a total Peak Flow Rated Capacity of 18,200 m³/d, discharging effluent to the Whitson River.

a. A summary and interpretation of all monitoring data and a comparison to the compliance limits outlined in Compliance Limits Condition, including an overview of the success and adequacy of the Works.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	122	155.16	195.50	164.83	189.42	136.67
TSS (mg/L)	281	235	228	256	221	215
TP (mg/L)	3.47	3.85	3.22	3.22	3.32	3.20
TKN (mg/L)	23.66	23.37	24.60	22.47	26.58	23.85

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	4824	4491	4828	3552	4215	5344
CBOD ₅ (mg/L)	4.23	3.78	3.12	4.72	2.92	3.89
TSS (mg/L)	6.33	7.42	8.03	7.43	5.58	6.18
TP (mg/L)	0.22	0.24	0.25	0.23	0.20	0.23
Total Ammonia (mg/L)	3.19	2.37	3.56	1.29	1.44	4.90
E.Coli (CFU/100 mL)	8433	9474	2404	4278	2370	5950
pH	6.90	6.65	6.90	6.77	7.19	7.35

b. Description of any operating problems encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
10/16/2025	pH	Outside ECA Limit	Added lime, adjusted wasting	Plant upset	10/22/2025
Winter	Ammonia	Outside ECA Limit	Cleaned tank	Temp and airflow	1/28/2026

c. Summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Works.

The operating and maintenance staff at the Chelmsford WWTP conduct scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (40)		
Check operation of Auger Ball valve stiff to turn. Repair Leak Clean up unit Raw pump #2	Repair drainage system Ferric is not pumping Install new hose in UV room Replace or repair cables Build Flange to Camlock adapter	Check UPS Skimmer arm bent Repair door Repair pipe Pump #2 bring in for repair

Relamp Effluent room Pull pump and send out Replace belt Change Belt Inspect valve Replace sleeve Replace pendant on B plant	Replace intake filters on Blower check uv system Tighten chain Install anchor point Replace Cooling pump Not pumping Rebuild pump	Install rebuild pump Install repaired pump Replace turn buckles Install Anchor point Sump Pump in blower room Replace bulb men's shower Waste valve not closing (A)
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Regular Scheduled Maintenance (252 Completed)		
Pump Inspection (submersible) Diesel Engine Routine Annual Pump Inspection (Non-Submersible) Diesel Generator Test (Monthly) UV Channel Online Clean & Insp UV Lamp Bi-weekly Composite Sampler Inspection Monthly Clarifier drive/Gearbox Routine Blower Inspection Diesel Engine 5 Year Inspection Maintenance	Motor Condition Monitoring Elec. D.O. Meter Calibration Clarifier/Aeration Tank and Skimmer Oil Change Routine Valve Exercise Clean CL2 Chamber Mechanical Bar Screen / Compactor Filter/Belt Maintenance Filter/Belt SCBA Inspection (6 months) Routine Equipment Maintenance Piping and Valves Drain Hoses Spring Runoff Preparations Plants	Composite Sampler Inspection By-Annual Spill Kit Inspection (Quarterly) Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM Thermography Inspections Chlorine Parts Inventory Cold Weather Preparations Grit Classifier Draining First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. Operation Manual Review House Cleaning Colorimeter Verification (monthly) AED monthly inspection UV lamp Assembly Monthly Clean and inspection of Tank/Chamber

Regulated Works Orders (53 Completed)		
Workplace Inspections Lifting Appliance Annual Insp Contract Lab Equipment Calibration	Anchor Point Inspection Monthly Safety Checks High Voltage Gloves Testing	Lanyard Retractable Inspection (Annual) Operation Manual Review Flow Meter Calibration

d. Summary of any effluent quality assurance or control measures undertaken in the reporting period.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week as well as samples collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to area supervisors for final review.

e. Summary of the calibration and maintenance carried out on all effluent monitoring equipment.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Chelmsford WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment are summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Effluent	6/5/2025	CO1628-2506-31
Flow Meter FIT-102 Chamber Plant 'A'	6/9/2025	CO1628-2506-32
Flow Meter FIT-103 Chamber Plant 'B'	6/9/2025	CO1628-2506-33
Flow Meter, FIT-101 Influent	6/9/2025	CO1628-2506-34

g. Condition description of efforts made, and results achieved in meeting the Design Objectives

For 2025 reporting year Chelmsford averaged approximately 68% of rated capacity and achieved its design objectives as listed in the ECA.

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.

Chelmsford generated 15,726.10 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	Apr	May	Jun
Loads	29	46	54	49	27	28
Vol m ³	1167.80	1721.23	2144.10	1900.88	1067.17	1134.53
	Jul	Aug	Sep	Oct	Nov	Dec
Loads	29	23	26	32	26	28
Vol m ³	1148.60	941.45	1073.70	1289.85	1058.15	1078.64

h. Summary of any complaints received during the reporting period and any steps taken to address the complaints.

There were no complaints received for Chelmsford WWTP during this reporting year

i. Summary of all By-pass, spill, or abnormal discharge events; and

Date	Duration	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
Dec 10, 2025	5 mins	Plant Overflow	Whitson	5	None	Equipment failure

j. Any other information the Water Supervisor requires from time to time.

There is no further information required for this reporting year.

Coniston Wastewater Treatment Annual Performance Report

The Coniston Wastewater Treatment Plant located at 121 Government Rd. Coniston is an activated sludge plant that utilizes an oxidation ditch in the process. The plant has a Peak Flow Rated Capacity of 3,000 m³/d, and discharges effluent to Coniston Creek.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed monthly by compliance and plant supervisory staff. No abnormalities were observed for the Coniston WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	8.64	65	70	101	103	72
TSS (mg/L)	89	122	88	79	109	69
TP (mg/L)	3.03	2.93	3.11	3.41	3.62	3.10

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

All effluent monitoring data is graphed and reviewed monthly by compliance and plant supervisory staff. For the Coniston WWTP, all parameters fell within plant design objectives.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	1500	1671	2095	1476	1298	1692
CBOD ₅ (mg/L)	5.0	3.4	3.6	11	2.8	12.3
TSS (mg/L)	9.84	7.55	9.78	13.50	6.07	15.79
Total Residual Chlorine (mg/L)	0.74	0.72	0.68	0.73	0.67	0.84

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	6.37	5.34	8.15	16.57	N/A	N/A
TSS (kg/d)	15.22	13.20	21.57	20.85	7.76	22.79

c. Summary of all operating issues encountered, and corrective actions taken.

There were no operating issues encountered for Coniston WWTP for this reporting year.

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at Coniston WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (21)		
Air leak - replace or repair coupling	Emergency lighting	Repair Aeration Line
Replace motor on Clarifier Drive	furnace malfunction	Check receptacles in the Lab
Get system up and running	Check operation	Repair Davit arm installation
Programming of #2 RAS pump	Chlorine Leak	Have Weir Plates repaired
Install Vent Fan	Replace Cl2 detector	Check operation of sampler
Put System online	Check Operation	Install new pump
Repair Airline	Scum Heater not working	

Regular Scheduled Maintenance (142 Completed)		
Pump Inspection (submersible)	D.O. Meter Calibration	Thermography Inspections
Pump Inspection (Non-Submersible)	Clean CL2 Chamber	SCBA Annual Certification
Chlorinator Yearly PM	Cl2 Air Monitor Calibration	Cold Weather Preparations
Diesel Generator Test (Monthly)	UPS load test	First Aid Box Inspections
Composite Sampler Inspection Monthly	Piping and Valves Drain Hoses	Lockout Station Inspection
Clarifier drive/Gearbox Routine	Spring Runoff Preparations Plants	Emerg. & Exit Lighting Insp.
Load Bank Test	SCBA Inspection (6 months)	Operation Manual Review
Blower Inspection	Composite Sampler Inspection By-Annual	House Cleaning
Motor Condition Monitoring Elec.	Chlorine Vacuum Regulators Yearly.	Colorimeter Verification (monthly)
Snow Blower Maintenance	Spill Kit Inspection (Quarterly)	Sodium Bisulphite P-Traps
		Diesel 5 year Inspection

Regulated Works Orders (27 Completed)		
Lifting Appliance Annual Insp	Anchor Point Inspection	Lanyard Retractable Inspection (Annual)
Flow Meter Calibration	Monthly Safety Checks	Operation Manual Review

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Coniston WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment are summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Process, No.2 Effluent	6/4/2025	CO1628-2506-14
Flow Meter, Process, No. 1 Raw	6/4/2025	CO1628-2506-15

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- when any of the design objectives is not achieved more than 50% of the time in a year, or
- there is an increasing trend in deterioration of Final Effluent quality when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

For 2025 reporting year Coniston WWTP averaged approximately 50% of rated capacity and achieved its design objectives as listed in the ECA.

h. Tabulation of the volume of sludge generated, 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.

Coniston generated 3,595.92 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan.	Feb.	Mar.	Apr.	May	June
Loads	7	7	8	14	14	5
Vol m ³	284.45	280.47	271.85	378.31	418.51	192.91
	July	Aug	Sept.	Oct.	Nov.	Dec.
Loads	8	8	6	7	7	8
Vol m ³	320.83	325.69	244.39	289.36	283.17	305.99

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints recorded for Coniston WWTP for this reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

Date	Duration (hrs)	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
15-March-25	32	Plant By-Pass	121 Government Rd	4064	Disinfection	Spring Run Off
15-March-26	.25	Plant Overflow	121 Government Rd	2.5	To Environment	Spring Run Off
26-Apr-2025	8.66	Plant By-Pass	Coniston Creek	900	Disinfection	Heavy Rain/Spring Run off

6-July-2025	17	Plant By-Pass	Coniston Creek	252	Disinfection	Heavy Rain
17-July-2025	12.25	Plant By-Pass	Coniston Creek	1461	Disinfection	Heavy Rain

k. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There were no Notice of Modifications to Sewage Works for this reporting year.

l. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Replaced two ditch aeration pumps. Replaced two Bisulfite chemical feed pumps. Cleaned Cl2 contact chamber. Inspected and minor repairs on both clarifiers. Capital upgrades that were identified are now in planning stages.

m. Any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

No current construction projects.

n. Summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

There were no deviations to the monitoring schedule in the current reporting year, and no monitoring changes required for the next reporting year.

Dowling Wastewater Treatment

Annual Performance Report

The Dowling Wastewater Treatment Plant located at 62 Riverside Dr. Dowling is an extended aeration activated sludge plant, having a Peak Flow Rated Capacity of 3,200 m³/d, discharging effluent to the Onaping River.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed monthly by compliance and plant supervisory staff. No abnormalities were observed for the Dowling WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	20	16	23	43	28	40
TSS (mg/L)	28	37	48	45	46	44
TP (mg/L)	0.74	0.90	0.98	1.12	0.97	0.94

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

Monthly, all effluent monitoring data is graphed and reviewed by compliance and plant supervisory staff. For the Dowling WWTP, all parameters fell within plant design objectives and compliance limits.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	3322	2965	2614	1506	1951	1825
CBOD ₅ (mg/L)	4.13	2.47	2.50	2.93	2.57	3.38
TSS (mg/L)	7.33	5.49	5.24	4.62	3.93	5.28
TP (mg/L)	0.47	0.46	0.49	0.44	0.47	0.48
E.coli (CFU/100 mL)	42	12	17	17	22	24
pH	6.61	6.59	6.69	6.57	6.72	6.77
Total Residual Chlorine (mg/L)	0.71	0.9	0.68	0.60	0.63	0.64

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	14.17	7.45	7.66	4.63	6.92	6.15
TSS (kg/d)	25.08	15.95	14.10	7.05	7.54	9.47
TP (kg/d)	1.53	1.36	1.26	0.66	0.91	0.85

c. Summary of all operating issues encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
14-Aug-2025	E.coli	Outside ECA Limit	Updated sampling schedule	inaccurate sampling schedule	25-Aug-2025

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at Dowling WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (20)		
Heat trace not working	Pea keeps getting stuck	Valve broken in closed position
New kitchen faucet	Check what is needed for repair/rebuild	Indicator switch fell off in on position
Louvres are not closing	Scum box activator needs to be replaced	Comminutor is getting very loud
Pea is still slightly bouncing	Power bar Jiffy Pole in lab needs to be secured	Scum box heater/bulb needs to be replaced
Heater blowing cold air in blower room	investigate possible line break	Replace emergency light in lunchroom
Building alarm needs to be replaced	Pump issues	Doors to inlet building need to be adjusted
Missing some clamps gratings clarifier		

Regular Scheduled Maintenance (195 Completed)		
Pump Inspection (submersible)	Lanyard Retractable Inspection (Annual)	Dechlor ORP Monthly Insp
Diesel Engine Routine Annual	Filter/Belt Maintenance	Dechlor HVAC Inspection
Pump Inspection (Non-Submersible)	Cl2 Air Monitor Calibration	Open channel weir measurement verification
Chlorinator Yearly PM	Clean and inspection of Tank/Chamber	Cold Weather Preparations
Diesel Generator Test (Monthly)	Piping and Valves Drain Hoses	First Aid Box Inspections
Composite Sampler Inspection Monthly	Spring Runoff Preparations Plants	Lockout Station Inspection
Comminutor Inspection	SCBA Inspection (6 months)	Emerg. & Exit Lighting Insp.
Load Bank Test	Composite Sampler Inspection By-Annual	Operation Manual Review
Blower Inspection	Chlorine Vacuum Regulators Yearly.	House Cleaning
Motor Condition Monitoring Elec.	Spill Kit Inspection (Quarterly)	Colorimeter Verification (monthly)
D.O. Meter Calibration	Clean Bar Screens Monthly	Sodium Bisulphite P-Traps
Check Oil		Thermography Inspections
Clean CL2 Chamber		Chemical Pumps Bi-Annual PM

Regulated Works Orders (35 Completed)		
Workplace Inspections	Anchor Point Inspection	Lanyard Retractable Inspection (Annual)
Lifting Appliance Annual Insp	Monthly Safety Checks	Operation Manual Review
Contract	Flow Meter Calibration	

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Dowling WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, RAS	6/9/2025	CO1628-2506-39
Flow Meter, WAS	6/9/2025	CO1628-2506-40
Flow Meter, Plant Bypass	6/9/2025	CO1628-2506-41
Flow Meter, Process	6/9/2025	CO1628-2506-42

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- when any of the design objectives is not achieved more than 50% of the time in a year, or
- there is an increasing trend in deterioration of Final Effluent quality when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

For 2025 reporting year Dowling WWTP averaged approximately 104% of rated capacity due to high run off flows in April and May and achieved its design objectives as listed in the ECA.

The plant has been listed on the capital works plan for updates and upgrades.

h. Tabulation of the volume of sludge generated, 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.

Dowling generated 1,698.06 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan.	Feb	Mar	Apr	May	June
Loads	4	4	3	6	3	1
Vol m ³	165.50	165.32	117.22	163.54	118.75	38.90
	July	Aug	Sept	Oct	Nov	Dec
Loads	5	4	4	5	2	3
Vol m ³	197.56	161.14	167.99	213.94	80.11	108.11

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints received for Dowling in this reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

Date	Duration (hrs)	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
May 2- 2025	10.66	Plant Overflow	Dowling Plant property	~10	Full Treatment	Rain/Run off/Equip

k. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There were no Notice of Modifications to Sewage Works for this reporting year.

l. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Chlorine contact chamber was cleaned to allow for maximum flow through. Replaced comminutor and motor.

m. Any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

No current construction projects.

n. Summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

There were no deviations to the monitoring schedule in the current reporting year.

The average daily flows were above 2500 m³ for 2025 and this triggers the Federal Acute Lethality sampling requirement. As a precaution CGS continued with quarterly sampling throughout 2025 and the samples resulted in no kills. So, for the 2026 sampling year CGS is moving into the reduced sampling for Acute Lethality which is a yearly sample.

Falconbridge Wastewater Treatment

Annual Performance Report

The Falconbridge Wastewater Treatment Plant located at Hodge St., Falconbridge is a low-rate biological filter and wetland polishing system, having a Rated Capacity of 909 m³/d, discharging effluent to NIR creek and eventually to the Coniston creek.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed monthly by compliance and plant supervisory staff. No abnormalities were observed for the Falconbridge WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	132	137	145	195	199	168
TSS (mg/L)	124	132	119	120	120	88
TP (mg/L)	6.14	5.61	6.82	6.40	7.54	6.83

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, and loading. including an overview of the success and adequacy of the Works.

Monthly, all effluent monitoring data are graphed and reviewed by compliance and plant supervisory staff. For Falconbridge WWTP all parameters fell within plant design objectives and compliance limits.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	296	316	297	292	308	316
BOD ₅ (mg/L)	1.96	1.66	1.62	1.72	2.79	1.62
TSS (mg/L)	3.38	2.79	3.14	3.33	3.13	2.92
TP (mg/L)	0.06	0.05	0.03	0.20	0.13	0.04
TKN (mg/L)	0.44	0.45	0.50	0.47	0.80	1.17
Total Ammonia (mg/L)	0.27	0.16	0.20	0.25	0.43	0.25
Nitrite (mg/L)	0.08	0.12	0.19	0.06	0.09	0.09
Nitrate (mg/L)	0.11	0.19	0.25	0.22	0.19	0.21
E.coli (CFU/100 mL)	686	647	508	2629	1138	1071

c. Summary of all operating issues encountered, and corrective actions taken.

There were no operating issues encountered for this reporting year.

