

Bobcaygeon Wastewater System 2025 Annual Wastewater Performance Report

Wastewater System Works Number: 110002498

Wastewater System Operating Authorities: City of Kawartha Lakes and Ontario
Clean Water Agency

Reporting Period: January 1st – December 31st, 2025



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2025 Annual Wastewater System Performance Report

Executive Summary

The Bobcaygeon Water Pollution Control Plant (WPCP) is an extended aeration wastewater treatment facility with a rated capacity of 3,055 m³/day. It is located at 127 Boyd Street in Bobcaygeon and discharges treated effluent into the Big Bob Channel. The facility is owned by the City of Kawartha Lakes. The treatment system and sewage pumping stations are operated by the Ontario Clean Water Agency, while the remaining collection system is operated by City staff.

The treatment system is operated under Environmental Compliance Approval (ECA) #3028-AEUKDQ, issued April 10, 2017. The collection system operates under Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) #141-W601, issued May 2, 2025. The wastewater system is classified as a Class II Wastewater Treatment System and a Class II Wastewater Collection System in accordance with Ontario Regulation 129/04.

The facility consists of two parallel treatment trains, each equipped with extended aeration tanks, secondary clarifiers, and ultraviolet (UV) disinfection. Sludge digestion is carried out in a common aerated digester, with supernatant returned to the plant headworks.

The headworks include a common coarse bar screen, three parallel grit channels, and individual comminutors for each treatment train. Following screening and grit removal, wastewater flows into the aeration tanks, where air is continuously supplied to maintain aerobic conditions. Alum is added in the aeration tanks to aid in phosphorous removal.

Mixed liquor from the aeration tanks flows by gravity to the secondary clarifiers, where solids settle to the bottom and clarified effluent is collected from the surface. The clarified effluent is then disinfected using UV light before passing through a common effluent chamber and being discharged to the Big Bob Channel.

A portion of the settled solids, known as Return Activated Sludge (RAS), is recirculated back to the aeration tanks to maintain biological treatment processes. The remaining solids, referred to as Waste Activated Sludge (WAS), are directed to the aerobic digester tank for further stabilization through aeration. The stabilized biosolids are subsequently hauled off-site by a licensed waste hauler for land application.

The Bobcaygeon wastewater collection system comprises gravity sewers, eleven pumping stations, and associated forcemains that convey raw sewage to the treatment facility.

The City of Kawartha Lakes and OCWA prepare an annual report summarizing the operation and performance of the municipal wastewater system. This report fulfills the requirements of

Environmental Compliance Approval (ECA) #3028-AEUKDQ and Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) #141-W601. Unless otherwise noted, the Bobcaygeon Sewage Works operates in compliance with all applicable regulatory requirements and approval conditions.

This Annual Performance Report is available to the public on the [City of Kawartha Lakes website](#) and at the Public Works Administration Office located at 322 Kent Street West in Lindsay, Ontario, by appointment. Notification of report availability is provided on the City's website and copies are available free of charge.

Reporting Requirements – Wastewater Treatment Plant

In accordance with the amended ECA #3028-AEUKDQ, Section 11(4) – REPORTING, the owner shall prepare a performance report on a calendar basis and submit to the Ministry of Environment, Conservation and Parks by March 31 of the calendar year following the period being reported upon.

Section 11(4) – REPORTING

The performance report is required to contain the following:

- a) a summary and interpretation of all monitoring data and a comparison to the Final Effluent limits outlined in Compliance Limits condition, including an overview of the success and adequacy of the Works;
- b) a description of any operating problems encountered and corrective actions taken;
- c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- f) a description of efforts made and results achieved in meeting the Design Objectives of Condition 6;
- 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;
- h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- i) a summary of all By-pass, spill or abnormal discharge events;
- j) a copy of all 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;
- k) a report summarizing all modifications completed as a result of Schedule B, Section 3; and

- l) any other information the Water Supervisor requires from time to time;

Section 6(3)

ECA #3028-AEUKDQ Section 6(3) states "The Owner shall make an assessment of the issues and recommendation of pro-active actions if any is required under the following situations and include in the annual report to the Water Supervisor:

- a) when any of the design objectives is not achieved consistently;
- b) when the Annual Average Daily Flow reaches 80% of the Rated Capacity."

The following is a report from the records maintained by the Ontario Clean Water Agency for the Bobcaygeon Wastewater Treatment Plant for the calendar year 2025:

Summary of Monitoring Data to Limits and Objectives

(a,f) Overall, the plant process ran well in 2025. The following tables summarize the monthly effluent quality results in comparison to the effluent limits, Condition 7 of Environmental Compliance Approval #3028-AEUKDQ (issued April 10, 2017).

Attached as **Appendix I** is the 2025 Performance Assessment Report (PAR) and associated loading calculations for the Bobcaygeon Wastewater Treatment Plant (WWTP), representing the facility's combined final effluent.

The PAR provides a tabulation of monthly average raw sewage and final effluent sample results obtained during the reporting period, as well as a summary of average daily flows and total monthly volumes. In addition, the report includes calculated total loadings for key parameters in the final effluent, including biochemical oxygen demand (BOD/CBOD₅), suspended solids, total phosphorus, and ammonia + ammonium (expressed as Nitrogen).

The Bobcaygeon Wastewater Treatment Plant (WWTP) has a rated capacity of 3,055 m³/day and a peak capacity of 10,440 m³/day. The total final effluent flow for 2025 was 672,667 m³, with an average daily flow of 1,842.92 m³/day, representing approximately 60.3% of the rated capacity.