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at Falconbridge WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (3)		
Repair lighting	Repair Waterline	Turn off water

Regular Scheduled Maintenance (5 Completed)		
Clean and inspection of Tank/Chamber	Piping and Valves Drain Hoses	Cold Weather Preparations

Regulated Works Orders (3 Completed)		
Workplace Inspection	Flow Meter Calibration	Operation Manual

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct rounds which are recorded on checklists. On site flow monitoring record continuous trending for various flows. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment or recommended by the manufacturer.

The calibration of flow meters was conducted by a third-party contractor. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Process	6/6/2025	CO1628-2506-17

g. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints recorded for Falconbridge in the current reporting year.

h. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

There were no Bypasses or overflows for Falconbridge in the current reporting year.

i. Summary of all Notice of Modifications to Sewage Works completed.

There were no modifications to the sewage works for this reporting year.

j. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

No changes for this reporting year.

Levack Wastewater Treatment

Annual Performance Report

The Levack Wastewater Treatment Plant located at 45 High St., Levack, is an extended aeration activated sludge plant having a Peak Flow Rated Capacity of 5,675 m³/d, discharging effluent to the Onaping River.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed monthly by compliance and plant supervisory staff. No abnormalities were observed for the Levack WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	116.4	108	100.5	139.8	148.8	126.8
TSS (mg/L)	162	163	132	87	173	147
TP (mg/L)	4.42	4.43	3.75	3.73	5.98	3.65
TKN (mg/L)	28.48	23.29	23.91	26.18	29.59	39.33
Total Ammonia (mg/L)	24.05	18.99	42.63	22.53	23.16	18.34

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

All effluent monitoring data is graphed and reviewed annually by compliance and plant supervisory staff. For Levack WWTP all parameters fell within plant design objectives and compliance limits. Apart from Total Phosphorus for the month of December due to mechanical failure.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	816	870	1031	875	831	1073
CBOD ₅ (mg/L)	3.07	2.74	3.21	3.03	2.73	3.04
TSS (mg/L)	7.45	7.94	7.61	6.63	6.61	6.96
TP (mg/L)	0.69	0.63	0.37	0.37	0.47	0.46
E.coli (CFU/100 mL)	4	5	3	4	5	8
Total Residual Chlorine (mg/L)	0.59	0.60	0.70	0.70	0.69	0.58

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	2.49	2.51	3.27	2.58	2.34	3.18
TSS (kg/d)	6.19	6.94	8.23	5.76	5.59	7.45
TP (kg/d)	0.56	0.54	0.38	0.33	0.40	0.49

c. Summary of all operating issues encountered, and corrective actions taken.

There were no operational issues encountered for this reporting year.

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at the Levack WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (20 Completed)		
E-lighting burnt out Storage room light is burnt Repair furnace blower unit Install receptacle Tripped on overload Lime mixer plug melted into receptacle	Install laundry sink Chlorine rotameter hard to adjust Surge Protector Install Electric motor making loud noises Clean out rag and grease build-up Grating over effluent discharge Tripped on overload	Possible blockage Tripping hazard Replace leaking valve Lights out in storage room Investigate pump issue Set clearances

Regular Scheduled Maintenance (202 Completed)		
Pump Inspection (submersible) Diesel Engine Routine Annual Pump Inspection (Non-Submersible) Chlorinator Yearly PM Diesel Generator Test (Monthly) Load Bank Test Classifier Maintenance Routine Blower Inspection Diesel Engine 5 Year Inspection Motor Condition Monitoring Elec. D.O. Meter Calibration Sensor Calibration Clarifier/Aeration Tank and Skimmer	Oil Change Routine Clean Cl2 Chamber Mechanical Bar Screen / Compactor Filter/Belt Maintenance Cl2 Air Monitor Calibration UPS load test Piping and Valves Drain Hoses Spring Runoff Preparations Plants SCBA Inspection (6 months) Composite Sampler Inspection Chlorine Vacuum Regulators Spill Kit Inspection (Quarterly)	Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM Thermography Inspections Dechlor ORP Monthly Insp Dechlor HVAC Inspection Cold Weather Preparations First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. House Cleaning Colorimeter Verification (monthly) Overhead Door Inspection

Regulated Works Orders (27 Completed)		
Workplace Inspection Lifting Appliance Annual Insp Contract	Flow Meter Calibration Anchor Point Inspection	Monthly Safety Checks Operation Manual Review

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Levack WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Effluent	6/5/2025	CO1628-2506-43

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- **when any of the design objectives is not achieved more than 50% of the time in a year, or**
- **there is an increasing trend in deterioration of Final Effluent quality when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.**

For 2025 reporting year Levack WWTP averaged approximately 36% of rated capacity and achieved its design objectives as listed in the ECA.

h. Tabulation of the volume of sludge generated, 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.

Levack generated 1,888.22 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into a class A biosolid. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	April	May	June
Loads	4	4	2	4	3	3
Vol (m ³)	163.17	159.27	81.96	163.24	123.33	120.07
	July	Aug	Sept	Oct	Nov	Dec
Loads	4	4	4	5	4	5
Vol (m ³)	162.05	169.31	171.70	214.12	166.68	193.32

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints recorded for Levack WWTP in the current reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

There were no Bypasses or overflows for Levack in the current reporting year.

k. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There were no modifications to the sewage works for this reporting year.

l. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Rebuilt a Return pump. Cleaned Chlorine contact chamber. Replaced waste pump.

m. Any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

No Changes or updates.

n. Summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

There were no deviations to the monitoring schedule in the current reporting year, and no monitoring changes required for the next reporting year.

Lively Wastewater Treatment

Annual Performance Report

The Lively Wastewater Treatment Plant located at 231 First Ave, Lively is an extended aeration process plant having a Peak Flow Rated Capacity of 3,000 m³/d, discharging effluent to Meatbird Creek.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed monthly by compliance and plant supervisory staff. There were no abnormalities seen for the Lively WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental compliance officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	67	113	122	136	106	77
TSS (mg/L)	75	123	209	120	91	87
TP (mg/L)	2.42	3.27	3.32	3.99	3.67	3.21
TKN (mg/L)	18.14	28.31	21.67	32.14	25.29	27.31

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

All effluent monitoring data is graphed and reviewed annually by compliance and plant supervisory staff. For the Lively WWTP all parameters fell within plant design objectives and compliance limits.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	1995	1579	1975	1752	1252	832
CBOD ₅ (mg/L)	3.10	4.10	5.11	6.64	2.19	4.66
TSS (mg/L)	5.76	6.61	8.40	10.62	7.93	10.72
TP (mg/L)	0.35	0.36	0.31	0.44	0.37	0.73
E.coli (CFU/100 mL)	7	3	5	7	6	28
pH	6.51	6.74	11.32	6.69	7.01	7.09
Total Residual Chlorine (mg/L)	0.84	0.88	0.93	0.85	0.81	0.83

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	6.07	6.18	10.34	9.95	2.74	2.73
TSS (kg/d)	10.98	9.62	16.75	17.52	10.16	8.07
TP (kg/d)	0.67	0.52	0.61	0.71	0.46	0.53

c. Summary of all operating issues encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
11-Feb-25	pH	Outside ECA Limit	Add Lime to Aeration	Unknown Substance entering Plant	18-Feb-2025

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at the Lively WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective		
Blower in overload Check operation of clarifier motor Install Fixture Bathroom heater not functioning Electrical needed for heated Lime tote Check Hose Repair anchor point installation Comminutor motor	Plug Hole Put System online Get system up and running Replace windsock Lime tote fill line fitting broken Repair fitting Disconnect Electrical for Roofers Replace Sleeve Repair Supports for clarifier weirs	Correct Anchor Point inspection failure Install rental pump Check coupling Check operation Check operation of Pump Wire C Can for Lime Check Operation Replace Breaker

Regular Scheduled Maintenance		
Pump Inspection (submersible) Chlorinator Yearly PM Centrifugal Blower Inspection Clarifier drive/Gearbox Routine D.O. Meter Calibration Clarifier/Aeration Tank and Skimmer Sanitary Ejector Routine Clean Cl2 Chamber Cl2 Air Monitor Calibration Exercise Valves Piping and Valves Drain Hoses	Aeration Filter Check Spring Runoff Preparations Plants SCBA Inspection (6 months) Composite Sampler Inspection By-Annual Chlorine Vacuum Regulators Yearly. Spill Kit Inspection (Quarterly) Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM	Cold Weather Preparations First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. Operation Manual Review House Cleaning Colorimeter Verification (monthly) Sodium Bisulphite P-Traps Thermography Inspections Motor Condition Monitoring

Regulated Works Orders		
Workplace Inspection Lifting Appliance Annual Insp Contract	Flow Meter Calibration Anchor Point Inspection	Monthly Safety Checks Operation Manual Review

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent, and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Lively WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Diversion chamber	6/4/2025	CO1628-2506-19
Flow Meter, Effluent	6/4/2025	CO1628-2506-20

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- when any of the design objectives is not achieved more than 50% of the time in a year, or
- there is an increasing trend in deterioration of Final Effluent quality when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

For 2025 reporting year Lively WWTP averaged approximately 117% of rated capacity and achieved its design objectives as listed in the ECA.

Excess flow above rated capacity can be diverted to the Walden WWTP

h. Tabulation of the volume of sludge generated, 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.

Lively generated 2,487.47 of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	Apr	May	June
Loads	4	7	7	7	5	4
Vol (m ³)	153.58	246.14	282.37	276.25	192.43	144.97
	July	Aug	Sept	Oct	Nov	Dec
Loads	9	3	2	5	5	9
Vol (m ³)	357.30	92.73	75.87	194.90	151.02	319.93

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints received for this reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

Date	Duration (hrs)	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
15-March-25	39	Plant By-Pass	231 First Ave. Lively	2123	Disinfection	Spring Run Off
6-July-2025	17.1	Plant By-Pass	Meatbird Creek	1479	Disinfection	Heavy Rain
17-July-2025	25	Plant By-Pass	Meatbird Creek	3750	Disinfection	Heavy Rain
17-July-2025	5.5	Coll'n Sys Overflow	Meatbird Creek	1000	Disinfection	Heavy Rain

I. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There were no modifications to the sewage works for this reporting year.

m. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Entire plant was taken down and cleaned repaired in summer of 2024. The Cl2 contact chamber was cleaned out in 2025.

n. Any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

Received \$34.9M grant from the provincial government towards a \$70M project to increase overall capacity in the collection system, including Anderson and Jacob lift stations, and the Walden WWTP with the ultimate goal of decommissioning Lively WWTP after completion. All future wastewater from the Lively area will be treated at Walden WWTP.

o. Summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

There were no deviations to the monitoring schedule in the current reporting year, and no monitoring changes required for the next reporting year.

Sudbury Wastewater Treatment Annual Performance Report

The Sudbury Wastewater Treatment Plant located at 1271 Kelly Lake Rd. Sudbury is a hybrid of a conventional activated sludge treatment plant and a high-rate treatment plant, having a Peak Flow Rated Capacity of 159,250 m³/d, discharging effluent to junction Creek and eventually into Kelly Lake.

a. Summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 2.8 or Condition 2.9, including an overview of the success and adequacy of the Works.

All effluent monitoring data is graphed and reviewed by compliance and plant supervisory staff. For Sudbury WWTP all parameters fell within plant design objectives and compliance limits.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	128	97	118.58	160.17	186.17	133.58
TSS (mg/L)	280	181	192	234	291	171
TP (mg/L)	6.12	3.37	3.39	3.44	3.07	2.41
TKN (mg/L)	27.81	19.54	20.20	24.68	29.61	20.60
Alkalinity (mg/L as CaCO ₃)	192.5	179	191.50	194.75	188.67	171.75

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	53691	53195	54493	49299	47313	58778
CBOD ₅ (mg/L)	9.46	6.30	6.08	6.85	6.82	5.46
TSS (mg/L)	14.73	12.22	11.86	11.48	10.53	11.09
TP (mg/L)	0.51	0.48	0.51	0.53	0.46	0.37
Free Ammonia as Nitrogen (µg/L)	19.05	142.52	230.10	111.80	141.37	51.83
TKN (mg/L)	16.33	15.60	11.81	14.26	15.71	14.44
Nitrite (mg/L)	0.08	0.14	0.16	0.33	0.55	0.62
Nitrate (mg/L)	0.34	0.50	0.49	0.45	0.41	0.54
Alkalinity (mg/L as CaCO ₃)	148.5	154.4	155.40	154.58	152.49	145.74
E.coli (CFU/100 mL)	13	11	26	13	5	47
pH	6.84	6.91	6.81	6.72	6.93	7.00
Total Residual Chlorine (mg/L)	0.59	0.6	0.50	0.60	0.57	0.71

Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	517.99	352.98	372.35	347.71	319.03	334.84
TSS (kg/d)	816.90	666.63	693.35	588.01	493.31	658.18
TP (kg/d)	28.27	26.28	28.37	25.72	21.71	22.45

c. Description of any operating problems encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
28-Feb-25	Total Suspended Solids (TSS)	Outside ECA Limit	Monitor Plant- Spoke to Test mark	Bad Sample - Poor Sample procedure or mistake when processing sample	18-Mar-25
07-Jul-25	Total Chlorine Residual	Outside ECA Limit	Adjusted Chemical feed	High flows over weekend did not adjust chemicals quick enough	9-Jul-2025

d. Summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Works.

The operating and maintenance staff at Sudbury WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (195)		
Sensor needs to be relocated	Manway grating access	Check Sensor
Change Out Receptacle	Inspect spirals for cause of	Hang new signage
Burnt out light on control panel	breakage	Check mixer for fail to start
Burnt out light on control panel	Check LIT-1541 tank level loss of	Replace float.
Burnt out light on control panel	echo	Install hose
Lighting is very dim	Portalogic Station Malfunctioning	Install new valves
Air compressor not working	Repair two spot lights on exit sign	Investigate and Repair Air Valve
Install / Modify hose bib in HH	Pumps needs to be rebuilt	Check Operation
Fails to start	Check Operation	Investigate Leak
Door issues	Check Operation of Mixer	Septage pump fail to St/Sp
Inspect SWWTP Doors	Install hose reels	Check operation of Pump
Check operation of HVAC in the Lab	Cl2 detector # 2 not alarming	Float not working
Install hose reel	Lift Dechlor Pump	Hour meter
Install manual gate controls	Unplug Grit in HH	Leaking from drain plug
Light switch in operators' room	Replace Lights	Broken water line/pipe
Check pump operation	Set up new hose reel	Repair chlorine line
Install ceiling fan in MCC	Fix Condensate Line	Pump Tripped
Install new HH sump	Transfer Switch Failure	Rotate Sensor
Install Fire Extinguisher	Repair one burnt spotlight	Replace Belts
Clean/Organize Van	Change switch	Pump not Pumping
Check floor drains in boiler room	Switch over not working	Repair or replace
Lift and check operation of mixer	Ventilation Fan	Replace Belts
Grit plugged	Ventilation Fan	Meet with Xylem
Heater North Entrance	RV electrical	Replace Lights
Emergency lights	Repair emergency lighting	Install new Valve
Pump plugged	Repair or Replace Battery Cables	Install Vogelsang Comminutor
Check operation of valve	Replace brushes	Replace GFI
Check Operation of Mixer	Check Raw sewage Trans.	Utility lights burnt out on first floor
No Heat HH	Adjust Louvers	Rotate Sensor
Low flow alarm	Repair water line	Check emergency lights main
Replace sensor	Replace battery cables	building
Check operation of Unit	Leak Detection for Generator	Check operation
Heater West end	Mixer 1546 in fault	Disconnect Old Lighting
In Tx fail	Assist with new switch gear	Check Operation
Check operation of cooling fan	Low Pressure Alarm	Replace Lighting
Grit Plugged	Low Pressure Alarm	Repair two spot lights on exit sign

Piping system to fill totes Install Photocell on SS Building Collect and crush old lights Exhaust fan Lights Heaters Motion sensor Repair water line from HH to RV Check Operation of VFD Check operation of VFD Screens head house Bar Screen in Alarm Check Pump Operation Replace brushes Check Operation of Pump Liner & Auger Check Operation of Pump Replace Sensor Install indicator lights Install New Flow Meter Check Fan Check Fan Keeps blowing fuses Check Operation of Clarifier Rebuild pump Rust cleaning on pipe & sensor Label Breakers Check Heaters Check Heat Trace Repair WAS pipe Support Women's Washroom Lighting Install New VFD	Replace Wind sock Check operation Wire ac unit Emergency light in Gallery MCC room Not pumping PI-1734 filter alarm Investigate Alarm HH-SCC-202 fault Siphon Valve not functioning correctly Siphon Valve not functioning correctly Valve leaking at 201 valve area Overload after power bump Pump in O/L Repair Waterline Flow switch Install receptacles Tripped Sump pump behind grit bin is plugged Lighting Fixtures Repair Fitting Clean & repair FAT testing for Switch Gear Remove ballasts from old boards Fuel leak Electrical option to power pump station Emergency lights	Bisulphate room lighting Emergency Lights Check mixer for fail to start Emergency lights in main building Check Lighting Mixer tripped Check operation Replace Lighting Screen Room Clean and inspect tank Pump in Fault Water Flap remains open Second floor lighting Xylem for rebuilding 3B Replace sensor Start up electric boiler system Change light fixture Check out change room exhaust fan Hook up generator for power outage Install limit switch for lights Check operation Problems resetting after power bumps Check out blower making noise Remove 600 Volt lighting Pump Leaking Install new sensor Replace Sensor Check operation of VFD Check Operation of Sump Check Operation of Mixer Repair one burnt spot light
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Regular Scheduled Maintenance (1575 Completed)

Pump Inspection (submersible) Diesel Engine Routine Annual Pump Inspection (Non-Submersible) Flush and Clean Chlorinator Yearly PM Diesel Generator Test (Monthly) Heater Inspection Change Battery Composite Sampler Inspection Monthly Centrifugal Blower Inspection Clarifier drive/Gearbox Routine Comminutor Inspection Load Bank Test Air Compressor Mtce (quarterly) Air Compressor Mtce (annual) Motor Condition Monitoring Elec. Sensor calibration Contract Review Get contract ready for issuing	D.O. Meter Calibration Clarifier/Aeration Tank and Skimmer Oil Change Routine Check Oil Clean Cl2 Chamber Filter/Belt Maintenance Cl2 Air Monitor Calibration Clean and inspection of Tank/Chamber Routine Equipment Maintenance Piping and Valves Drain Hoses Spring Runoff Preparations Plants SCBA Inspection (6 months) Composite Sampler Inspection By-Annual Chlorine Vacuum Regulators Yearly Weekly Hosing Head House Bin Area	Change Hydraulic filter Snow Blower Maint Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM Thermography Inspections Dechlor ORP Monthly Insp Dechlor HVAC Inspection Azilda 10 Ton Condenser Annual Cold Weather Preparations First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. Operation Manual Review House Cleaning Colorimeter Verification (monthly) Spill Kit Inspection (Quarterly) AED monthly inspection Turbo blower Switchover Operators Manway Inspection
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Regulated Works Orders (136 Completed)		
Lifting Appliance Annual Insp Contract Calibration Lab Equipment (yearly)	Flow Meter Calibration Anchor Point Inspection High Voltage Gloves Testing Backflow Preventer Test	Monthly Safety Checks Operation Manual Review Lanyard Retractable Inspection (Annual)

e. Summary of any effluent quality assurance or control measures undertaken in the reporting period.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all effluent monitoring equipment.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Sudbury WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment is summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter Aeration FIT #1	6/3/2025	CO1628-2506-01
Flow Meter Aeration FIT #2	6/3/2025	CO1628-2506-02
Flow Meter Aeration FIT #3	6/3/2025	CO1628-2506-03
Flow Meter Aeration FIT #4	6/3/2025	CO1628-2506-04
Flow Meter, Effluent (SWWTP)	6/4/2025	CO1628-2506-5
Flow Meter 1A, Influent	6/3/2025	CO1628-2506-6
Flow Meter 2A, Influent	6/3/2025	CO1628-2506-7
Flow Meter 3A, Influent	6/3/2025	CO1628-2506-08
Flow Meter 1B, Influent	6/3/2025	CO1628-2506-9
Flow Meter 2B, Influent	6/3/2025	CO1628-2506-10
Flow Meter 3B, Influent	6/3/2025	CO1628-2506-11

g. Description of efforts made, and results achieved in meeting the Effluent Objectives of Condition 2.7.

Taking two final clarifiers offline for low flow seasons allowed for an optimized sludge retention time which led to a more efficient process. Emptied and cleaned Sludge holding tanks. Upgrading or replacing sludge tank mixers. Installed new sludge grinder. Planned Raw pump rebuilds for 2026 as well as septage screening replacement.

h. 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.

Sudbury generated 64,846 m³ of waste sludge which was pumped to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

i. Summary of any complaints received during the reporting period and any steps taken to address the complaints.

There were no process or odour related complaints for this reporting year.

j. Summary of all By-pass, Plant Overflow, Overflow, spill, or abnormal discharge events.

Date	Duration	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
3-Jan-25	12	Coll'n Sys Overflow	609 Notre Dame Sudbury (m/h 9-872)	1L/3-5 mins	Disinfection	Equipment
4-Jan-25	12	Plant By-Pass	St Charles @ Notredame	100L/min	To Environment	Equipment
15-Mar-25	42.28	Plant By-Pass	1271 Kelly Lake Rd.	185530	Disinfection	Spring Run Off
11-Jun-25	4	Coll'n Sys Overflow	311 Beatty Street, Sudbury	6 l/s	To Environment	Maintenance
17-Jul-25	17.75	Plant By-Pass	Junction Creek	46863	Disinfection	Heavy Rain
19-Aug-25	12	Plant By-Pass	Junction Creek	17500	Disinfection	Maintenance
22-Sept-25	9.25	Plant By-Pass	Junction Creek	13590	Disinfection	Maintenance
17-Nov-25	7.5	Plant By-Pass	Junction Creek	14310	Disinfection	Maintenance
18-Nov-25	5	Plant By-Pass	Junction Creek	9207	Disinfection	Maintenance

k. Any other information the Water Supervisor requires from time to time.

There were no deviations to the monitoring schedule in the current reporting year.

Average daily flows continued to be above 50,000 m³ in 2024 therefore Acute Lethality testing and monthly sampling regime will continue for 2025.

l. Copy of all Notices of Modification submitted to the Water Supervisor, with a status report on the implementation of Limited Operational Flexibility outlined under Schedule C of this Approval.

There were no modifications to the sewage works for this reporting year.

Valley East Wastewater Treatment Annual Performance Report

The Valley East Wastewater Treatment Plant located at 1861 Yorkshire Dr. Val Caron is a Conventional Activated Sludge process plant, having a Peak Flow Rated Capacity of 11,365 m³/d, discharging effluent through a 8 km forcemain to the Vermillion River.

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.

All effluent monitoring data is graphed and reviewed by compliance and plant supervisory staff. For Valley East WWTP all parameters fell within plant design objectives and compliance limits.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	124	163	231.10	187.67	189.25	155.83
TSS (mg/L)	233	218	219	210	203	169
TP (mg/L)	5.26	5.33	4.40	4.46	3.20	3.09
TKN (mg/L)	31.21	34.61	33.78	46.14	33.43	28.83

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	4795	4345	4465	4376	4571	5368
CBOD ₅ (mg/L)	7.63	3.34	4.81	6.73	4.28	5.71
TSS (mg/L)	9.26	6.19	8.17	9.92	9.72	7.88
TP (mg/L)	0.62	0.56	0.62	0.63	0.63	0.54
Total Ammonia (mg/L)	27.08	23.65	22.30	21.60	25.63	23.48
E.coli (CFU/100 mL)	11	23	14	15	59	33
Total Residual Chlorine (mg/L)	1.04	1.0	0.91	0.80	0.74	0.77
pH	6.93	6.86	6.38	6.85	7.36	7.25

b. Description of any operating problems encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
28-Feb-25	Total Phosphorus (TP)	Outside ECA Limit	Cleaned Ferric tank, investigate substance	Unknown Substance entering Plant /sediment in ferric tank	7-Mar-2025

c. Summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Works.

The operating and maintenance staff at the Valley East WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (42)		
Replace strainer units Needs oil. Level at approximately 80% LED lights in the headhouse flashing Clean up wiring for MCC in Blower room Regulator on left side not feeding Cl2 Check pump Flush ferric line Check pump Open hatch Relamp various locations Investigate blockage Investigate tripped breaker Remove blockage	Men's washroom light not working Hook up water lines for Well water Backflushing for grit classifier is plugged Tighten up chains or replace on drive unit Tighten up chains or replace on drive unit Clean up loose wiring Repair water line Remove Obsolete Panels Cut over alarms to SCADA Clean out tank Obstruction in pump or impeller Check pump coupling & bearing Install Shelving / Racks VE Raw Well	Repair air leak Gate to effluent well needs adjusting. Install side cover to stop water from spraying. Prep work for shower replacement Install Hose Nozzle Repair hole in pipe Change chlorine wind sock Install timer #1 secondary Left lower sprocket Discharge valve stuck Drain Tank - complete repairs Repair flight that has come off the sprocket Install plug Tripping

Regular Scheduled Maintenance (254 Completed)		
Pump Inspection (submersible) Pump Inspection (submersible) Diesel Engine Routine Annual Pump Inspection (Non-Submersible) Chlorinator Yearly PM Diesel Generator Test (Monthly) Change Battery Composite Sampler Inspection Monthly Clarifier drive/Gearbox Routine Load Bank Test Air Compressor Mtce (quarterly) Air Compressor Mtce (annual) Classifier Maintenance Routine Blower Inspection Diesel Engine 5 Year Inspection Composite Sampler Inspection By-Annual	Motor Condition Monitoring Elec. Filter/Strainer Clean/Change Out Clarifier/Aeration Tank and Skimmer Check Oil K 0153 Mechanical Bar Screen / Compactor Filter/Belt Maintenance Booster Pump Maintenance Cl2 Air Monitor Calibration Clean and inspection of Tank/Chamber Exercise Valves Piping and Valves Drain Hoses Aeration Filter Check Spring Runoff Preparations Plants	Chlorine Vacuum Regulators Yearly. Spill Kit Inspection (Quarterly) Overhead Door Inspection Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM Thermography Inspections VE Aeration Blower Oil & Filter Change VE Monthly Blower Gearbox Breather Check L0070 First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. House Cleaning Colorimeter Verification (monthly)

Regulated Works Orders (35 Completed)		
Calibration Lab Equipment (yearly) Anchor Point Inspection High Voltage Gloves Testing	Flow Meter Calibration Backflow Preventer Test Lifting Appliance Annual Insp Contract	Lanyard Retractable Inspection (Annual) Operation Manual Review Safety Checks

d. A summary of any effluent quality assurance or control measures undertaken in the reporting period.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

e. a summary of the calibration and maintenance carried out on all effluent monitoring equipment; and

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Valley East WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment are summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Raw Sewage	6/5/2025	CO1628-2506-01
Flow Meter, Sludge Transfer	6/4/2025	CO1628-2506-45
Flow Meter Effluent.	6/4/2025	CO1628-2506-46

f. a description of efforts made, and results achieved in meeting the Effluent Objectives of Condition 6.

Cleaned and repaired primary clarifier #2 including broken flight replacement and one secondary clarifier. Rebuilt clarifier drive on second secondary clarifier. Cleaned grit tank and inspected to maximized flow. Cleaned out Ferric tank.

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.

Valley East generated 18518.70 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	Apr	May	June
Loads	39	42	44	38	44	35
Vol (m ³)	1527.48	1638.07	1737.21	1490.26	1714.47	1365.72
	July	Aug	Sept	Oct	Nov	Dec
Loads	36	49	34	40	33	37
Vol (m ³)	1415.80	1908.50	1361.41	1570.19	1281.49	1508.11

h. a summary of any complaints received during the reporting period and any steps taken to address the complaints.

There were no process or odour complaints for this reporting year

i. a summary of all By-pass, spill, or abnormal discharge events.

There were no by-pass, spill, or abnormal discharge events for this reporting year

j. Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification.

There were no modifications to the sewage works for this reporting year.

k. Report summarizing all modifications completed as a result of Schedule B, Section 3.

There have been no modifications for this reporting year.

l. Any other information the Water Supervisor requires from time to time.

No other information is required at this time.

Walden Wastewater Treatment Annual Performance Report

The Walden Wastewater Treatment Plant located at 1425 MR 55 Naughton, is an extended aeration process plant, having a Peak Flow Rated Capacity of 8,000 m³/d, discharging effluent to Junction Creek and eventually into Simon Lake.

a. Summary and interpretation of all Influent, monitoring data, and a review of the historical trend of the sewage characteristics and flow rates.

All influent monitoring data, historical trending of sewage characteristics and flow rates are graphed and reviewed by compliance and plant supervisory staff. No abnormalities were observed for the Walden WWTP for this reporting year. If abnormal influent issues occur, CGS Environmental Compliance Officers can be deployed to investigate and react as needed.

Influent	2025	2024	2023	2022	2021	2020
BOD ₅ (mg/L)	109	108	284	160	135	102
TSS (mg/L)	144	156	211	184	112	74
TP (mg/L)	3.55	3.17	3.39	3.79	3.48	2.76
TKN (mg/L)	39.39	28.54	29.37	28.60	33.08	24.44

b. Summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works.

All effluent monitoring data is graphed and reviewed by compliance and plant supervisory staff. For the Walden WWTP all parameters fell within plant design objectives and compliance limits.

Effluent	2025	2024	2023	2022	2021	2020
Avg Daily Flow (m ³ /d)	2619	2655	2453	2247	2106	2621
CBOD ₅ (mg/L)	2.62	2.24	2.28	2.33	2.48	2.15
TSS (mg/L)	4.35	4.78	7.58	7.38	8.05	7.31
TP (mg/L)	0.33	0.38	0.34	0.38	0.40	0.34
E.coli (CFU/100 mL)	14	2	5	3	3	7
pH	6.51	6.54	6.87	6.70	6.91	6.75
Total Residual Chlorine (mg/L)	0.83	0.9	0.94	0.70	0.76	0.77
Effluent (Loading)	2025	2024	2023	2022	2021	2020
CBOD ₅ (kg/d)	6.64	6.26	6.53	5.49	5.26	5.91
TSS (kg/d)	11.14	12.16	19.54	16.61	17.10	18.83
TP (kg/d)	0.85	1.03	0.85	0.85	0.82	0.90

c. Summary of all operating issues encountered, and corrective actions taken.

Date	Parameter	Problem/ Exceedance	Corrective Action	Probable Cause	Notification Date
05-Jun-25	Total Chlorine Residual	Outside ECA Limit	Adjusted Chemical	Incorrect sampling or not feeding enough chemical at the time of sample	6-Jun-2025

d. Summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus, or mechanism forming part of the Works.

The operating and maintenance staff at the Walden WWTP conducts scheduled and emergency maintenance of the WWTP equipment. The City of Greater Sudbury utilizes a Computerized Maintenance Management System (CMMS) known as Antero to issue work orders and maintain records for regular maintenance and emergency repair at the WWTP.

Corrective (27)		
Scum Trough Heater not functioning Repair headhouse man door Replace Pump Air leak Check operation of Bar Screen Check Operation Check Transfer Switch Replace countertop, sink in the lab	Check operation of classifier Replace Disconnect Switch on catwalk Replace air compressor belt Check Operation of Mixer Install new HH stairs Install new grating in HH Lighting Issues Clean up panel & check old wiring	Repair #1 RAS pump Water line Repair or Replace ceiling lights Check Operation Pump not pumping Supernatant Tank Alarm Repair hole in air lift Dechlor Seacan installation Repair Mixer Pump Not Pumping

Regular Scheduled Maintenance (192 Completed)		
Pump Inspection (submersible) Diesel Engine Routine Annual Pump Inspection (Non-Submersible) Diesel Generator Test (Monthly) Heater Inspection Composite Sampler Inspection monthly Centrifugal Blower Inspection Clarifier drive/Gearbox Routine Progressive Cavity Pump Inspection Load Bank Test Air Compressor Mtce (quarterly) Air Compressor Mtce (annual) Classifier Maintenance Routine Blower Inspection Diesel Engine 5 Year Inspection	Mechanical Bar Screen / Compactor mtc Filter/Belt Maintenance Cl2 Air Monitor Calibration Battery Load Inspection Clean and inspection of Tank/Chamber Exercise Valves Piping and Valves Drain Hoses Spring Runoff Preparations Plants SCBA Inspection (6 months) Composite Sampler Inspection By- annual D.O. Meter Calibration Drive Train Inspection Filter/Strainer Clean/Change Out Sensor Calibration	Chlorine Vacuum Regulators Yearly Spill Kit Inspection (Quarterly) Chemical Pump Monthly Inspection Chemical Pumps Bi-Annual PM Thermography Inspections Cold Weather Preparations First Aid Box Inspections Lockout Station Inspection Emerg. & Exit Lighting Insp. Operation Manual Review House Cleaning Colorimeter Verification (monthly) Sodium Bisulphite P-Traps Motor Condition Monitoring Elec.

Regulated Works Orders (32 Completed)		
Backflow Preventer Test Lifting Appliance Annual Insp Contract	Flow Meter Calibration Anchor Point Inspection	Monthly Safety Checks Operation Manual Review Lab Equipment Calibrations

e. Summary of any effluent quality assurance or control measures undertaken.

Operations conduct daily rounds which are recorded on checklists. SCADA systems record continuous trending for various flows and processes. Lab analysis is performed several times per week in addition to samples being collected and sent out for third party testing. Plant monthly reports are created containing flow, in-house lab results and third-party lab results. This data is transferred to monthly and annual performance reports by a data clerk ensuring all information is accounted for. It is then sent to the area supervisor for final review.

f. Summary of the calibration and maintenance carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer.

The calibration of flow meters is conducted annually by an accredited third-party company in accordance with the requirements of the Walden WWTP ECA. Records and certificates are kept electronically. Calibrations completed on monitoring equipment are summarized below.

Flow Meter	Date Calibrated	Certificate number
Flow Meter, Influent	6/4/2025	CO1628-2506-22
Flow Meter, Effluent	6/4/2025	CO1628-2506-21
Flow meter, Bypass	6/4/2025	CO1628-2506-23
Flow meter RAS	6/4/2025	CO1628-2506-24
Flow meter WAS	6/4/2025	CO1628-2506-25

g. Summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:

- when any of the design objectives is not achieved more than 50% of the time in a year, or there is an increasing trend in deterioration of Final Effluent quality.
- when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

For 2025 reporting year Walden WWTP averaged approximately 58% of rated capacity and achieved its design objectives as listed in the ECA.

h. Tabulation of the volume of sludge generated, 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.

Walden generated 6154.75 m³ of Waste sludge which was brought to the Sudbury Biosolids facility and processed into class A biosolids. A similar volume is anticipated for the next reporting period.

Month	Jan	Feb	Mar	Apr	May	June
Loads	12	11	12	14	15	11
Vol (m ³)	488.66	448.31	495.20	565.93	615.14	458.87
	July	Aug	Sept	Oct	Nov	Dec
Loads	11	12	12	14	12	14
Vol (m ³)	458.22	498.53	497.22	552.58	505.34	570.77

i. Summary of any complaints received, and any steps taken to address the complaints.