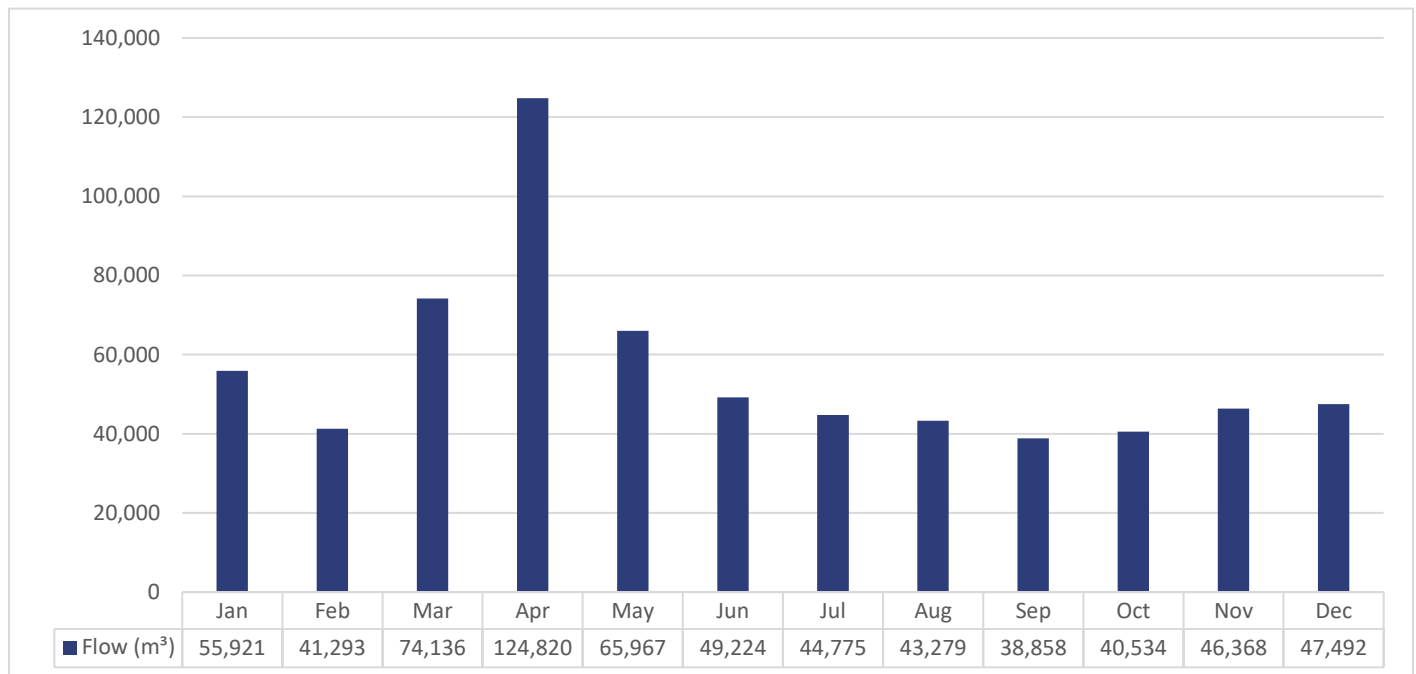
In 2022, closed-circuit television (CCTV) inspections and sanitary sewer flushing were completed across the entire collection system. The inspection results were reviewed by an engineering consultant, who assigned priority rankings (low, medium, or high) to identified deficiencies. In 2023, a contract was awarded to complete the required repairs. A range of rehabilitation methods was employed, including specialty cleaning (hydraulic reaming and robotic cutting), injection grouting, cured-in-place pipe (CIPP) lining, and mechanical spot repairs. This work was completed in 2024.

The effectiveness of these improvements is reflected in the reduction of total flows observed between 2023 and 2025. Ontario Clean Water Agency (OCWA) will continue to work in partnership

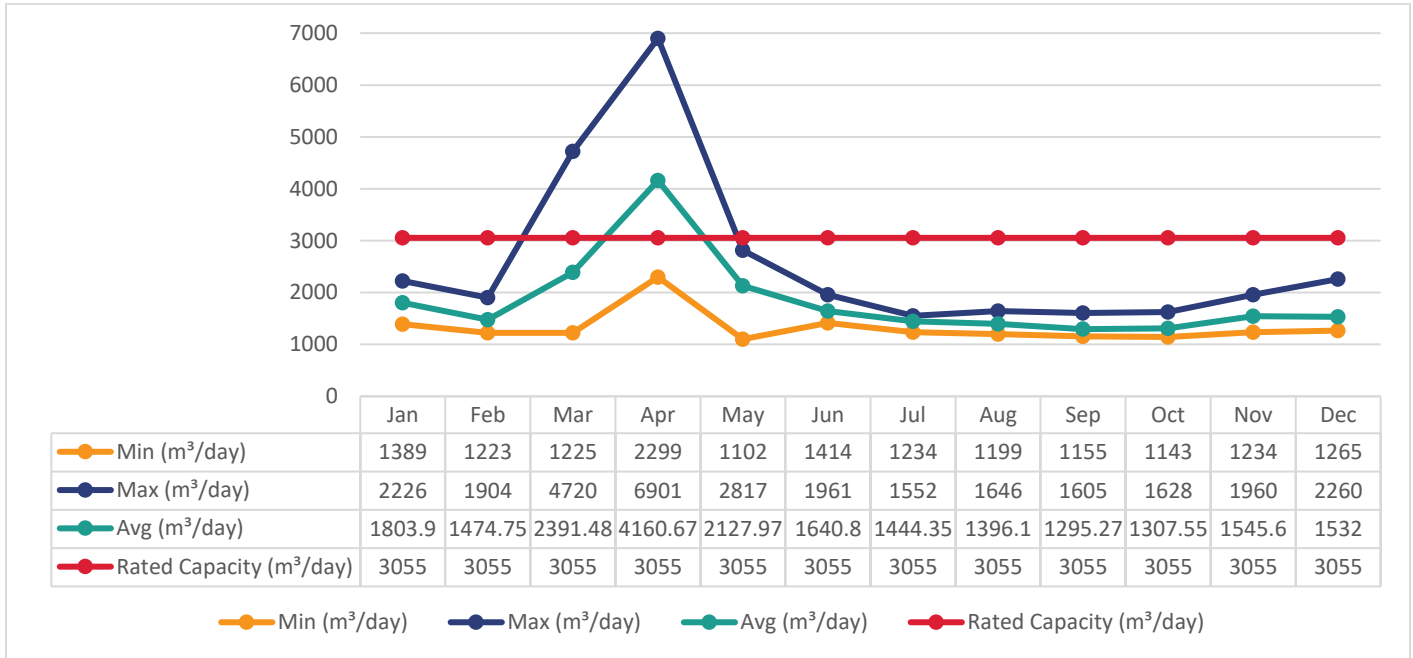
with the City of Kawartha Lakes to reduce inflow and infiltration (I&I) and optimize flows to the wastewater treatment plant.

In 2024, OCWA initiated a biosolids management for the Bobcaygeon WWTP. The study provides a comprehensive review of facility performance, including sludge production, storage capacity, and handling processes. Based on the findings, opportunities for optimization were identified, including recommendations to increase sludge storage capacity through the addition of a new storage tank and implementation of sludge thickening processes. These recommendations will be considered as part of a future Environmental Assessment (EA) project, which is anticipated to begin in 2027.