There were no complaints reported for this reporting year.

j. Summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events.

Date	Duration (hrs)	Type of Occurrence	Receiving Stream ID	VOL (m ³)	Level of Treatment Received	Reason for Event
11-Feb-25	15	Force Main Break	Oja Lift station	2	To Environment	Equipment

k. Summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

There were no modifications to the sewage works for this reporting year.

l. Summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.

Received \$34.9M grant from the provincial government towards a \$70M project to increase overall capacity in the collection system, including Anderson and Jacob lift stations, and the Walden WWTP with the goal of decommissioning Lively WWTP after completion. The Walden Upgrade project started its planning stage in 2025. Installed two new Bisulphite feed pumps.

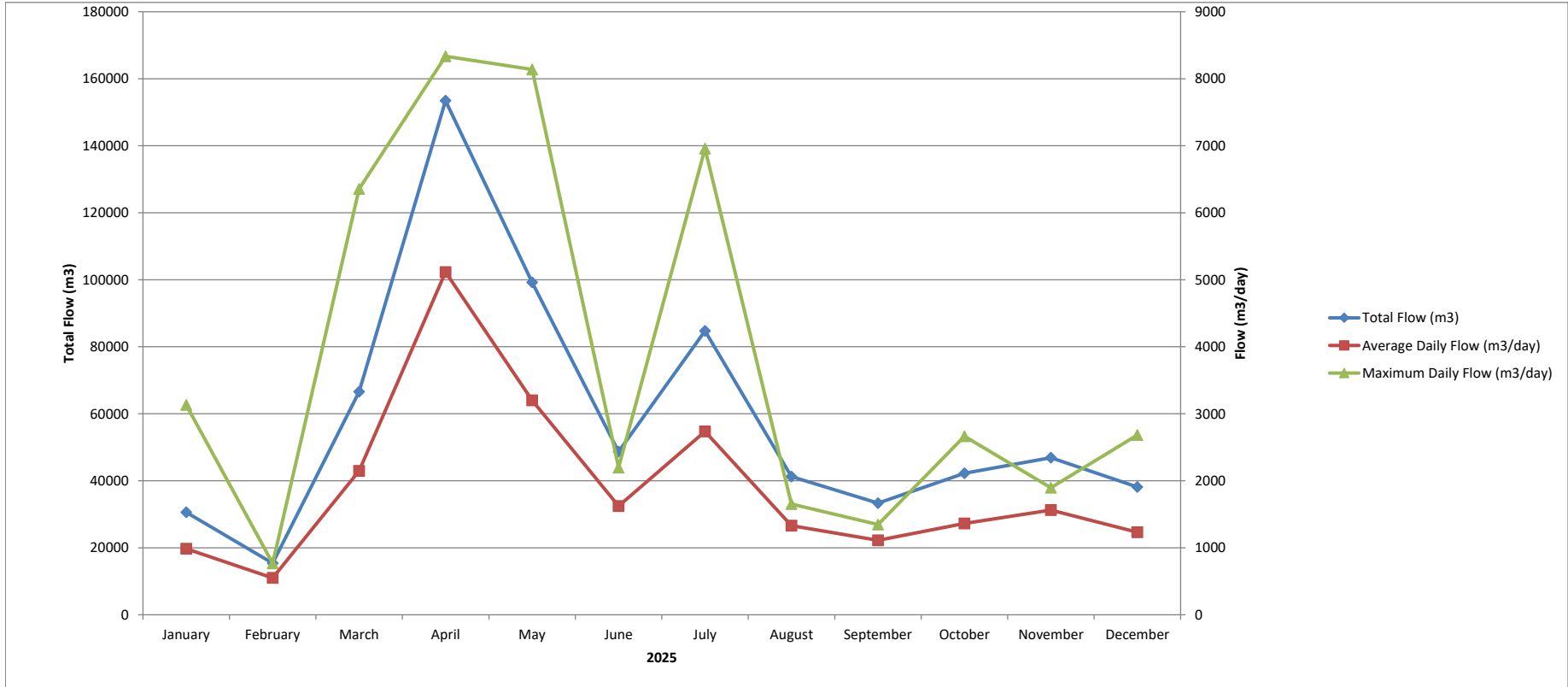
Appendices

- Azilda Plant Performance Report
- Azilda Annual Sludge Report
- Chelmsford Plant Performance Report
- Chelmsford Annual Sludge Report
- Coniston Annual Performance Report
- Coniston Annual Sludge Report
- Dowling Annual Performance Report
- Dowling Annual Sludge Report
- Falconbridge Annual Performance Report
- Levack Annual Performance Report
- Levack Annual Sludge Report
- Lively Annual Performance Report
- Lively Annual Sludge Report
- Sudbury Annual Metals Report
- Sudbury Annual Performance Report
- Sudbury Annual Sludge Report
- Valley East Annual Performance Report
- Valley East Annual Sludge Report
- Walden Annual Performance Report
- Walden Annual Sludge Report



2025 Azilda Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD ₅ Raw	CBOD				Total Suspended Solids				Total Phosphorus				Total Ammonia				Un-ionized Ammonia	TKN		Nitrate	Nitrite	pH		Alkalinity		Chlorine		Dechlorination		E.Coli Geomean	
	Total	Avg Day	Max Day			Raw	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading		Plant Efficiency	Raw			Effluent	Raw	Effluent	Raw	Effluent	Total	Residual	Total		Loading
	m ³	m ³ /d	m ³ /d	10 ³ m ³	mg/L	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	µg/L	mg/L	mg/L	mg/L	mg/L	Raw	Effluent	mg/L	mg/L	Kg	mg/L	mg/L	Kg/day	# Col./100ml	
January	30589	987	3133	0.000	145	89	2.2	2.17	97.5%	119	4.9	4.84	95.9%	3.1	0.23	0.23	92.6%	26.41	0.77	0.76	97.1%	1.93	30.2	0.7	22.1	0.5	7.3	6.5	285	112.5	251.3	0.789	0.003	0.00	13	
February	15392	550	767	0.000	154	88	4.4	2.42	95.0%	137	5.1	2.80	96.3%	5.6	0.34	0.19	93.9%	36.83	11.02	6.06	70.1%	25.07	40.9	10.4	21.2	0.8	7.0	6.8	264	68.5	111.5	1.096	0.001	0.00	2	
March	66553	2147	6356	0.000	104	53	2.1	4.51	96.0%	59	5.3	11.38	91.0%	3.0	0.22	0.47	92.7%	23.25	6.05	12.99	74.0%	28.72	25.8	5.6	17.2	0.2	7.6	6.8	243	116.9	153.0	0.822	0.011	0.02	8	
April	153450	5115	8335	0.000	73	43	2.8	14.32	93.5%	101	6.4	32.74	93.7%	1.6	0.22	1.13	86.3%	8.19	2.82	14.42	65.6%	33.89	10.0	3.3	7.9	0.2	7.6	7.0	286	223.3	192.0	0.655	0.004	0.02	102	
May	99217	3201	8137	1.457	73	45	3.3	10.69	92.6%	84	4.3	13.63	95.0%	2.1	0.17	0.54	92.0%	13.12	5.28	16.90	59.8%	69.91	17.6	5.7	8.8	0.1	7.3	6.9	269	225.0	164.3	0.672	0.006	0.02	61	
June	48669	1622	2198	0.000	119	129	2.3	3.70	98.2%	203	5.3	8.63	97.4%	3.6	0.20	0.32	94.4%	25.90	2.90	4.70	88.8%	20.71	32.2	13.7	22.3	0.3	7.1	6.6	287	122.5	53.5	0.838	0.004	0.01	2	
July	84757	2734	6958	0.000	45	45	2.7	7.38	94.0%	258	4.6	12.58	98.2%	2.5	0.11	0.30	95.5%	15.29	0.36	0.98	97.6%	7.49	17.4	0.4	18.1	0.1	7.2	6.8	292	150.8	203.8	0.599	0.004	0.01	18	
August	41237	1330	1654	0.000	194	104	2.0	2.59	98.1%	126	3.6	4.78	97.1%	4.6	0.16	0.21	96.5%	32.90	1.38	1.84	95.8%	18.27	35.1	1.8	26.85	0.4	7.4	6.6	299	86.3	197.1	0.859	0.006	0.01	7	
September	33349	1112	1346	0.000	189	129	2.3	2.56	98.2%	214	4.7	5.17	97.8%	5.5	0.18	0.20	96.7%	39.13	0.22	0.24	99.4%	2.41	43.7	1.6	33.35	0.4	7.2	6.4	287	71.4	195.7	0.769	0.005	0.01	24	
October	42232	1362	2665	0.000	158	129	3.7	5.10	97.1%	266	5.9	8.05	97.8%	5.1	0.23	0.31	95.5%	30.80	0.88	1.20	97.1%	10.68	37.0	1.2	26.40	0.8	7.3	6.7	278	106.3	250.4	0.717	0.002	0.00	134	
November	46872	1562	1895	0.000	103	104	2.1	3.33	97.9%	161	5.8	9.03	96.4%	3.0	0.25	0.39	91.7%	20.68	0.53	0.83	97.4%	13.02	23.3	0.9	19.90	0.2	7.3	6.8	313	154.7	239.8	0.800	0.002	0.00	43	
December	38158	1231	2684	0.000	154	147	1.7	2.14	98.8%	195	5.9	7.20	97.0%	4.0	0.22	0.27	94.4%	24.56	3.13	3.85	87.3%	74.06	27.4	5.5	16.54	0.22	7.3	6.8	318	154.5	171.3	0.822	0.005	0.01	19	
Total	700475			1.457					96.5%				96.4%				93.4%				85.8%															
Average		1919		0.121	126	92	2.64	5.08	96.4%	160	5.14	10.07	96.1%	3.64	0.21	0.38	93.5%	24.76	2.95	5.4	85.8%	25.5	28.37	4.23	20.05	0.36	7.30	6.72	285	133		0.787	0.004	0.01	36	



Plant Type: Extended Aeration
Design Capacity: 3300 m³/day
Population Served: 4,105

Compliance Parameters:

CBOD	10 mg/L	33 kg/day	}	*Monthly Avg (Concentration) *Annual Avg (Loading)
TSS	10 mg/L	33 kg/day		
Total Phosphorus	0.6 mg/L	2.0 kg/day		
Total Ammonia (as N)	5 mg/L	16.5 kg/day		
pH	6.0 to 9.5 inclusive, at all times			
E.Coli	200 col/100 mL	Monthly Geometric Mean		



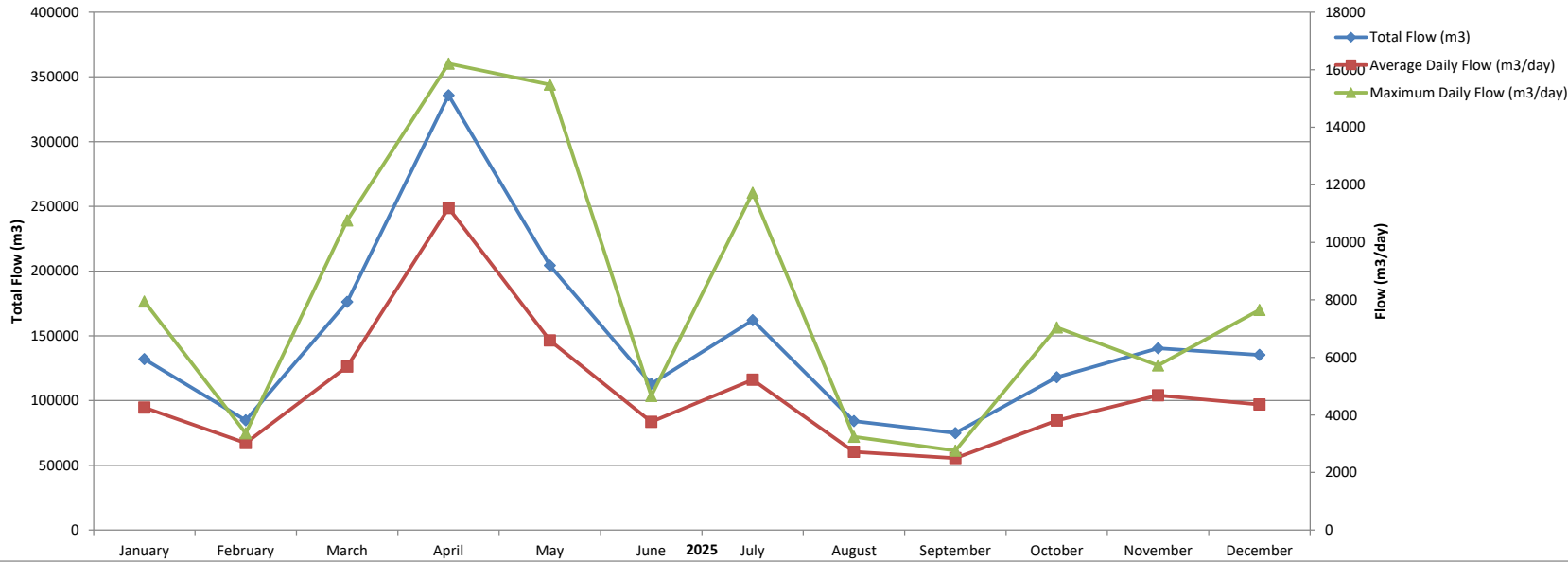
2025 Azilda Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	19.00	160.00	14.10	181.00	110.00	53.00	8.54	4.34	5.60	71.30	40.40	12.50	56.65
Nitrate (as N)	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	5.81	0.00	0.00	0.00	0.55
Nitrite (as N)	0.00	0.00	0.10	0.00	0.21	0.10	0.00	0.00	0.43	0.00	0.00	0.00	0.07
Potassium	64	108	41	120	63	64	22	20	24	63	28	20	53
TKN	687	1970	195	1790	347	939	1127	112	130	505	166	84	671
Total Phosphorus	159.00	508.00	122.00	427.00	7.15	0.18	4.64	47.50	86.20	182.00	26.40	30.50	133.38
Total Solids	10100	23000	7470	30700	6650	15900	3090	4640	4780	21100	4790	2960	11265
Arsenic	0.03	0.12	0.02	0.21	0.06	0.11	0.01	0.00	0.02	0.06	0.01	0.00	0.05
Cadmium	0.0044	0.0181	0.0027	0.0317	0.0046	0.0147	0.0021	0.0011	0.0023	0.0113	0.0018	0.0011	0.0080
Chromium	0.08	0.35	0.04	0.50	0.12	0.30	0.06	0.02	0.06	0.25	0.06	0.03	0.16
Cobalt	0.081	0.223	0.038	0.290	0.052	0.100	0.032	0.042	0.058	0.205	0.059	0.029	0.101
Copper	2.30	10.50	1.50	10.50	2.10	8.10	1.40	0.57	1.60	7.30	1.19	0.57	3.97
Lead	0.036	0.154	0.026	0.224	0.047	0.121	0.026	0.012	0.031	0.167	0.033	0.014	0.074
Mercury	0.000	0.002	0.000	0.003	0.000	0.004	0.000	0.000	0.000	0.004	0.000	0.000	0.001
Molybdenum	0.03	0.09	0.02	0.15	0.02	0.05	0.01	0.00	0.01	0.05	0.01	0.00	0.04
Nickel	0.32	0.92	0.10	1.80	0.76	0.90	0.15	0.16	0.19	0.65	0.18	0.09	0.52
Selenium	0.029	0.117	0.014	0.103	0.014	0.081	0.013	0.000	0.011	0.043	0.012	0.006	0.037
Zinc	2.81	12.60	1.86	11.30	2.64	10.30	1.88	1.22	1.85	5.91	1.44	0.69	4.54
Sample Date	Feb.3/25	Mar.6/25	Mar.4/25	Apr.3/25	May.1/25	Jun.5/25	Jul.3/25	Aug.7/25	Sep.4/25	Oct.2/25	Nov.6/25	Dec.4/25	