Graph 1. 2025 Final Effluent Flow Monthly Totals

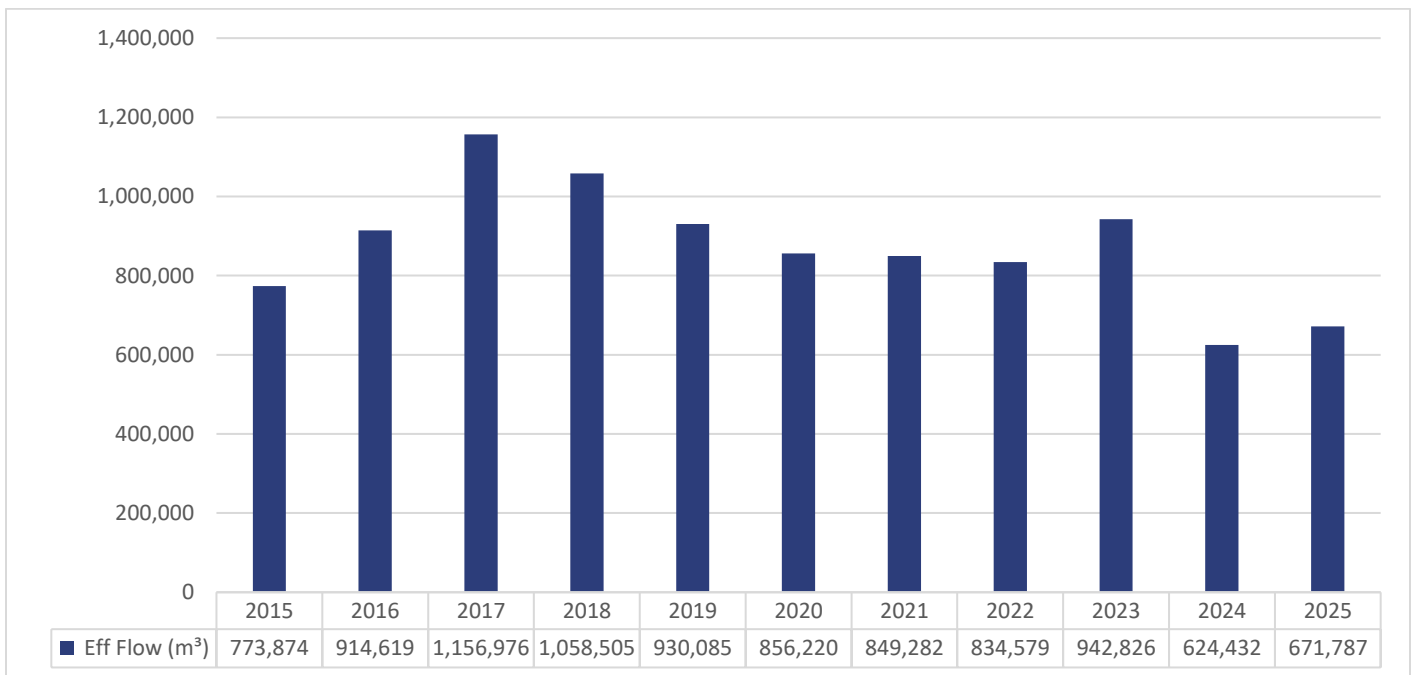


Graph 2. 2025 Final Effluent Daily Minimum, Maximum and Average Flows



There may be instances where effluent flow exceeded the Rated Capacity on a monthly basis. However, Rated Capacity is calculated as an annual average daily flow rate, which was met in 2025. Flows were high in March and April due to seasonal snow melt and heavy rainfall.

Graph 3. Historical Effluent Flows from 2015 - 2025



The total effluent flow has increased by 7.04% from 2024 to 2025. The City of Kawartha Lakes completed collection system repairs late 2023 early 2024. These repairs can be seen in the total flow reduction in 2024 and 2025.

Minimum Sampling Requirements

ECA #3028-AEUKDQ (issued April 10, 2017) Condition 9(3) describes the requirement for sample collection at the following locations, frequencies and by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 1. Influent Sampling Point

Parameters	Sample Type	Frequency
BOD ₅	Composite	Monthly
Total Suspended Solids	Composite	Monthly
Total Phosphorus	Composite	Monthly
Total Kjeldahl Nitrogen	Composite	Monthly

Table 2. Final Effluent Sampling Point

Parameters	Sample Type	Frequency
CBOD ₅	Composite	Weekly
Total Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Total Ammonia Nitrogen	Composite	Weekly
E. Coli	Grab	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly
Acute Lethality to Rainbow Trout and Daphnia Magna	Grab	Quarterly

Effluent Parameter Summary

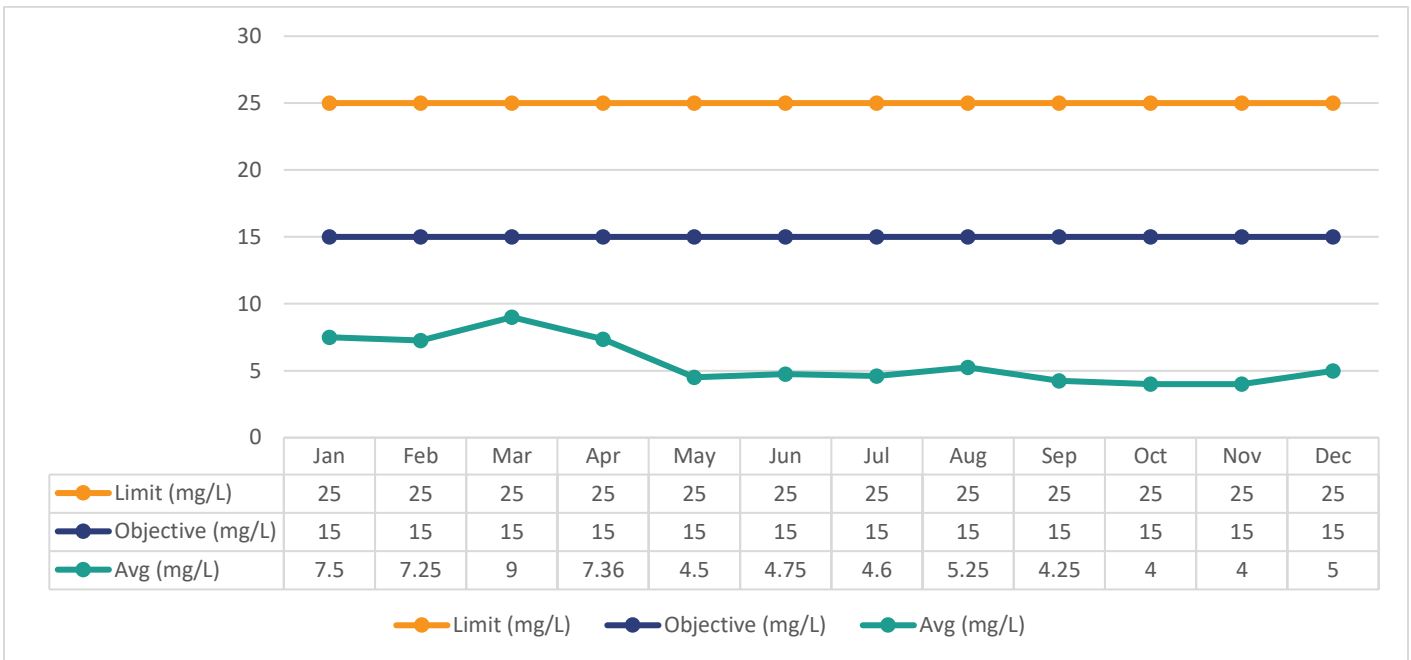
Carbonaceous Biochemical Oxygen Demand (CBOD₅)

ECA #3028-AEUKDQ sets the CBOD₅ monthly average concentration limit at 25.0 mg/L and the monthly average waste loading at 76.4 kg/day. The monthly CBOD₅ average concentration results and monthly average waste loading results were in compliance with the limits and objectives outlined in ECA #3028-AEUKDQ in every month in 2025.

CBOD₅ Monthly Average Concentration

The CBOD₅ monthly average concentration limit and monthly concentration objective were met each month in 2025.

Graph 4. 2025 Monthly CBOD₅ Final Effluent Concentration Comparisons

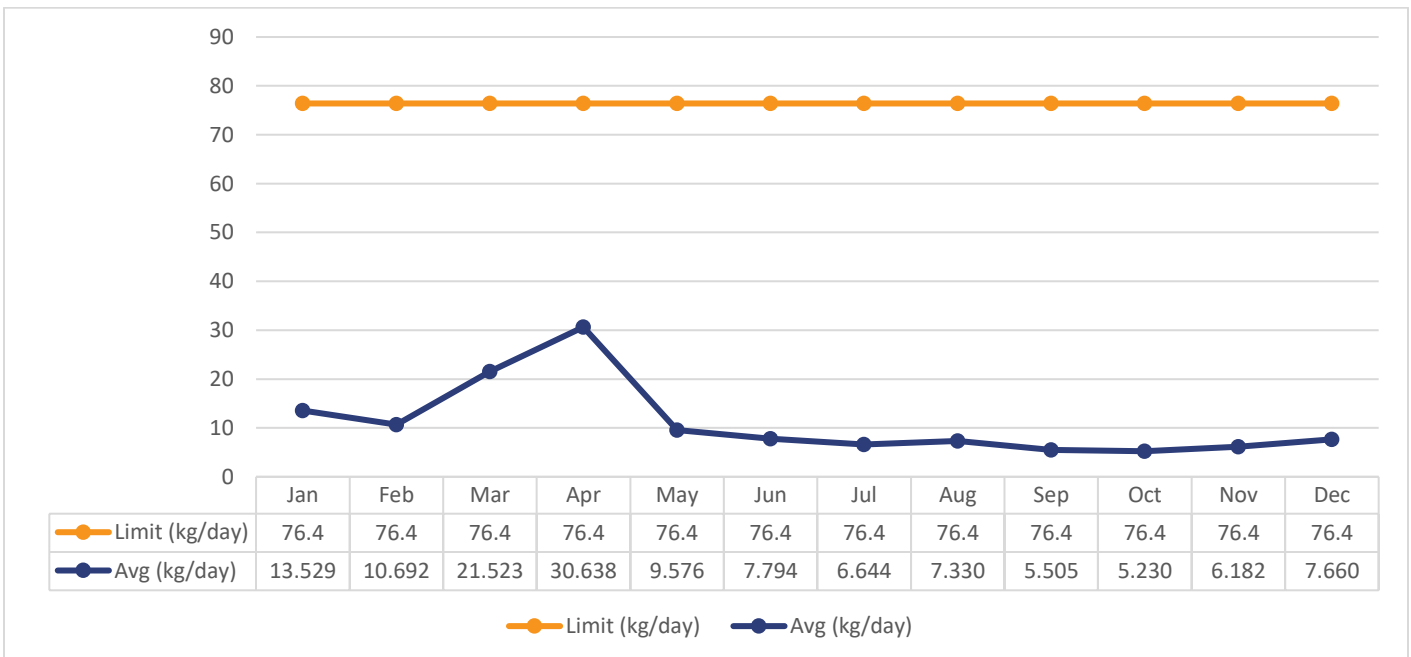


The Bobcaygeon WWTP was able to consistently meet the Effluent Objectives and Limits for CBOD₅ throughout 2025.

CBOD₅ Monthly Average Waste Loading

The monthly CBOD₅ monthly average waste loading limit was met each month in 2025.

Graph 5. 2025 Monthly Final Effluent CBOD₅ Average Waste Loading Comparisons



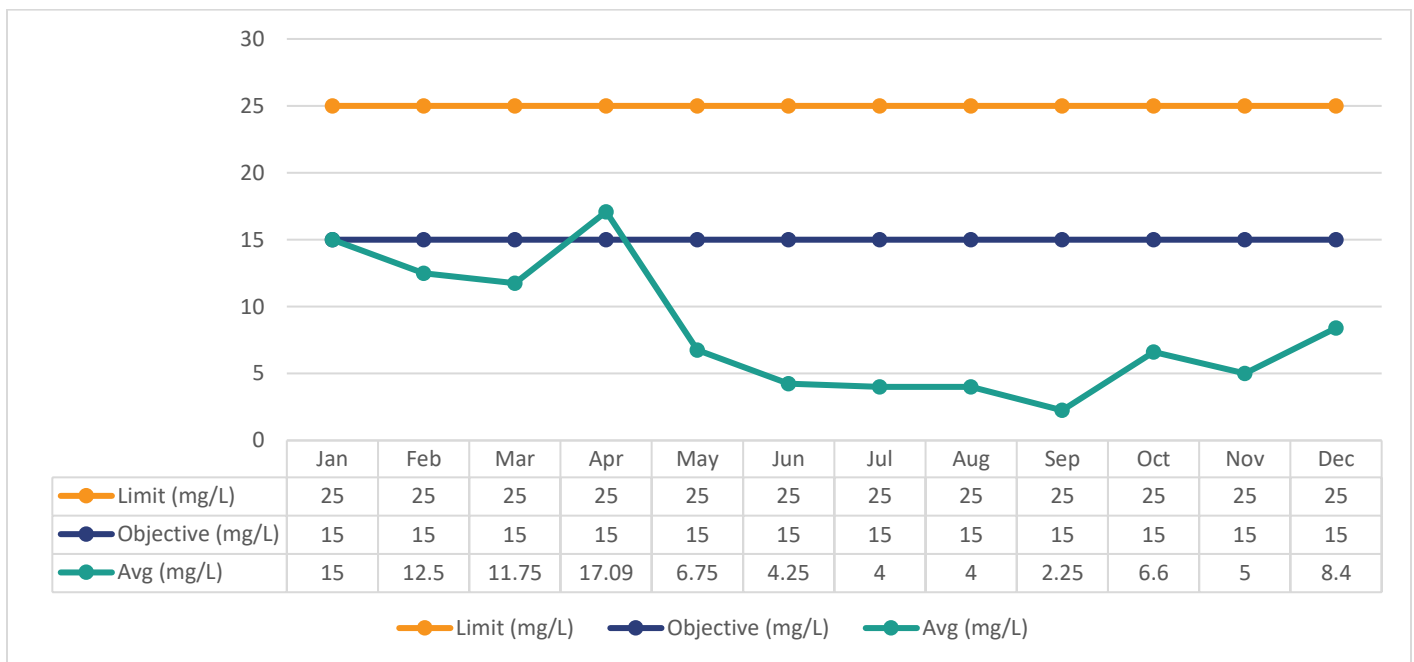
Total Suspended Solids (TSS)

ECA #3028-AEUKDQ sets the Total Suspended Solids monthly average concentration limit at 25.0 mg/L and the monthly average waste loading at 76.4 kg/day. The monthly Total Suspended Solids average concentration results and monthly average waste loading results throughout 2025 were in compliance with the limits outlined in ECA #3028-AEUKDQ. The monthly objective was higher in April 2025 due to snow melt/higher flows.