2025 Chelmsford Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD ₅ Raw	CBOD				Total Suspended Solids				Total Phosphorus				Total Ammonia						Un-ionized Ammonia		TKN		Nitrate		Nitrite		pH		Alkalinity		E.Coli
	Total	Avg Day	Max Day			Raw	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Raw Loading	Removed	Plant	Ammonia	Raw	Effluent	Effluent	Effluent	Raw	Effluent	Raw	Effluent	Geomean		
	m ³	m ³ /d	m ³ /d	10 ³ m ³	mg/L	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	kg/day	kg/day	Efficiency	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	# Col./100ml			
January	131995	4258	7940	0.000	28	22	3.1	13.20	85.9%	317	6.2	26.40	98.0%	1.7	0.31	1.32	81.8%	7.40	3.94	16.78	31.51	14.73	46.8%	23.82	9.20	3.80	11.28	0.12	7.3	6.8	245	143	38494			
February	84734	3026	3360	0.000	78	69	4.0	12.10	94.2%	320	4.1	12.41	98.7%	5.6	0.28	0.85	95.0%	23.50	11.35	34.35	71.12	36.77	51.7%	56.41	7.30	11.80	7.72	0.08	7.2	6.7	256	164	4681			
March	176155	5682	10760	0.000	190	120	3.6	20.46	97.0%	248	8.3	47.16	96.7%	4.4	0.28	1.59	93.6%	22.30	10.14	57.62	126.72	69.10	54.5%	66.96	38.20	9.90	5.69	0.05	7.3	7.0	221	166	5318			
April	335793	11193	16210	0.000	75	56	4.1	45.89	92.7%	184	7.3	81.71	96.0%	2.1	0.23	2.57	89.0%	13.90	4.30	48.13	155.58	107.45	69.1%	48.74	17.50	5.90	3.30	0.25	7.5	7.3	269	204	29734			
May	204362	6592	15480	0.000	19	6	3.6	23.93	39.5%	172	5.5	36.26	96.8%	1.7	0.19	1.25	88.8%	6.40	2.80	18.46	42.19	23.73	56.3%	33.71	8.00	3.13	8.28	0.28	7.7	7.3	261	195	50			
June	112828	3761	4660	0.000	100	120	5.0	18.62	95.9%	205	5.3	20.08	97.4%	3.8	0.29	1.09	92.3%	27.20	1.07	4.02	102.30	98.27	96.1%	4.01	32.00	1.00	20.05	0.11	7.7	7.0	281	149	9			
July	162051	5227	11720	0.000	57	31	5.7	29.95	81.5%	419	6.7	35.08	98.4%	2.5	0.16	0.84	93.7%	16.70	0.20	1.05	87.30	86.25	98.8%	4.24	22.70	0.50	14.33	0.06	7.7	7.0	263	134	34			
August	84199	2716	3240	0.000	335	54	4.5	12.22	91.7%	340	5.0	13.61	98.5%	5.4	0.17	0.46	96.8%	25.80	0.29	0.79	70.08	69.29	98.9%	3.83	38.40	0.25	20.20	0.12	7.9	6.8	278	79	63			
September	74925	2498	2760	0.000	70	11	3.4	8.49	67.6%	262	6.5	16.26	97.5%	4.6	0.24	0.60	94.7%	31.80	0.26	0.65	79.42	78.77	99.2%	1.28	32.20	0.65	22.45	0.18	7.6	6.5	264	50	73			
October	118056	3808	7040	0.000	250	190	6.2	23.50	96.8%	221	8.5	32.37	96.2%	4.1	0.23	0.88	94.4%	33.90	0.38	1.45	129.10	127.65	98.9%	2.02	37.70	0.40	16.20	1.08	7.2	6.4	272	54	426			
November	140349	4678	5720	0.000	77	140	3.0	14.03	97.9%	183	4.3	19.98	97.7%	2.3	0.11	0.51	95.1%	19.20	0.20	0.94	89.82	88.89	99.0%	4.03	21.10	0.20	16.55	0.07	7.5	6.9	275	126	4725			
December	135313	4365	7650	0.000	180	69	4.5	19.77	93.4%	507	8.2	35.75	98.4%	3.6	0.13	0.57	96.4%	16.50	3.34	14.58	72.02	57.44	79.8%	78.48	19.60	2.90	11.88	0.23	7.6	7.1	283	146	17593			
Total	1760760			0.000					94.1%				97.5%				93.0%				1057	858	81.2%													
Average		4824			122	74		4.23	20.18		281	6.33	31.42	97.5%	3.47	0.22	1.04	92.6%	20.38	3.19	16.6	88.10	71.53	79.1%	27.3	23.66	3.37	13.16	0.22	7.52	6.90	264	134	8433		
Summer								4.73	19.45			6.26	25.61	97.6%		0.21	0.85	93.6%	23.63	0.83	4.40	85.06	80.66	94.8%												
Winter								3.72	20.91			6.39	37.23	97.5%		0.22	1.24	92.5%	17.13	5.55	28.73	91.13	62.40	68.5%												



Plant Type: Extended Aeration w/modified activated sludge for denitrification
Design Capacity: 7100 m³/day
Population Served: 7,147 (Plant & Lagoon)
Compliance Parameters:

Summer - May 1 to October 31

	Conc.	Loading	
CBOD	7.0 mg/L	49.7 kg/day	Seasonal Average
TSS	7.0 mg/L	49.7 kg/day	Seasonal Average
Total Phosphorus	0.3 mg/L	2.13 kg/day	Monthly Average
Total Ammonia as N	2.0 mg/L	14.2 kg/day	Seasonal Average
E.Coli	200 col/100 mL		Monthly Geometric Mean
UV Disinfection turned on.			

Winter - November 1 to April 30

	Conc.	Loading	
CBOD	15.0 mg/L	106.5 kg/day	Seasonal Average
TSS	15.0 mg/L	106.5 kg/day	Seasonal Average
Total Phosphorus	0.5 mg/L	3.55 kg/day	Monthly Average
Total Ammonia as N	4.0 mg/L	28.4 kg/day	Seasonal Average
UV Disinfection turned off.			



2025 Chelmsford Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	17.80	9.08	18.60	23.40	4.63	39.00	1.65	3.51	16.60	3.26	34.60	0.28	14.37
Nitrate (as N)	0.00	0.15	0.00	0.00	0.97	0.00	0.00	0.08	0.00	3.39	4.57	5.14	1.19
Nitrite (as N)	0.00	0.15	0.00	0.00	1.70	0.07	0.00	0.05	0.00	1.24	0.43	0.00	0.30
Potassium	61	72	38	51	14	93	35	21	49	13	26	14	40.58
TKN	600.0	469.0	340.0	626.0	89.0	971.0	280.0	94.0	402.0	35.5	221.0	75.8	350.3
Total Phosphorus	64.30	126.00	71.00	164.00	23.60	4.29	2.27	35.40	157.00	15.90	11.30	20.70	57.98
Total Solids	12000	7550	6060	13200	2270	16700	8070	2390	9760	1220.00	5520	2600	7278
Arsenic	0.04	0.02	0.03	0.06	0.00	0.07	0.03	0.00	0.04	0.00	0.02	0.00	0.03
Cadmium	0.0065	0.0032	0.0035	0.0081	0.0012	0.0082	0.0039	0.0009	0.0060	0.0008	0.0023	0.0006	0.0038
Chromium	0.13	0.07	0.08	0.23	0.04	0.26	0.12	0.02	0.14	0.02	0.07	0.02	0.10
Cobalt	0.067	0.026	0.033	0.145	0.012	0.078	0.058	0.030	0.115	0.021	0.089	0.026	0.058
Copper	3.60	2.60	2.00	2.80	0.60	5.40	2.50	0.65	3.80	0.44	1.40	0.46	2.19
Lead	0.085	0.069	0.066	0.119	0.015	0.132	0.061	0.014	0.085	0.011	0.049	0.013	0.060
Mercury	0.002	0.000	0.002	0.001	0.003	0.004	0.000	0.000	0.007	0.002	0.004	0.002	0.002
Molybdenum	0.03	0.01	0.02	0.03	0.00	0.04	0.01	0.00	0.05	0.00	0.02	0.00	0.02
Nickel	0.64	0.20	0.18	1.00	0.30	0.90	0.44	0.09	0.33	0.06	0.28	0.11	0.38
Selenium	0.036	0.012	0.009	0.029	0.000	0.058	0.019	0.000	0.025	0.000	0.018	0.005	0.018
Zinc	3.64	2.34	2.32	4.40	0.58	4.62	3.14	0.70	3.59	0.79	1.34	0.46	2.33
Sample Date	Jan.2/25	Feb.6/25	Mar.6/25	Apr.1/25	May.1/25	Jun.4/25	Jul./3/25	Aug.7/25	Sep.4/25	Oct.2/25	Nov.6/25	Dec.4/26	#DIV/0!



2025 Coniston Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	42.9	61.7	87.0	12.1	22.3	63.0	18.7	178.0	16.6	4.7	18.5	3.30	44.1
Nitrate (as N)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01
Nitrite (as N)	0.00	0.00	0.06	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.05	0.00	0.02
Potassium	90	65	39	42	30	25	35	102	34	41	77	58	53.2
TKN	764	625	679	485	366	323	594	1350	362	444	826	423	603
Total Phosphorus	138.0	163.0	145.0	103.0	82.7	112.0	108.0	270.0	86.7	145.0	171.0	0.0	127.0
Total Solids	13400	10200	9960	7780	6050	8920	7900	20700	6720	8120	11300	7250	9858
Arsenic	0.07	0.03	0.03	0.04	0.03	0.03	0.03	0.12	0.02	0.02	0.04	0.02	0.04
Cadmium	0.0160	0.0066	0.0066	0.0094	0.0118	0.0118	0.0103	0.0350	0.0072	0.0075	0.0101	0.0057	0.0115
Chromium	0.19	0.06	0.12	0.14	0.08	0.11	0.11	0.39	0.07	0.07	0.14	0.07	0.13
Cobalt	0.400	0.155	0.109	0.362	0.300	0.184	0.084	0.308	0.041	0.041	0.127	0.102	0.184
Copper	5.7	3.9	3.0	2.6	3.0	4.4	5.1	16.2	4.4	4.6	6.8	2.9	5.2
Lead	0.221	0.122	0.104	0.106	0.134	0.145	0.156	0.529	0.112	0.114	0.178	0.080	0.167
Mercury	0.005	0.000	0.002	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.001
Molybdenum	0.04	0.02	0.04	0.02	0.01	0.03	0.03	0.07	0.02	0.03	0.04	0.03	0.03
Nickel	3.90	1.40	1.08	2.20	2.50	2.50	1.90	8.40	1.00	1.03	2.90	1.40	2.52
Selenium	0.051	0.019	0.017	0.035	0.053	0.052	0.045	0.215	0.023	0.022	0.046	0.024	0.050
Zinc	5.53	3.82	2.96	3.03	3.04	4.99	5.39	14.50	3.89	3.81	4.72	2.64	4.86
Sample Date	Jan.7/25	Feb.4/25	Mar.11/25	Apr.1/25	May.7/25	Jun.10/15	Jul.2/25	Aug.5/25	Oct.9/25	Oct.1/25	Nov.4/25	Dec.3/25	



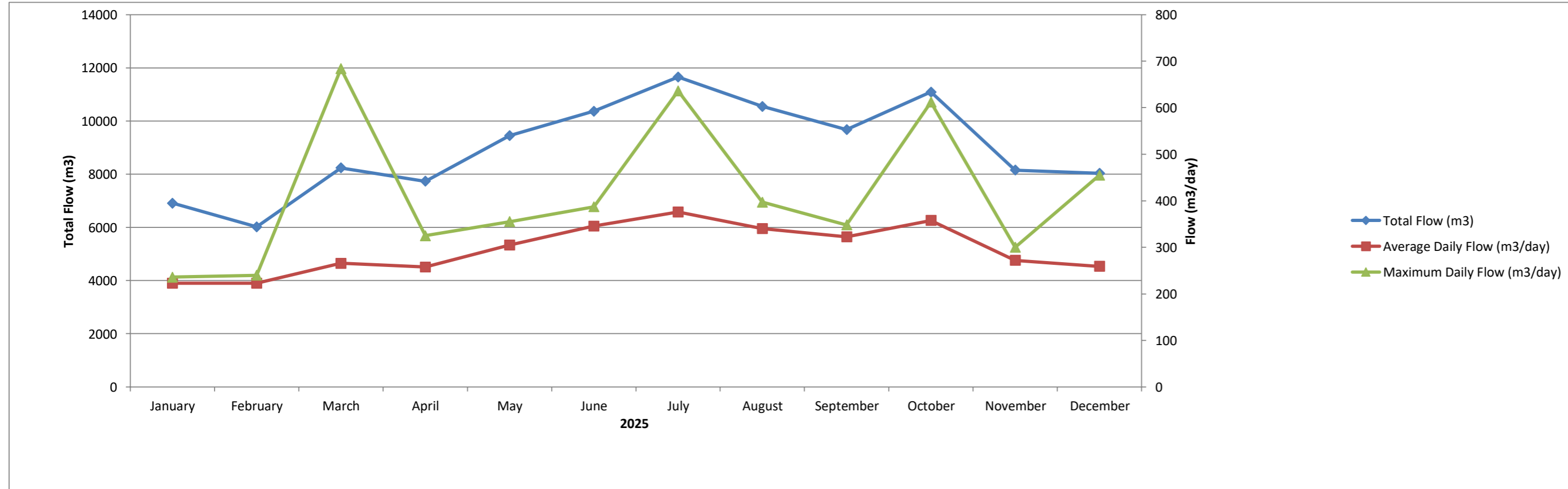
2025 Dowling Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	1.63	93.10	54.20	226.00	1.82	2.63	81.60	69.40	125.00	62.00	1.29	0.79	59.96
Nitrate (as N)	0.50	0.00	0.00	0.00	0.71	0.22	0.00	0.00	0.00	0.00	1.78	0.95	0.35
Nitrite (as N)	0.00	0.00	0.12	0.00	0.93	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.11
Potassium	14	37	24	87	10	10	35	52	48	41	18	12	32
TKN	125	344	199	1220	72	113	328	872	777	282	81	83	375
Total Phosphorus	28.9	82.8	38.6	194.0	18.6	22.4	81.2	63.0	162.0	93.2	27.0	14.6	68.9
Total Solids	2070	5050	2940	15300	1540	1680	7180	12800	11200	11300	2010	1530	6217
Arsenic	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.02	0.01	0.00	0.00	0.01
Cadmium	0.0012	0.0032	0.0018	0.0111	0.0011	0.0014	0.0083	0.0091	0.0130	0.0090	0.0013	0.0012	0.0051
Chromium	0.02	0.10	0.05	0.30	0.03	0.03	0.23	0.28	0.41	0.26	0.04	0.03	0.15
Cobalt	0.002	0.007	0.003	0.027	0.002	0.003	0.018	0.020	0.029	0.019	0.002	0.002	0.011
Copper	1.03	5.80	2.00	9.50	0.94	1.17	10.10	16.80	22.00	12.00	1.70	1.22	7.02
Lead	0.011	0.046	0.019	0.139	0.016	0.021	0.189	0.175	0.235	0.168	0.026	0.013	0.088
Mercury	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.002	0.000	0.000	0.001
Molybdenum	0.00	0.02	0.03	0.07	0.00	0.00	0.04	0.05	0.08	0.05	0.00	0.00	0.03
Nickel	0.03	0.10	0.04	0.34	0.06	0.04	0.29	0.32	0.45	0.31	0.04	0.03	0.17
Selenium	0.005	0.022	0.009	0.069	0.000	0.003	0.035	0.050	0.081	0.050	0.008	0.003	0.028
Zinc	0.46	1.97	0.89	4.86	0.47	0.54	4.54	4.24	6.16	3.94	0.56	0.43	2.42
Sample Date	Jan.2/25	Feb.6/25	Mar.6/25	Apr.3/25	May.1/25	Jun.12/25	Jul.3/25	Aug.5/25	Sep.4/25	Oct.2/25	Nov.5/25	Dec.11/25	



2025 Falconbridge Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD ₅						Total Suspended Solids						Total Phosphorus				Total Ammonia				Un-Ionized Ammonia	TKN	Nitrate	Nitrite	pH		E.Coli Average # Col./100mL
	Total	Avg Day	Max Day		Raw	Effluent	Loading	Raw Loading	Removed	Plant	Raw	Effluent	Loading	Raw Loading	Removed	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant					Raw	Effluent	
	m ³	m ³ /d	m ³ /d		mg/L	mg/L	kg/d	kg/day	kg/day	Efficiency	mg/L	mg/L	kg/d	kg/day	kg/day	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency					µg/L	mg/L	
January	6910	223	236	0.000	180	1.4	0.31	40	40	99.2%	152	3.2	0.71	6	5	88.2%	6.8	0.52	0.12	92.4%	40.40	0.46	0.10	98.9%	0.71	0.80	0.15	0.15	7.6	6.9	1850
February	6017	223	240	0.000	75	3.0	0.67	17	16	96.0%	144	2.8	0.62	2	2	73.0%	6.1	0.03	0.01	99.5%	35.10	0.74	0.17	97.9%	1.28	1.20	0.15	0.15	7.4	6.9	2000
March	8238	266	684	0.000	190	0.8	0.21	50	50	99.6%	140	2.7	0.72	7	6	89.8%	7.1	0.02	0.01	99.7%	32.40	0.71	0.19	97.8%	1.51	0.90	0.25	0.05	7.6	7.0	1230
April	7734	258	325	0.000	96	1.3	0.34	25	24	98.6%	99	2.1	0.54	2	2	77.6%	6.3	0.01	0.00	99.8%	31.90	0.24	0.06	99.2%	0.60	0.50	0.20	0.05	8.1	13.4	670
May	9450	305	355	0.000	120	1.9	0.58	37	36	98.4%	89	4.0	1.21	3	2	62.2%	6.4	0.01	0.00	99.8%	33.50	0.07	0.02	99.8%	0.25	0.20	0.05	0.05	7.9	6.9	660
June	10371	346	387	0.000	100	7.2	2.49	35	32	92.8%	104	6.1	2.09	3	1	37.0%	5.0	0.03	0.01	99.4%	35.90	0.11	0.04	99.7%	0.93	0.20	0.05	0.05	7.4	7.0	1000
July	11655	376	636	0.000	88	1.0	0.38	33	33	98.9%	89	3.5	1.33	3	2	54.6%	5.5	0.01	0.00	99.8%	32.50	0.08	0.03	99.8%	0.34	0.20	0.05	0.05	7.2	6.9	10
August	10548	340	397	0.000	79	1.9	0.65	27	26	97.6%	94	3.8	1.29	2	1	47.9%	7.0	0.01	0.00	99.9%	40.10	0.22	0.07	99.5%	2.18	0.20	0.10	0.10	7.0	7.1	52
September	9676	323	348	0.000	160	1.4	0.45	52	51	99.1%	104	3.1	1.00	5	4	81.2%	6.5	0.01	0.00	99.8%	37.80	0.01	0.00	100.0%	0.10	0.20	0.10	0.10	7.5	7.1	48
October	11089	358	612	0.000	220	1.1	0.39	79	78	99.5%	136	2.7	0.95	11	10	91.1%	7.4	0.02	0.01	99.7%	46.70	0.01	0.00	100.0%	0.12	0.20	0.05	0.05	7.2	7.0	86
November	8152	272	300	0.000	170	1.2	0.33	46	46	99.3%	233	2.7	0.73	11	10	93.2%	7.6	0.01	0.00	99.9%	47.00	0.28	0.08	99.4%	3.56	0.40	0.05	0.05	7.3	7.1	200
December	8032	259	455	0.000	110	1.3	0.34	29	28	98.8%	99	3.9	1.02	3	2	63.3%	2.0	0.02	0.01	99.0%	31.70	0.31	0.08	99.0%	3.60	0.30	0.10	0.10	7.49	7.0	422
Total	107872			0.000				468	461	98.5%				59	47	79.4%				99.2%				99.4%							
Average		296			132	1.96	0.59	39.02	38.42	98.48%	124	3.38	1.02	4.93	3.91	79.37%	6.14	0.06	0.01	99.2%	37.08	0.27	0.07	99.2%	1.27	0.44	0.11	0.08	7.48	7.52	686