Total Suspended Solids Monthly Average Concentration

The Total Suspended Solids monthly average concentration limit was met each month in 2025.

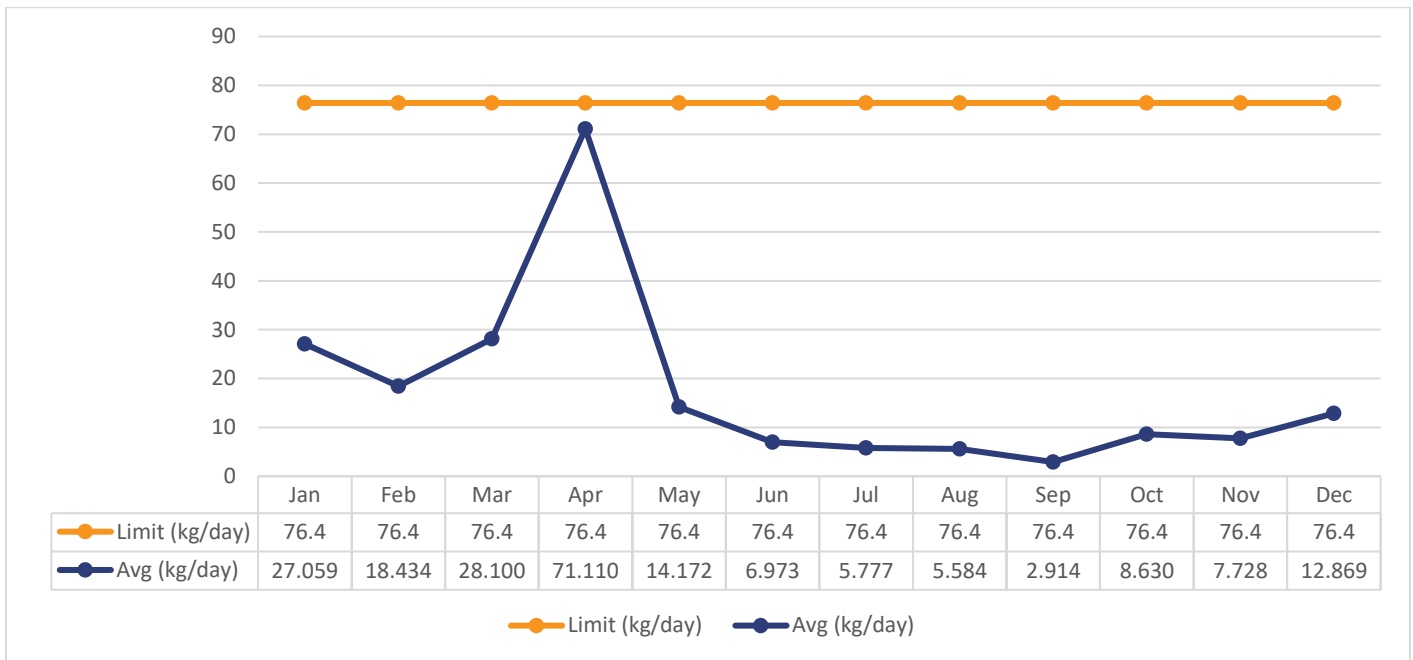
Graph 6. 2025 Monthly TSS Final Effluent Concentration Comparisons



Total Suspended Solids Monthly Average Waste Loading Limits

The Total Suspended Solids monthly average waste loading limit was met each month in 2025.

Graph 7. 2025 Monthly Final Effluent TSS Average Waste Loading Comparisons



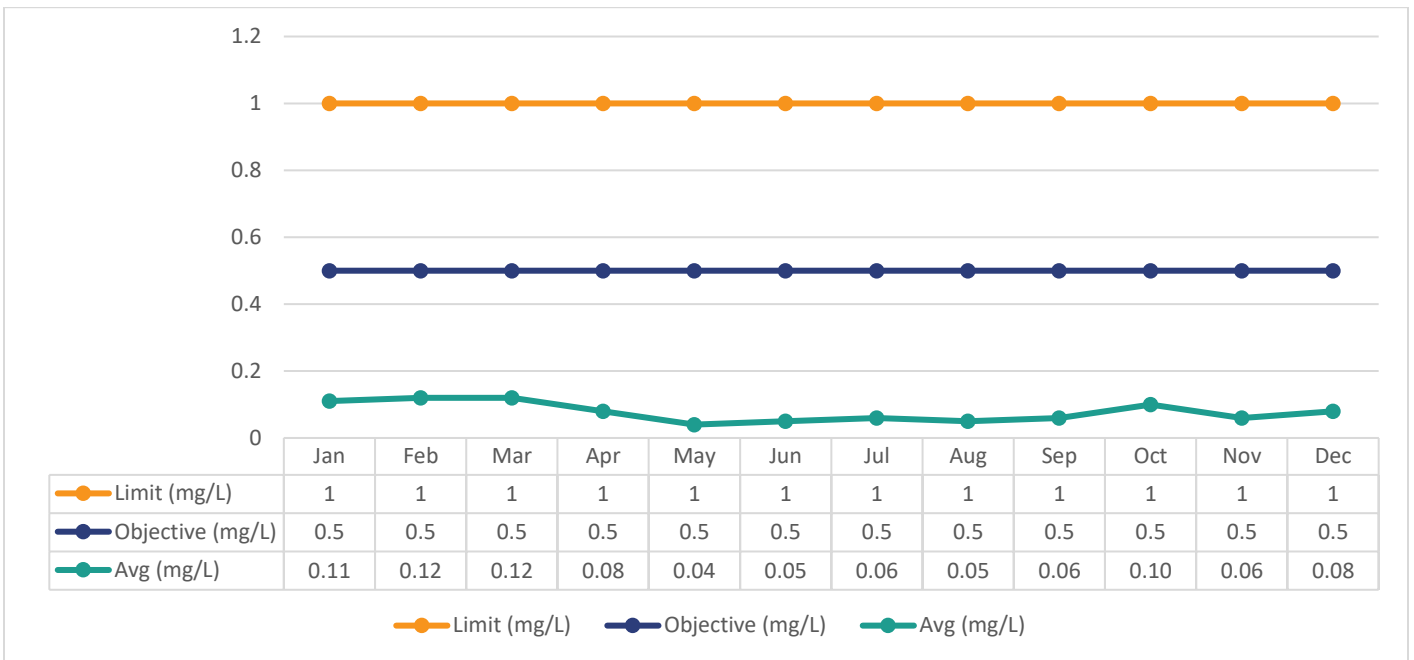
Total Phosphorus (TP)

ECA #3028-AEUKDQ sets the Total Phosphorus monthly average concentration limit at 1.0 mg/L and the monthly average waste loading at 1.3 kg/day. The Total Phosphorus monthly average concentration results and monthly average waste loading results throughout 2025 were in compliance with the limits and objectives.