Plant Type: Trickling Filter
Design Capacity: 909 m³/day
Population Served: 754

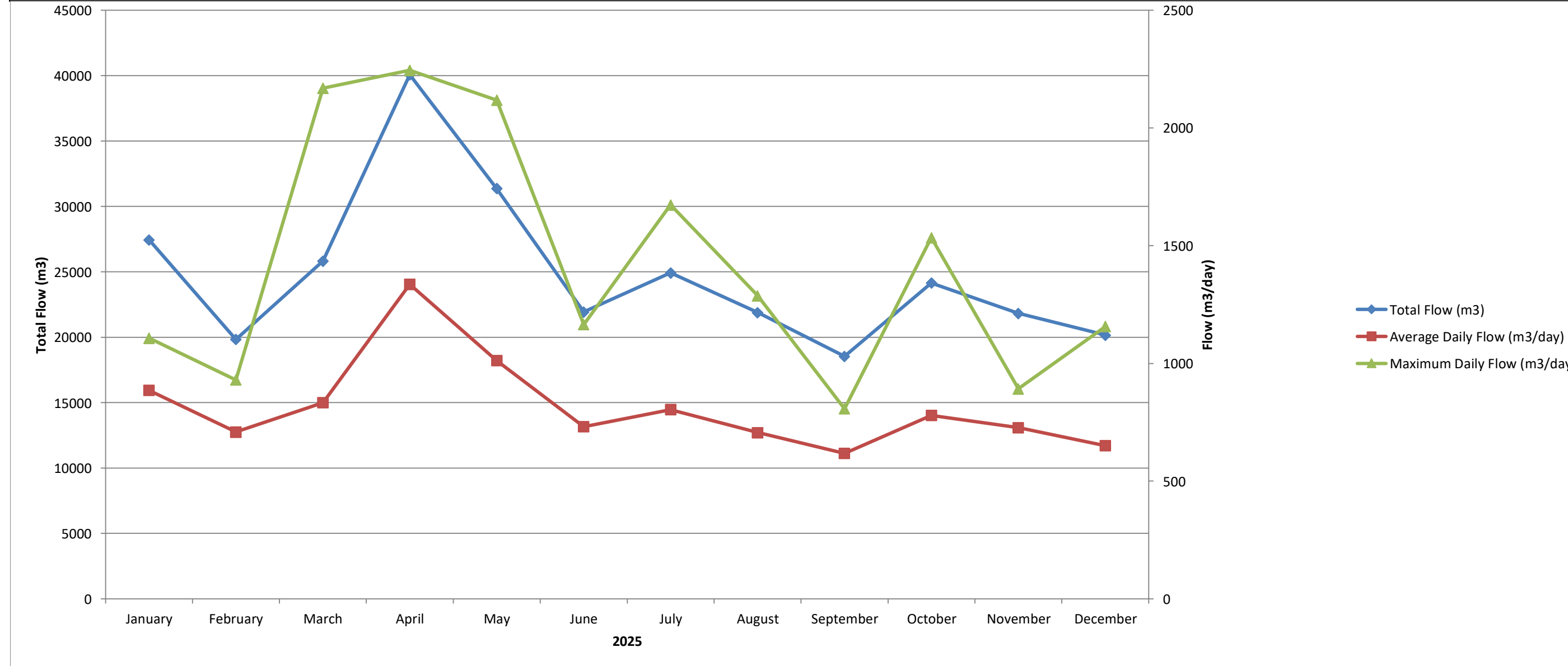
Compliance Parameters:

	Conc.	Loading	
BOD ₅	15 mg/L	46 kg/day	Annual Avg.
TSS	15 mg/L	46 kg/day	Annual Avg.



2025 Levack Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD RAW	CBOD				Total Suspended Solids				Total Phosphorus				Total Ammonia				Un-Ionized Ammonia	TKN		Nitrate	Nitrite	pH		Alkalinity		Chlorine		Dechlorination		E.Coli Geomean # Col./100mL			
	Total	Avg Day	Max Day			Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant		Raw	Effluent			Effluent	Effluent	Raw	Effluent	Raw	Effluent	Total	Residual		Total	Loading	
	m ³	m ³ /d	m ³ /d			10 ³ m ³	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d		Efficiency	µg/L			mg/L	mg/L	mg/L	mg/L	Raw	Effluent	mg/L	mg/L		Kg	mg/L	mg/L
January	27445	885	1107	0.000	110	60	3.3	2.92	94.5%	141	7.2	6.37	94.9%	4.0	0.58	0.51	85.5%	16.20	0.15	0.13	99.1%	0.36	19.4	0.20	14.20	0.15	7.0	6.5	165	66.00	147.8	0.615	0.002	0.00	3			
February	19836	708	930	0.000	110	130	4.6	3.26	96.5%	161	7.3	5.17	95.5%	4.5	0.78	0.55	82.7%	18.70	8.90	6.31	52.4%	29.37	25.0	9.20	9.30	0.10	7.2	6.8	176	80.40	85.6	0.705	0.004	0.00	1			
March	25823	833	2169	0.000	160	150	3.6	3.00	97.6%	171	7.0	5.83	95.9%	4.5	0.78	0.65	82.7%	20.90	10.90	9.08	47.8%	22.21	34.0	9.20	16.60	0.05	6.9	6.5	196	63.43	104.0	0.747	0.005	0.00	1			
April	40068	1336	2245	0.000	200	120	4.4	5.88	96.3%	117	11.3	15.09	90.3%	2.5	0.66	0.88	73.6%	40.20	3.33	4.45	91.7%	0.28	45.9	3.30	23.60	1.25	7.0	6.3	156	27.17	253.3	0.547	0.015	0.02	16			
May	31362	1012	2118	0.000	71	6	1.1	1.11	81.7%	139	6.5	6.59	95.3%	3.4	0.71	0.72	79.1%	10.00	0.02	0.02	99.8%	0.04	11.8	1.00	12.40	0.05	6.9	6.3	145	35.50	217.5	0.671	0.004	0.00	3			
June	21926	731	1165	0.000	110	100	2.4	1.75	97.6%	208	7.4	5.44	96.4%	4.1	0.86	0.63	79.2%	20.30	0.31	0.23	98.5%	0.44	24.2	0.20	19.50	0.05	7.0	6.3	166	48.83	164.7	0.480	0.011	0.01	3			
July	24917	804	1673	0.000	71	51	1.7	1.37	96.7%	160	5.0	4.03	96.9%	4.2	0.43	0.35	89.7%	22.50	0.15	0.12	99.3%	1.59	28.1	0.90	24.90	0.05	6.9	6.4	146	55.00	204.2	0.511	0.007	0.01	2			
August	21888	706	1287	0.000	110	55	3.4	2.40	93.8%	154	7.5	5.32	95.1%	4.6	0.73	0.52	84.1%	23.90	0.18	0.13	99.2%	1.29	28.4	0.20	22.80	0.05	7.0	6.7	171	72.67	227.6	0.514	0.002	0.00	3			
September	18532	618	807	0.000	76	57	3.2	1.98	94.4%	179	6.2	3.81	96.6%	5.3	0.77	0.48	85.4%	26.80	0.12	0.07	99.6%	0.51	27.1	0.20	32.20	0.10	6.9	6.6	175	79.00	236.0	0.592	0.002	0.00	1			
October	24144	779	1534	0.000	150	130	1.2	0.93	99.1%	181	5.0	3.89	97.2%	6.7	0.71	0.55	89.5%	31.20	0.12	0.09	99.6%	2.14	35.0	0.20	26.10	0.05	6.9	6.6	168	64.29	208.0	0.633	0.006	0.00	3			
November	21819	727	892	0.000	110	170	1.3	0.95	99.2%	161	6.0	4.39	96.3%	4.4	0.71	0.52	84.0%	28.60	0.09	0.07	99.7%	0.63	30.6	0.20	20.50	0.05	7.0	6.5	198	53.86	218.5	0.495	0.008	0.01	7			
December	20158	650	1157	0.000	120	130	6.6	4.29	94.9%	173	12.9	8.38	92.6%	4.8	0.59	0.38	87.7%	29.30	2.61	1.70	91.1%	6.39	32.3	2.90	1.30	0.10	7.0	6.6	193	44.83	104.3	0.520	0.008	0.01	3			
Total	297918			0.000					96.8%				95.2%				83.9%				90.6%																	
Average		816			116.43	97	3.07	2.49	96.8%	162	7.45	6.19	95.2%	4.42	0.69	0.56	83.9%	24.05	2.24	1.87	90.6%	5.44	28.48	2.31	18.62	0.17	6.98	6.51	171	58		0.586	0.006	0	4			



Plant Type: Extended Aeration
Design Capacity: 2270 m³/day
Population Served: 2,320

Compliance Parameters:

	Conc.	Loading	
CBOD	25 mg/L	56.75 kg/day	Annual Average
TSS	25 mg/L	56.75 kg/day	Annual Average
Total Phosphorus	1.0 mg/L	3.1 kg/day	Monthly Average
pH	6.0 to 9.5 inclusive, at all times		
E.Coli	200 col/100 mL	Monthly Geometric Mean	



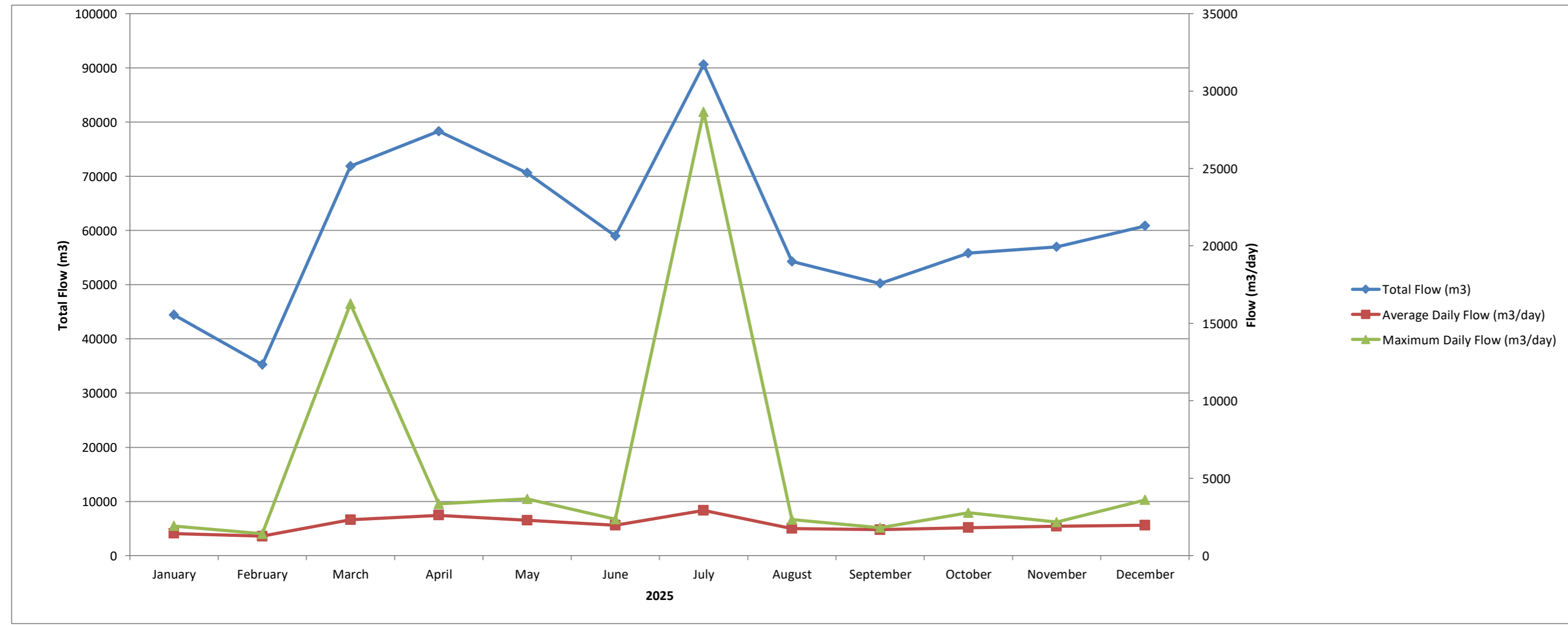
2025 Levack Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	1.07	7.02	7.16	86.00	0.85	0.17	3.37	3.52	1.33	64.00	0.36	1.89	14.73
Nitrate (as N)	8.14	3.84	0.00	3.05	10.50	18.00	0.00	0.00	9.40	0.00	14.30	12.00	6.60
Nitrite (as N)	0.00	0.00	0.00	0.00	2.45	0.05	0.00	0.00	0.08	0.00	0.05	0.05	0.22
Potassium	17	21	19	34	13	14	18	27	22	86	21	18	26
TKN	85	113	106	400	70	23	86	329	98	1880	111	55.7	280
Total Phosphorus	31.5	35.4	23.3	145.0	32.0	10.6	9.6	31.7	44.9	72.1	28.0	0.002	38.7
Total Solids	2020	2020	2040	7420	1440	990	1830	7120	2850	22400	2180	1400	4476
Arsenic	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
Cadmium	0.0013	0.0012	0.0009	0.0051	0.0012	0.0005	0.0015	0.0041	0.0025	0.0298	0.0015	0.0006	0.0042
Chromium	0.03	0.03	0.02	0.12	0.03	0.01	0.03	0.08	0.04	0.46	0.03	0.01	0.07
Cobalt	0.007	0.007	0.006	0.034	0.015	0.005	0.012	0.033	0.020	0.166	0.013	0.004	0.027
Copper	0.66	0.81	0.55	2.60	0.61	0.29	1.01	2.70	1.7	11	0.78	0.35	1.92
Lead	0.030	0.032	0.032	0.154	0.037	0.016	0.057	0.156	0.091	0.974	0.057	0.023	0.138
Mercury	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.012	0.000	0.000	0.001
Molybdenum	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.00	0.01
Nickel	0.22	0.25	0.15	0.63	0.26	0.14	0.29	0.76	0.45	5.60	0.26	0.12	0.76
Selenium	0.003	0.004	0.000	0.012	0.000	0.004	0.007	0.013	0.005	0.071	0.005	0.000	0.010
Zinc	0.59	0.71	0.55	2.36	0.47	0.27	0.84	2.02	1.76	18.7	0.74	0.30	2.44
Sample Date	Jan.2/25	Feb.6/25	Mar.6/25	Apr.3/25	May.1/25	Jun.3/25	Jul.3/25	Aug.5/25	Sep.4/25	Oct.1/25	Nov.5/25	Dec.11/25	



2025 Lively Wastewater Treatment Plant Performance

Month	Flows				Excess Capacity 10 ³ m ³	BOD ₅ Raw mg/L	CBOD				Total Suspended Solids				Total Phosphorus				Total Ammonia				Un-Ionized Ammonia µg/L	TKN		Nitrate Effluent mg/L	Nitrite Effluent mg/L	pH		Alkalinity		Chlorine		Dechlorination		E.Coli # Col./100mL		
	Total	Avg Day	Max Day	Diverted			Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant	Raw	Effluent	Loading	Plant		Raw	Effluent			Raw	Effluent	Raw	Effluent	Raw	Effluent	Total	Residual		Total	Loading
	m ³	m ³ /d	m ³ /d	m ³			mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency	mg/L	mg/L	kg/d	Efficiency		mg/L	mg/L			kg/d	Efficiency	µg/L	mg/L	mg/L	mg/L	mg/L	Kg		mg/L	mg/L
January	44416	1433	1920	3256	0.000	87	97	1.0	1.43	99.0%	113	4.1	5.87	97.3%	3.3	0.21	0.30	95.3%	17.70	13.20	18.91	44.3%	124.87	25.2	13.50	4.61	0.05	7.1	6.7	131	73	63.9	1.008	0.004	0.01	1		
February	35233	1258	1412	2816	0.000	140	56	2.4	3.02	95.7%	100	10.9	13.72	90.3%	3.6	0.46	0.58	88.6%	20.60	17.60	22.15	23.9%	83.84	26.3	15.80	1.90	0.10	6.8	6.6	134	56	75.7	0.870	0.002	0.00	5		
March	71856	2318	16263	9685	0.000	42	45	3.3	7.65	92.7%	98	6.3	14.60	99.1%	2.5	0.27	0.63	98.5%	17.30	0.09	0.21	99.9%	0.10	21.8	0.50	22.10	0.05	7.0	6.5	120	62	235.4	1.014	0.000	0.00	11		
April	78300	2610	3341	16731	0.390	48	33	3.4	8.87	89.7%	31	4.1	10.70	89.7%	1.5	0.33	0.86	82.8%	11.40	0.09	0.23	99.4%	0.09	12.9	1.76	15.40	0.05	6.8	6.6	113	36	131.9	0.707	0.002	0.01	3		
May	70624	2278	3661	10381	0.669	74	57	1.0	2.28	98.2%	61	3.1	7.06	96.8%	1.9	0.37	0.84	88.1%	6.00	0.09	0.21	99.1%	0.28	8.3	0.50	12.40	0.05	6.9	6.4	106	52	151.4	0.881	0.001	0.00	1		
June	58996	1967	2350	8865	0.000	69	70	5.6	11.01	92.0%	72	18.7	36.75	78.4%	2.1	0.79	1.55	68.1%	13.00	0.59	1.16	96.2%	2.94	16.3	1.90	20.80	0.05	6.9	6.4	133	38	153.8	0.970	0.002	0.00	5		
July	90601	2923	28648	20584	25.648	24	41	1.0	2.92	97.6%	64	3.0	8.86	99.5%	1.8	0.18	0.53	99.0%	12.60	0.09	0.26	99.9%	1.07	15.2	0.40	17.70	0.05	7.0	6.4	139	48	138.2	0.922	0.002	0.01	2		
August	54276	1751	2334	11794	0.000	29	32	3.5	6.13	89.1%	71	4.1	7.25	95.6%	2.4	0.35	0.61	89.1%	16.30	0.15	0.26	99.3%	1.08	15.8	0.90	16.90	0.55	6.8	6.6	127	43	147.5	0.861	0.002	0.00	1		
September	50218	1674	1801	7407	0.000	60	36	3.2	5.36	91.1%	70	3.3	5.57	95.6%	2.5	0.30	0.50	89.0%	18.00	0.18	0.30	99.1%	1.10	16.1	1.30	14.40	0.05	7.0	6.4	120	31	87.2	0.810	0.000	0.00	4		
October	55814	1800	2773	9574	0.000	55	52	4.1	7.38	92.1%	57	5.5	9.96	93.7%	2.5	0.39	0.70	89.8%	18.40	0.18	0.32	99.4%	0.92	18.2	0.20	21.00	0.05	6.8	6.7	142	44	58.5	0.811	0.000	0.00	28		
November	56971	1899	2162	6693	0.000	70.5	62	3.9	7.41	93.7%	72	2.9	5.41	96.5%	2.1	0.26	0.49	89.0%	17.40	4.05	7.69	79.6%	42.94	17.3	2.40	8.69	8.16	7.0	6.4	124	43	56.5	0.466	0.000	0.00	7		
December	60832	1962	3599	7798	0.000	110	17	4.8	9.42	71.8%	93	3.1	6.04	98.2%	2.8	0.25	0.49	95.2%	20.50	0.13	0.26	99.7%	1.02	24.3	0.60	19.70	0.16	6.9	6.4	141	44	82.5	0.740	0.000	0.00	11		
Total	728137				26.707					93.7%				97.5%				94.7%				94.9%																
Average		1995				67	50	3.10	6.07	91.9%	75	5.76	10.98	94.2%	2.42	0.35	0.67	89.4%	15.77	3.04	4.3	86.6%	21.69	18.14	3.31	14.63	0.78	6.92	6.51	128	47		0.838	0.001	0.00	7		



Plant Type: Extended Aeration
Design Capacity: 1600 m³/day
Population Served: 2,761

Compliance Parameters:

	Conc.	Loading	
BOD ₅	25 mg/L	40 kg/day	*
TSS	25 mg/L	40 kg/day	*
Total Phosphorus	1.0 mg/L	1.6 kg/day	Monthly Average
E.Coli	200 col/100 mL		Monthly Geometric Mean

* Annual average of any consecutive 12 month period.



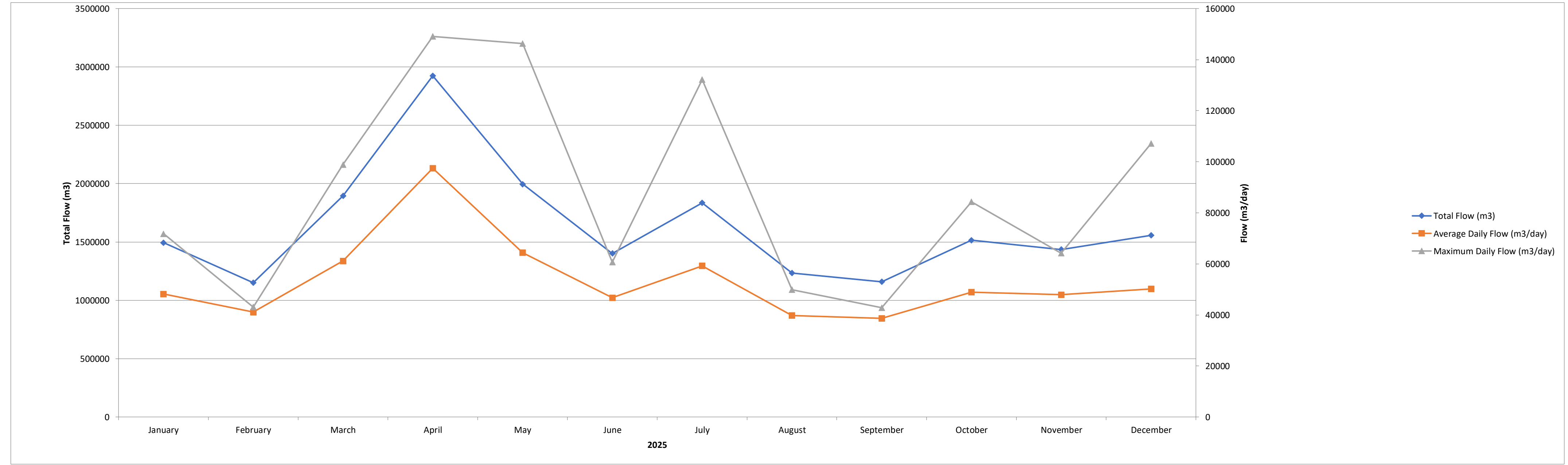
2025 Lively Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	17.1	18.7	0.7	0.5	35.9	122.0	16.3	2.6	2.6	1.3	13.0	0.3	19.3
Nitrate (as N)	0.20	1.20	13.60	6.14	0.11	0.00	0.00	0.00	10.30	20.40	0.18	14.10	5.52
Nitrite (as N)	0.10	0.00	2.71	2.81	0.28	0.31	0.00	0.00	2.30	1.75	0.38	0.17	0.90
Potassium	28	23	18	18	88	133	91	48	14	14	48	17	45
TKN	175	121	169	133	951	1480	1320	696	85	88	301	131	471
Total Phosphorus	0.0	138.0	81.0	51.7	377.0	0.2	502.0	462.0	69.5	74.0	35.2	69.1	155.0
Total Solids	15700	2370	4340	3200	20600	27900	25200	21200	2830	3370	9920	3410	11670
Arsenic	0.02	0.00	0.00	0.02	0.20	0.28	0.14	0.09	0.02	0.01	0.05	0.02	0.07
Cadmium	0.0049	0.0017	0.0028	0.0037	0.0366	0.0590	0.0401	0.0169	0.0040	0.0025	0.0117	0.0031	0.0156
Chromium	0.07	0.03	0.04	0.06	0.54	0.73	0.43	0.26	0.07	0.04	0.19	0.05	0.21
Cobalt	0.070	0.021	0.028	0.031	0.286	0.647	1.340	0.350	0.086	0.055	0.231	0.062	0.267
Copper	1.00	0.90	1.19	1.23	10.00	15.70	10.30	5.20	1.60	0.88	3.40	1.08	4.37
Lead	0.078	0.033	0.053	0.061	0.477	0.794	0.307	0.345	0.082	0.053	0.261	0.065	0.217
Mercury	0.002	0.000	0.000	0.000	0.007	0.015	0.000	0.005	0.000	0.000	0.004	0.001	0.003
Molybdenum	0.00	0.00	0.00	0.00	0.05	0.09	0.21	0.02	0.00	0.00	0.02	0.00	0.03
Nickel	0.74	0.21	0.26	0.56	4.80	4.60	5.30	2.40	0.47	0.25	1.29	0.33	1.77
Selenium	0.013	0.005	0.009	0.007	0.069	0.138	0.104	0.036	0.009	0.008	0.034	0.007	0.037
Zinc	1.69	0.97	1.29	1.15	8.60	14.40	14.70	5.60	1.47	0.97	4.50	1.05	4.70
Sample Date	Jan.9/25	Feb.6/25	Mar.4/25	Apr.1/25	May.1/25	Jun.5/25	Jul.2/25	Aug.6/25	Sep.4/25	Oct.2/25	Dec.6/25	Dec.4/25	



2025 Sudbury Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD ₅ Raw mg/L	CBOD						Total Suspended Solids						Total Phosphorus				Total Ammonia				Un-ionized Ammonia µg/L	TKN Raw mg/L	TKN Effluent mg/L	Nitrate mg/L	Nitrite mg/L	pH		Alkalinity		Chlorine		Dechlorination		E.Coli # Col./100mL			
	Total m ³	Avg Day m ³ /d	Max Day m ³ /d			Raw mg/L	Effluent mg/L	Loading kg/d	Raw Loading kg/day	Removed kg/day	Plant Efficiency	Raw mg/L	Effluent mg/L	Loading kg/d	Raw Loading kg/day	Removed kg/day	Plant Efficiency	Raw mg/L	Effluent mg/L	Loading kg/d	Raw Loading kg/day	Removed kg/day	Plant Efficiency	Raw mg/L	Effluent mg/L						Loading kg/d	Plant Efficiency	Raw	Effluent	Raw	Effluent	Total	Residual		Total	Loading	
January	1494120	48197	71800	0.000	122	87	9.1	438.6	4193	3755	89.5%	192	13.9	669.9	9254	8584	92.8%	4.1	0.53	25.5	197.61	172.06	87.1%	16.7	19.13	922.0	-14.6%	95.0	22.9	15.5	0.29	0.10	7.1	7.0	171	142.5	2097	0.565	0.002	0.10	4	
February	1150304	41082	43100	0.000	145	107	10.2	419.0	4396	3977	90.5%	226	28.8	1183.2	9285	8101	87.3%	5.5	0.81	33.3	225.95	192.68	85.3%	25.1	21.29	874.6	15.2%	69.7	36.8	21.2	0.26	0.10	7.1	6.8	184	146.0	1726	0.510	0.003	0.12	2	
March	1894100	61100	98900	0.000	65	46	13.3	812.6	2811	1998	71.1%	158	23.3	1423.6	9654	8230	85.3%	3.7	0.68	41.5	226.07	184.52	81.6%	15.9	16.13	985.5	-1.4%	52.8	19.3	13.9	0.52	0.06	7.0	6.7	161	128.2	2981	0.612	0.005	0.31	11	
April	2923800	97460	149100	0.000	54	38	10.0	974.6	3703	2729	73.7%	125	21.0	2046.7	12183	10136	83.2%	2.4	0.64	62.4	233.90	171.53	73.3%	10.7	11.17	1088.6	-4.4%	44.7	16.0	9.9	0.55	0.05	7.0	6.6	160	139.4	3730	0.552	0.002	0.19	31	
May	1995870	64383	146280	0.000	87	79	11.1	712.7	5086	4374	86.0%	135	12.8	824.1	8721	7897	90.6%	3.4	0.66	42.5	217.61	175.12	80.5%	15.0	15.58	1003.1	-3.9%	97.5	19.6	12.2	0.26	0.06	7.1	6.9	170	156.6	3163	0.678	0.004	0.26	4	
June	1401300	46710	60700	0.000	91	73	6.4	299.9	3410	3110	91.2%	317	11.2	524.6	14789	14265	96.5%	6.5	0.38	17.7	302.21	284.46	94.1%	21.4	21.06	983.7	1.6%	190.2	28.9	18.4	0.27	0.05	7.1	6.9	221	143.0	2044	0.589	0.003	0.14	6	
July	1835700	59216	132200	0.000	86	103	6.6	389.6	6099	5710	93.6%	297	11.2	662.0	17571	16909	96.2%	5.2	0.23	13.6	307.33	293.71	95.6%	14.9	14.98	887.1	-0.5%	122.7	21.1	12.7	0.39	0.05	7.2	6.9	188	127.6	3140	0.636	0.009	0.55	11	
August	1233900	39803	49900	0.000	153	90	7.4	294.9	3569	3274	91.7%	416	12.1	480.0	16557	16077	97.1%	8.2	0.32	12.7	326.78	314.05	96.1%	21.2	21.57	858.6	-1.7%	246.1	39.3	17.0	0.27	0.05	7.2	6.9	211	142.4	2700	0.581	0.001	0.04	7	
September	1159700	38657	42800	0.000	210	167	6.5	250.5	6443	6192	96.1%	426	9.4	364.9	16472	16107	97.8%	7.2	0.32	12.4	277.55	265.18	95.5%	22.4	24.35	941.3	-8.7%	256.5	42.9	22.4	0.30	0.06	7.1	7.1	210	142.9	2026	0.589	0.003	0.12	12	
October	1515600	48890	84300	0.000	208	167	6.5	319.3	8149	7829	96.1%	357	8.8	430.2	17469	17039	97.5%	13.2	0.44	21.5	644.37	622.86	96.7%	21.3	21.54	1053.1	-1.1%	268.49	38.7	19.6	0.39	0.30	6.9	6.8	231	204.5	2178	0.555	0.003	0.15	18	
November	1436290	47876	64200	0.000	135	130	10.1	481.2	6224	5743	92.3%	336	9.2	442.4	16064	15622	97.2%	7.7	0.54	25.9	369.61	343.75	93.0%	18.0	21.11	1010.7	-17.3%	237.15	21.7	17.2	0.27	0.05	6.9	6.7	210	152.9	2160	0.639	0.001	0.05	44	
December	1556400	50206	107100	0.000	180	147	16.4	822.9	7364	6541	88.8%	370	15.0	751.1	18589	17838	96.0%	6.4	0.60	30.1	321.82	291.70	90.6%	19.5	20.74	1041.3	-6.4%	258.21	26.7	16.1	0.30	0.05	6.9	6.7	193	155.7	2383	0.604	0.003	0.15	9	
Total	19597084			0.000					61447	55231	89.9%				166608	156805	94.1%				3650.84	3312	90.7%				-3.2%															
Average		53691					103	9.46	517.99	5120.56	4602.6	89.88%	280	14.73	816.90	13884	13067	93.11%	6.12	0.51	28.27	304.24	275.97	90.71%	18.51	19.05	970.80	-0.04	161.57	27.81	16.33	0.34	0.08	7.05	6.84		148.5	2527	0.593	0.00	0.18	13
May-Oct																			5.80	0.61	35.34	304.62	269.28	0.86																		
Jun-Sept																			6.76	0.31	14.12	303.47	289.35	0.95																		



Plant Type: High Rate
Design Capacity: 79625 m³/day
Population Served: 84609

Compliance Parameters:

	Conc.	Loading	
CBOD	25 mg/L	1990.6 kg/day	Annual Avg
TSS	25 mg/L	1990.6 kg/day	Annual Avg
Total P	1.0 mg/L	79.6 kg/day	Monthly Avg (Oct.-May)
Total P	0.5 mg/L	39.8 kg/day	Monthly Avg (June-Sept.)
E.Coli	200 col/100 mL		Monthly Geometric Mean
pH	6.0 to 9.5 inclusive, at all times		
Dechlorination	total chlorine residual 0.02 mg/L, 1.6 kg/L, Monthly Average		



2025 Sudbury Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	326.0	47.9	314.0	194.0	297.0	352.0	210.0	109.0	241.0	398.0	36.3	366	241
Nitrate (as N)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrite (as N)	0.00	0.00	0.62	0.00	0.25	0.00	4.99	0.10	0.00	0.00	0.00	0.00	0.50
Potassium	166	289	286	153	185	212	179	218	159	241	212	227	211
TKN	1360	2110	2730	1850	1500	2710	2630	3260	3480	3410	2540	3130	2559
Total Phosphorus	600	710	759	393	482	765	583	23	809	9.4	700	0.0	486
Total Solids	35200	43500	41400	25700	30200	39400	29800	37800	36600	36000	36000	42700	36192
Arsenic	0.15	0.19	0.18	0.13	0.23	0.21	0.18	0.26	0.19	0.18	0.28	0.18	0.20
Cadmium	0.0229	0.0258	0.0244	0.0232	0.0463	0.0499	0.0283	0.0286	0.0235	0.0301	0.0654	0.0391	0.0340
Chromium	0.30	0.38	0.37	0.30	0.49	0.49	0.41	0.40	0.37	0.38	0.56	0.45	0.41
Cobalt	0.257	0.266	0.221	0.183	0.309	0.347	0.324	0.373	0.265	0.345	0.724	0.452	0.339
Copper	12.9	15.0	14.0	8.9	19.9	21.4	12.6	15.1	11.8	12.0	18.0	15.6	14.8
Lead	0.341	0.532	0.437	0.325	0.588	0.584	0.436	0.497	0.439	0.505	0.631	0.598	0.493
Mercury	0.005	0.006	0.006	0.002	0.006	0.011	0.009	0.006	0.007	0.009	0.011	0.009	0.007
Molybdenum	0.09	0.13	0.12	0.06	0.08	0.13	0.13	0.12	0.12	0.14	0.12	0.13	0.11
Nickel	5.1	4.7	5.1	3.6	8.0	8.1	4.6	7.5	4.8	11.8	8.1	6.3	6.5
Selenium	0.112	0.158	0.112	0.066	0.140	0.209	0.149	0.185	0.121	0.098	0.182	0.153	0.140
Zinc	11.4	13.7	14.7	6.29	12.8	20.2	14.4	11.7	13.8	21.5	19.3	15.3	14.6
Sample Date	Jan.2/25	Feb.3/25	Mar.3/25	Apr.2/25	May.7/25	Jun.2/25	Jul.2/25	Aug.1/25	Sep.2/25	Oct.1/25	Nov.3/25	Dec.1/25	