Total Phosphorus Monthly Average Concentration

The Total Phosphorus monthly average concentration limit and monthly average concentration objective were met each month in 2025.

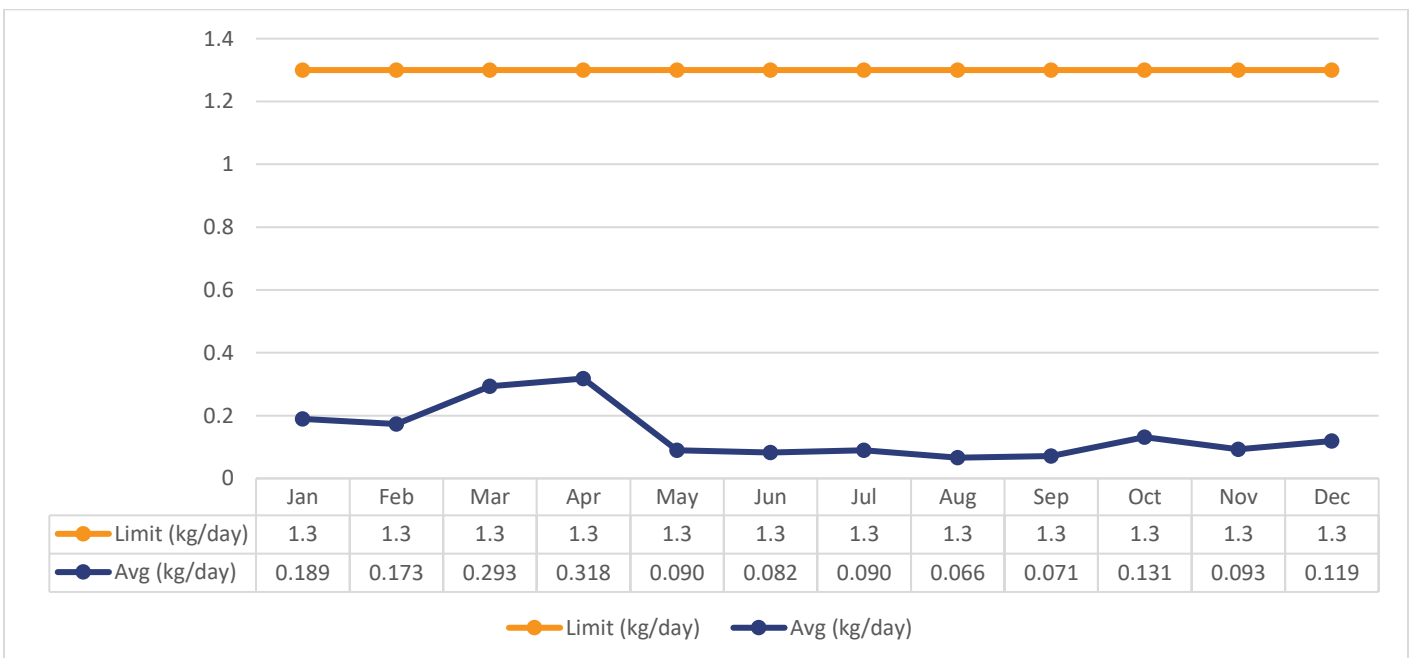
Graph 8. 2025 Monthly Total Phosphorus Final Effluent Concentration Comparisons



Total Phosphorus Monthly Average Waste Loading Limits

The Total Phosphorus monthly average waste loading limit was met each month in 2025.

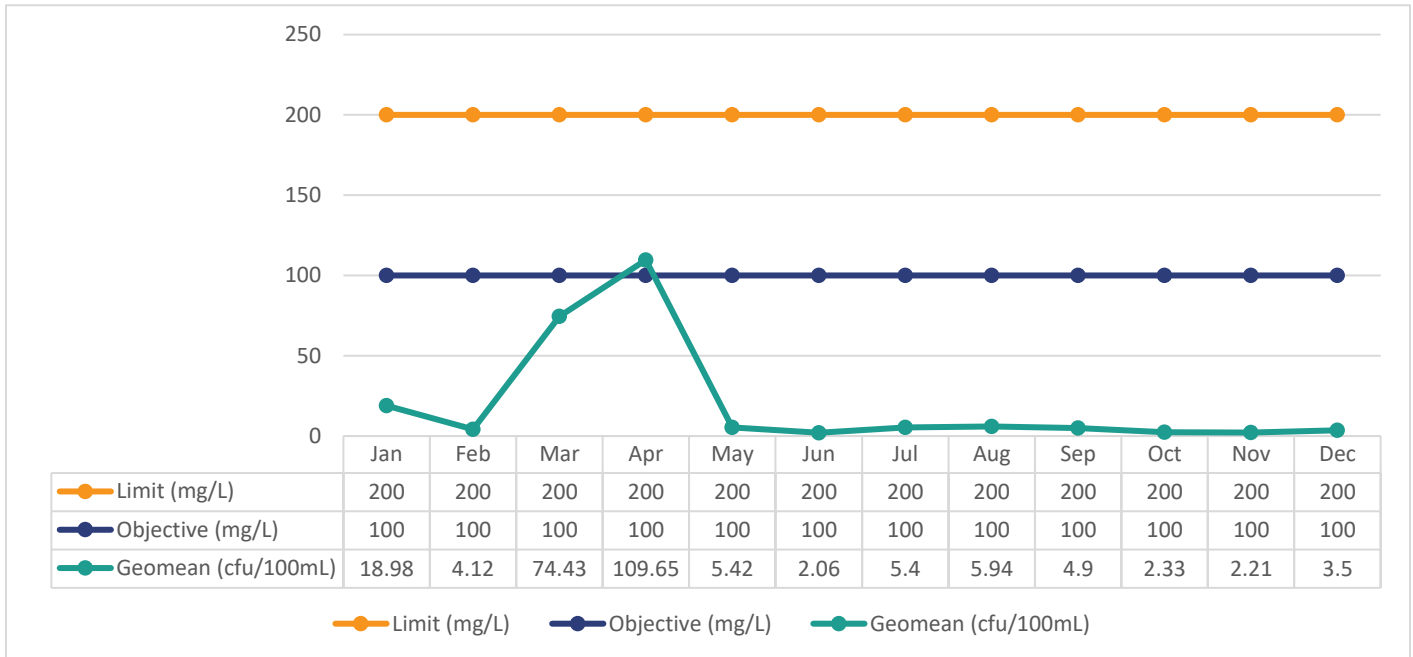
Graph 9. 2025 Monthly Final Effluent Total Phosphorus Average Waste Loading Comparisons



E. Coli

ECA #3028-AEUKDQ sets the monthly geometric mean density of E. Coli at 200 cfu/100mL and the monthly geomean limit was met each month in 2025. The monthly objective was higher in April 2025 due to suspected sample contamination from the sample pole/container, the sample pole/container was replaced.

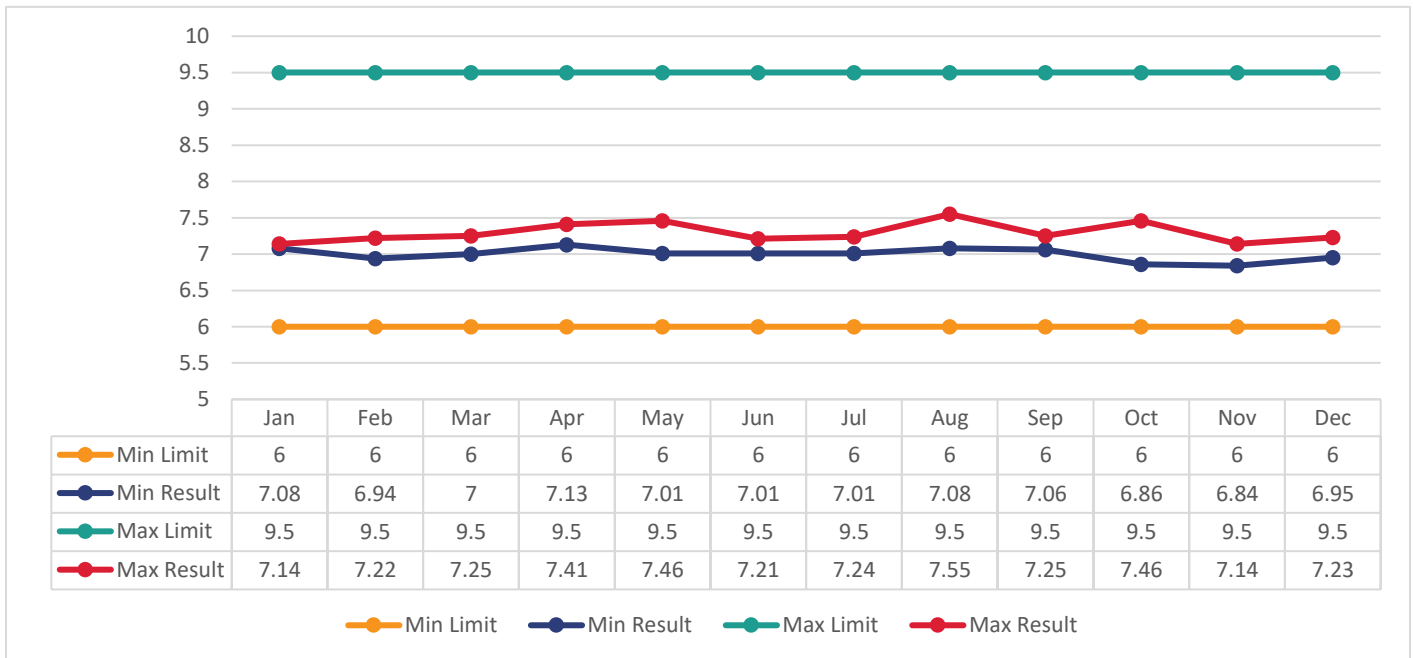
Graph 10. 2025 Monthly E. Coli Final Effluent Geometric Mean Comparisons



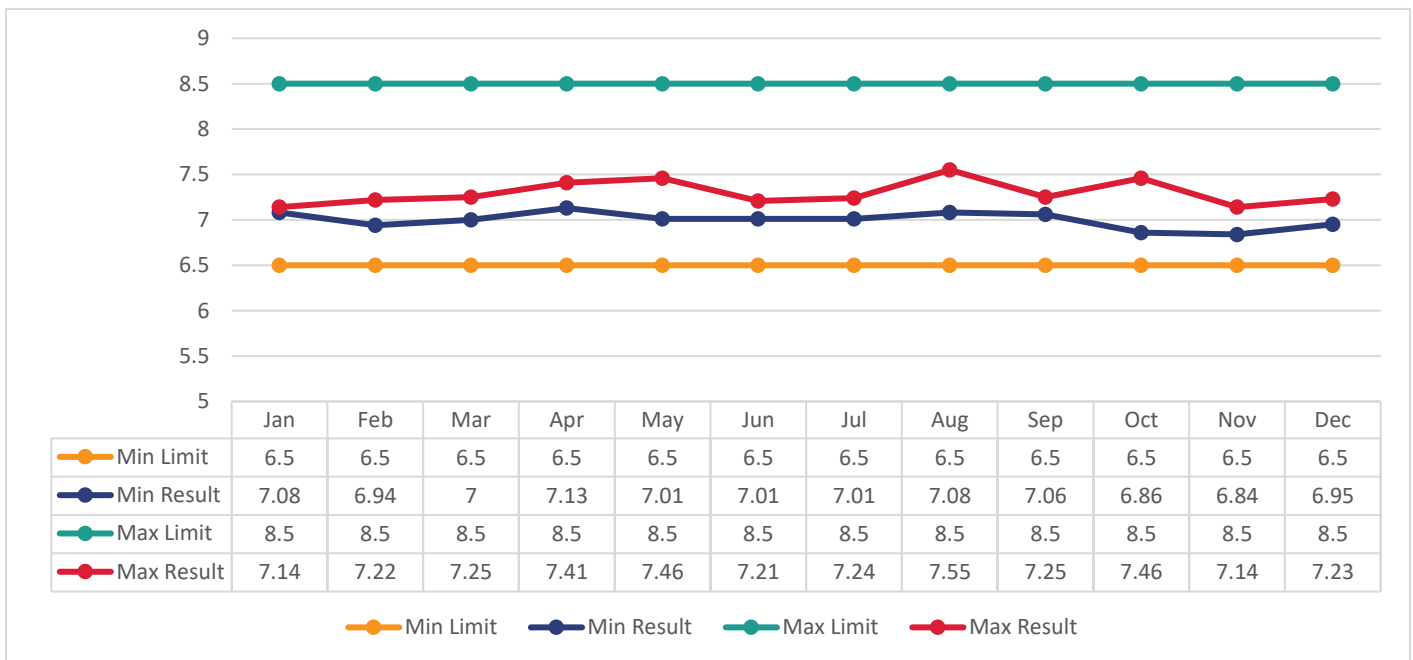
pH

ECA #3028-AEUKDQ has a pH compliance limit within the range of 6.0 to 9.5, inclusive, at all times. The pH of the final effluent ranged from 6.84 – 7.55 throughout 2025, which is within the ECA compliance limit and objective at all times.

Graph 11. 2025 Monthly pH Final Effluent Concentration Limit Comparisons



Graph 12. 2025 Monthly pH Final Effluent Concentration Objectives Comparisons



Acute Lethality to Rainbow Trout and Daphnia Magna

Quarterly effluent samples were collected for analysis for acute lethality to Rainbow Trout and Daphnia Magna and a summary of the result are provided in **Appendix II: Acute Lethality Summary**. Samples were collected on January 29, April 7, July 9 and October 14, 2025. All of the 2025 samples resulted in 0% mortality rate for both Rainbow Trout and Daphnia magna.