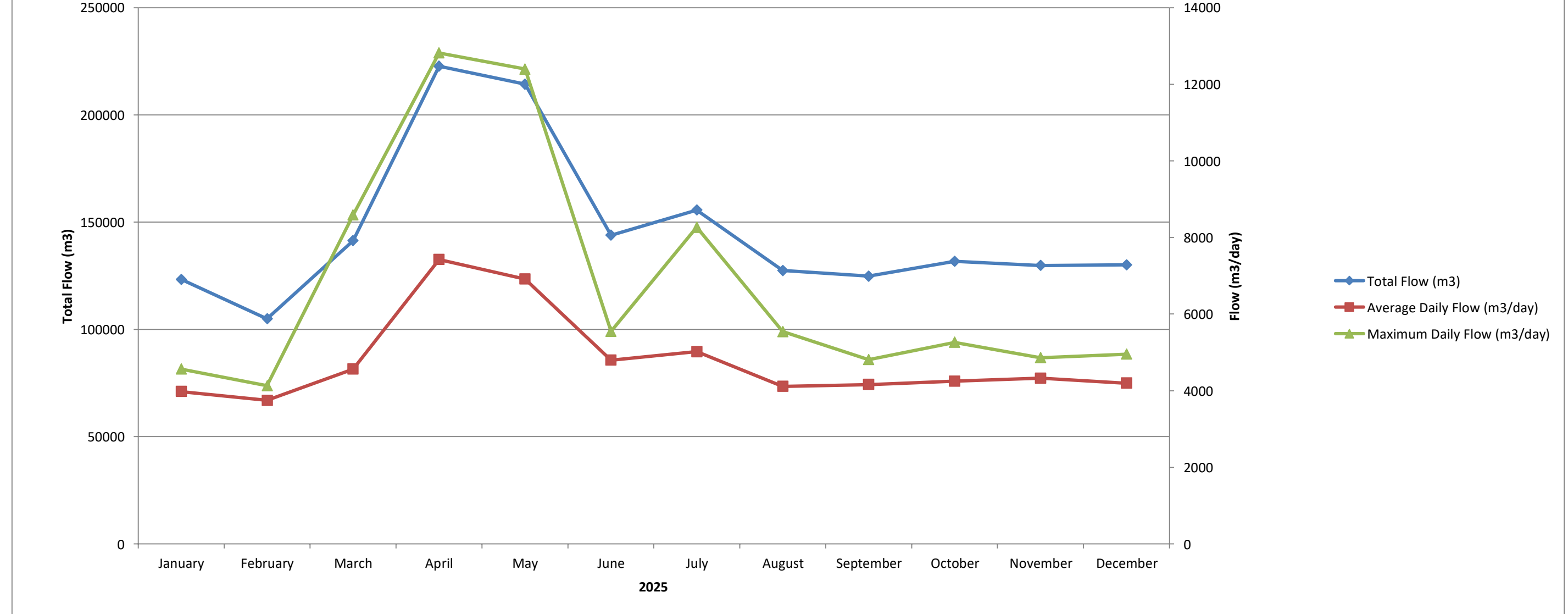
2025 Sudbury Wastewater Treatment Plant - Raw & Effluent Metals Analysis

Parameter (mg/L)	Location	January	February	March	April	May	June	July	August	September	October	November	December	Average
Arsenic	Raw	0.002	0.003	0.003	0.003	0.002	0.004	0.002	0.003	0.001	0.002	0.001	0.002	0.0023
	Effluent	0.002	0.003	0.002	0.003	0.002	0.004	0.002	0.002	0.000	0.002	0.001	0.002	0.0021
Cadmium	Raw	0.0001	0.0001	0.0000	0.0002	0.0002	0.0000	0.0001	0.0002	0.0001	0.0002	0.0003	0.0002	0.0001
	Effluent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chromium	Raw	0.002	0.004	0.002	0.002	0.001	0.000	0.003	0.003	0.002	0.003	0.002	0.002	0.0022
	Effluent	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.002	0.000	0.0005
Cobalt	Raw	0.0034	0.0019	0.0019	0.0039	0.0036	0.0024	0.0029	0.0043	0.0027	0.0000	0.0069	0.0045	0.0032
	Effluent	0.0035	0.0029	0.0028	0.0046	0.0044	0.0040	0.0022	0.0033	0.0026	0.0014	0.0058	0.0035	0.0034
Copper	Raw	0.017	0.004	0.011	0.010	0.030	0.016	0.006	0.026	0.012	0.015	0.036	0.014	0.0164
	Effluent	0.009	0.011	0.013	0.016	0.011	0.006	0.077	0.018	0.005	0.008	0.033	0.010	0.0181
Lead	Raw	0.0033	0.0022	0.0019	0.0011	0.0012	0.0015	0.0011	0.0021	0.0006	0.0008	0.0023	0.0012	0.0016
	Effluent	0.0002	0.0002	0.0001	0.0003	0.0003	0.0001	0.0002	0.0002	0.0000	0.0001	0.0008	0.0002	0.0002
Mercury	Raw	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Effluent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Molybdenum	Raw	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.001	0.004	0.000	0.0010
	Effluent	0.001	0.003	0.000	0.000	0.000	0.000	0.001	0.006	0.000	0.002	0.003	0.000	0.0013
Nickel	Raw	0.100	0.062	0.063	0.114	0.117	0.086	0.078	0.095	0.058	0.066	0.089	0.093	0.0851
	Effluent	0.086	0.049	0.052	0.092	0.107	0.076	0.074	0.066	0.048	0.043	0.069	0.068	0.0692
Selenium	Raw	0.0014	0.0040	0.0009	0.0012	0.0000	0.0005	0.0019	0.0013	0.0012	0.0011	0.0024	0.0008	0.0014
	Effluent	0.0014	0.0007	0.0008	0.0010	0.0004	0.0005	0.0008	0.0008	0.0007	0.0006	0.0021	0.0006	0.0009
Zinc	Raw	0.079	0.101	0.099	0.090	0.055	0.074	0.060	0.109	0.092	0.113	0.109	0.082	0.0886
	Effluent	0.027	0.032	0.042	0.040	0.027	0.020	0.016	0.020	0.017	0.016	0.029	0.023	0.0258



2025 Valley East Wastewater Treatment Plant Performance

Month	Flows			Excess Capacity	BOD ₅ Raw	CBOD				Total Suspended Solids				Total Phosphorus				Total Ammonia				Un-ionized Ammonia	TKN		Nitrate	Nitrite	pH		Alkalinity		Chlorine		Dechlorination		E.Coli Geomean	
	Total m ³	Avg Day m ³ /d	Max Day m ³ /d			Raw	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading	Plant Efficiency	Raw	Effluent	Loading		Plant Efficiency	Raw			Effluent	Raw	Effluent	Raw	Effluent	Raw	Residual	Total		Residual
	m ³	m ³ /d	m ³ /d	10 ³ m ³	mg/L	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	mg/L	mg/L	kg/d	%	µg/L	mg/L	mg/L	mg/L	mg/L	Raw	Effluent	mg/L	mg/L	Kg	mg/L	mg/L	Kg/day	# Col./100mL	
January	123302	3977	4562	0.000	200	180	5.3	21.08	97.1%	202	6.9	27.44	96.6%	5.4	0.57	2.27	89.4%	28.80	31.50	125.3	-9.4%	289.7	33.7	30.8	1.66	3.73	7.1	7.0	254	215	210.9	1.038	0.007	0.03	9	
February	104955	3748	4128	0.000	130	130	10.2	38.23	92.2%	342	8.6	32.24	97.5%	6.1	1.08	4.05	82.3%	36.40	34.38	128.9	5.5%	215.7	45.0	31.9	1.08	0.13	7.0	7.0	257	234	231.7	1.184	0.006	0.02	18	
March	141413	4562	8588	0.000	170	140	8.4	38.32	94.0%	290	13.7	62.50	95.3%	5.3	0.69	3.15	87.0%	35.20	30.65	139.8	12.9%	211.7	43.0	22.7	1.43	0.33	7.0	6.9	239	199	300.0	1.026	0.005	0.02	5	
April	222740	7425	12817	1.713	120	150	6.0	44.55	96.0%	215	15.5	115.08	92.8%	3.9	0.59	4.38	84.9%	23.00	16.54	122.8	28.1%	135.3	27.9	15.9	2.09	0.66	6.9	6.8	211	182	513.8	0.714	0.003	0.02	5	
May	214334	6914	12397	1.032	67	68	7.6	52.55	88.8%	150	11.5	79.72	92.3%	4.0	0.55	3.80	86.2%	8.54	15.71	108.6	-84.0%	127.2	13.5	15.8	1.90	0.51	7.0	6.8	203	179	559.1	1.028	0.007	0.05	2	
June	143915	4797	5548	0.000	88	90	5.2	24.95	94.2%	197	9.1	43.75	95.4%	4.6	0.56	2.69	87.9%	22.60	23.95	114.9	-6.0%	383.2	26.5	22.9	2.12	0.31	7.1	6.8	224	196	334.8	1.157	0.006	0.03	5	
July	155604	5019	8267	0.000	62	30	6.8	34.13	77.3%	156	8.3	41.41	94.7%	4.0	0.44	2.21	88.9%	19.30	22.06	110.73	-14.3%	288.1	13.9	57.0	2.30	0.58	6.9	6.8	211	179	270.8	0.998	0.011	0.06	3	
August	127465	4112	5542	0.000	59	72	9.3	38.36	87.0%	219	6.2	25.33	97.2%	6.7	0.54	2.22	91.9%	23.50	25.68	105.59	-9.3%	467.7	28.2	24.0	2.48	0.73	7.0	6.9	227	196	214.0	1.149	0.004	0.02	21	
September	124807	4160	4810	0.000	140	41	5.9	24.67	85.5%	227	5.0	20.68	97.8%	5.6	0.56	2.33	90.1%	29.90	30.70	127.72	-2.7%	638.4	38.0	28.0	3.64	6.46	7.2	7.1	228	196	173.7	1.078	0.008	0.03	16	
October	131757	4250	5261	0.000	160	170	7.5	31.79	95.6%	256	6.3	26.69	97.5%	6.2	0.64	2.72	89.6%	31.90	31.54	134.05	1.1%	654.3	31.1	34.4	3.07	0.61	7.1	7.0	243	199	204.0	1.059	0.009	0.04	7	
November	129801	4327	4859	0.000	160	140	8.3	35.91	94.1%	304	10.6	45.91	96.5%	6.2	0.58	2.51	90.7%	34.20	31.83	137.72	6.9%	616.3	37.8	29.0	1.18	0.13	7.2	7.1	239	205	192.6	0.991	0.006	0.03	8	
December	130107	4197	4950	0.000	130	170	11.0	46.33	93.5%	235	9.5	40.00	95.9%	5.2	0.58	2.43	88.9%	30.20	30.46	127.84	-0.9%	668.0	35.9	29.7	2.18	0.25	7.0	6.9	241	214	176.2	1.089	0.003	0.01	31	
Total	1750200			2.745					93.4%				95.7%				88.1%				-0.4%															
Average		4795					7.63	35.91	91.3%	233	9.26	46.73	95.8%	5.26	0.62	2.90	88.1%	26.96	27.08	123.7	-0.1	391.30	31.21	28.50	2.09	1.20	7.04	6.93	231	199	281.80	1.043	0.006	0.03	11	



Plant Type: Extended Aeration
Design Capacity: 11,400 m³/day
Population Served: 17,365

Compliance Parameters:

	Conc.	Loading	
CBOD	25 mg/L	284 kg/day	Annual Average
TSS	25 mg/L	284 kg/day	Annual Average
Total Phosphorus	1.0 mg/L	11.4 kg/day	Monthly Average
pH	6.0 to 9.5 inclusive, at all times		
E.Coli	200 col/100 mL		Monthly Geometric Mean



2025 Valley East Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	99.9	233.0	108.0	90.0	25.6	293.0	4750.0	96.5	180.0	241.0	47.3	146.0	525.9
Nitrate (as N)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.70	0.00	0.05	0.00	1.65
Nitrite (as N)	0.00	0.00	0.47	0.00	0.21	0.00	0.00	0.00	7.09	0.00	0.23	0.11	0.68
Potassium	83	116	89	74	73	130	90	76	71	71	100	102	90
TKN	675	1180	644	1150	625	320	5790	1240	1350	1030	1480	1510	1416
Total Phosphorus	507	14	496	344	388	985	1010	549	563	75.8	602	0.00	461
Total Solids	45200	34600	36400	28000	28900	4.70	5.4	28100	32200	33000	3780	37600	25649
Arsenic	0.07	0.06	0.05	0.07	0.09	0.00	1.70	0.06	0.08	0.06	0.09	0.07	0.20
Cadmium	0.0182	0.0149	0.0157	0.0153	0.0206	0.0000	0.0000	0.0123	0.0168	0.0115	0.0187	0.0140	0.0132
Chromium	0.23	0.28	0.24	0.31	0.43	1.30	1.50	0.24	0.40	0.21	0.30	0.22	0.47
Cobalt	0.092	0.082	0.070	0.079	0.072	0.130	0.200	0.062	0.097	0.083	0.134	0.086	0.099
Copper	10.8	10.5	9.8	5.2	7.3	13.6	20.7	8.1	11.4	10.1	11.3	8.3	10.6
Lead	0.236	0.229	0.237	0.154	0.230	0.000	0.900	0.152	0.227	0.151	0.234	0.185	0.245
Mercury	0.007	0.003	0.005	0.002	0.014	0.000	0.000	0.001	0.002	0.000	0.000	0.000	0.003
Molybdenum	0.05	0.05	0.05	0.04	0.03	0.00	0.00	0.04	0.05	0.05	0.06	0.04	0.04
Nickel	0.55	0.43	0.41	0.42	0.81	1.00	1.60	0.38	0.54	0.38	0.60	0.44	0.63
Selenium	0.044	0.049	0.042	0.032	0.039	0.000	0.000	0.037	0.050	0.029	0.058	0.036	0.035
Zinc	15.4	13.0	13.7	6.4	8.6	16.1	28.0	12.1	16.0	11.2	13.5	10.6	13.7
Sample Date	Jan.2/25	Feb.6/25	Mar.4/25	Apr.2/25	May.6/25	Jun.4/25	Jul.2/25	Aug.6/25	Sep.3/25	Oct.1/25	Nov.27/25	Dec.3/25	



2025 Walden Wastewater Treatment Plant Waste Sludge Analysis

Parameter (mg/L)	January	February	March	April	May	June	July	August	September	October	November	December	Average
Ammonia (as N)	3.6	57.0	1.50	9.8	10.8	2.1	16.8	6.3	0.8	5.1	4.5	9.8	10.7
Nitrate (as N)	11.20	0.15	5.04	0.11	0.05	0.16	0.00	0.00	9.50	0.00	5.48	0.00	2.641
Nitrite (as N)	1.67	0.15	0.04	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.80	0.00	0.23
Potassium	40	92	36	87	77	47	82	52	27	27	34	49	54
TKN	163	1040	82.7	1120	818	472	1100	684	120	89	181	648	543
Total Phosphorus	3.57	335.0	74.2	279.0	259.0	0.10	508.0	276.0	81.5	42.1	53.3	0.03	159.3
Total Solids	5320	17900	5430	21500	16200	8620	21900	15200	4130	5420	4860	12700	11598
Arsenic	0.04	0.07	0.02	0.12	0.13	0.05	0.17	0.54	0.28	0.11	0.12	0.21	0.16
Cadmium	0.0139	0.0239	0.0059	0.0402	0.0345	0.0140	0.0384	0.0220	0.0072	0.0045	0.0069	0.0224	0.0195
Chromium	0.12	0.28	0.06	0.50	0.44	0.17	0.48	0.82	0.27	0.10	0.13	0.33	0.31
Cobalt	0.407	0.947	0.169	0.846	1.130	0.548	0.640	0.601	0.193	0.139	0.246	0.668	0.545
Copper	2.7	6.7	1.9	9.1	9.7	5.9	10.4	7.2	2.4	1.2	1.9	5.6	5.39
Lead	0.099	0.191	0.046	0.284	0.281	0.117	0.561	0.217	0.084	0.048	0.079	0.168	0.181
Mercury	0.002	0.000	0.000	0.002	0.004	0.000	0.011	0.000	0.000	0.000	0.000	0.001	0.002
Molybdenum	0.06	0.77	0.09	0.24	0.14	0.07	0.06	0.12	0.04	0.06	0.06	0.14	0.15
Nickel	1.50	3.40	0.64	5.60	6.00	3.20	3.50	4.40	1.01	0.74	0.98	2.80	2.81
Selenium	0.028	0.068	0.016	0.080	0.068	0.041	0.085	0.063	0.018	0.011	0.028	0.053	0.047
Zinc	3.88	10.10	2.47	11.20	10.60	4.74	10.90	6.85	2.23	1.65	2.41	6.83	6.16
Sample Date	Jan.9/25	Feb.6/25	Mar.4/25	Apr.1/25	May.1/25	Jun.5/25	Jul.3/25	Aug.6/25	Sep.4/25	Oct.2/25	Nov.6/25	Dec.4/25	