Operational Challenges and Corrective Actions

(b) In 2024, a biosolids study was conducted and completed for the Bobcaygeon WWTP due to the storage restrictions, increase in solids, and use of one digester that is not able to operate with air blowers due to the odour complaints when running. The study was completed and the recommendations for additional storage is being taken into consideration for capital upgrades.

Table 3. Bobcaygeon WWTP Operational Challenges

Month	Challenges	Corrective Actions
January	SPS 6 Generator Fail	Contractor repaired leaks in coolant and fuel systems.
	UV Fail	Raked inlet 1 & 2 bar screens.
	Cloudy Effluent	Increased RAS with higher DO.
	RAS Pumps Fault	Reset RAS pumps.
	Air Blower Fault	Reset blower.
	Scum Pump Frozen	Reset heat trace.
	Scum Pump 2 Trip	Overload tripped inside MCC, reset by electrician.
	Supernatant Pump 1 Not Pumping	Lifted pump to remove air lock.
	Composite Sampler Unable to Pull Sample – Line Frozen	Ensure heat trace is properly insulated and there is no exposed tubing.
	Broken Decant Pipe	Contractor repaired and installed heat trace and insulation on pipe.
February	Digester Capacity	Reduce/stop wasting and haul sludge.
	DO Level	Increase blower operation to increase DO.
	SPS 10 Pump 2 Overload	Reset pump. Reverse pump to clear any potential blockages.
	SPS 6 Pump 2 Trip	Reset pump. Reverse pump to clear any potential blockages.

Month	Challenges	Corrective Actions
	Communication Problems at Pumping Stations	Reconfigured wiring to fix the issue (Cisco 100 Series)
	Alum Pump 2 Leak	New pumps approved. Old ones to be replaced.
	High MLSS	Lower RAS rate and increase settling time.
	Bridge Heat Trace Troubleshooting	Changed heat trace set points.
	Digester Pump 2 Trip	Overload reset by electrician.
	UV Faults	Solids carrying over. Increase wasting.
	Digester Capacity	Reduce/stop wasting and haul sludge.
March	High Flows at Pumping Stations	Pump out wet wells and dump into SPS 1.
	High Flows	Seasonal high flows due to the weather.
	SPS 10 Pump 2 Fault	Reset pump. Tested pump in hand. Pump pulled for maintenance.
	SPS 6 High Level	Pump 2 not running. Pump 2 working after cycling the disconnect switch.
	DO Sensor North Mounting Issue	Secured and tightened pins that connect with the DO mount.
	Main Power Issue	Generator running. Contractors fixed issue.
	UV Faults	Solids carrying over. Increase wasting and RAS.
	Generator Fail	Contractor hauling from sump pit until power restored. Contractor fixed generator.
	Digester Repair	Contractor completed repair.
	DO Level	Due to increased productivity from the local dairy.
	Digester Capacity	Reduce/stop wasting and haul sludge.
April	SPS 6 High Flows	Infiltration and OERT Team onsite, contractor on site to pump out station as needed.
	High Flows	Seasonal high flows due to weather.

Month	Challenges	Corrective Actions
	UV Faults	High flows, increased WAS and RAS.
	WWTP Generator Fail	Batteries dead. Voltage lost to generator as receptacle battery plugged into only receives power from Hydro. Changed battery and changed charging receptacle.
	SPS 5 Miltronics Lost Program After Power Outage	Update with new level controller
	SPS 10 Phase I Out	Generator providing power to station due to loss of phase. Repaired by Hydro.
	SPS 6 Overload Tripped	Reset pump. Reverse pump to clear any potential blockages.
	SPS 10 Pump Issues	Pulled and inspected.
	SPS 5 Power Outage	No back up power. Contractor on site to pump out station as needed.
	Digester Capacity	Reduce/stop wasting and haul sludge.
May	UV Faults	Cleaned off algae build up on UV racks and replaced UV sensor. Noticed cable damage. Hosed down clarifier weirs.
	Train 2 Scraper Arm	Adjusted motor chain to fix the issue. Replaced gear drive sprocket.
	SPS 6 Generator Oil Leak	Contractor fixed.
	DO Levels	Increase blower operation to increase DO. Low DO on train 2, adjusted valving to favour train 1. Due to discharge from local dairy.
	Digester Capacity	Reduce/stop wasting and haul sludge.
	SPS 5 Power Failure	Contractor on standby to pump station if needed.
	SPS 1 Pump 2 & 3 Fault	Contacted Hydro One. Electrician reset pump overloads and transferred SPS 1 to plant power to eliminate hydro issue.

Month	Challenges	Corrective Actions
June	UV Faults	Solids carrying over. Increased wasting and raked bar screens.
	Generator Work	Contractor replaced ball valve and rocker cover.
	Blower Oil Issue	Complete more frequent inspections and top up oil as needed.
	Digester Cleaning	Disabled wasting and locked out scum boxes. Contractor hauled from RAS pit.
	SPS 3 Pumping Slowly/High Level	Installed new pump and completed inspection of other pumps. Turned off surge pit pumps to allow wet well pumps to catch up.
	Influent Colour	Due to increased productivity at local dairy.
July	SPS 7 High Level	Reset pump 1 and test in hand.
	GFI Trip	Electrician moved and fixed the plugs.
	Alum Pump 2 Blue Screen	Gated off train 2. Put pump into manual to confirm was working. Alum pump inspected by electrician and replaced cable.
	Air Blower 3 Fault	Reset VFD and reset SCADA fault. Checked blower performance.
	SPS 11 Pump Airlock	Lifted the pumps to purge the air lock.
	Air Blower Oil Leak	Complete more frequent inspections and top up oil as needed. Added absorbent.
	Clarifier Scraper Chain	Shortened chain and secured chain clutch.
	UV Faults	Cleaned off algae build up on UV racks and clean UV sensor. Increased wasting.
	Digester Capacity	Reduce/stop wasting and haul sludge.

Month	Challenges	Corrective Actions
August	UV Faults	Solids carrying over. Increased wasting and raked bar screens. Hosed down UV weirs/banks.
	Air Blowers Leaking Oil	Increased inspection frequency and topped up as needed. Added absorbent.
	Thick Sludge Blanket	Increase wasting.
	Train 1 Sludge Pump Fault	Reset VFD.
	Communication Lost	Reset the Cisco router.
	SPS 4 Decant Pumps Air Locked	Lifted the pumps to purge the air lock.
	SPS 10 A/C Alarm	Backup battery draining due to no source power to the DSC panel. Changed the wire configuration, replaced back up.
	Raw Composite Sampler Leak Error	Sampler hose cracked. Replace hose.
September	Air Blower Fault	Reset VFD.
	SPS 2 Generator Fault	Contractor replaced dead battery.
	Digester Capacity	Reduce/stop wasting and haul sludge.
	Clogged Bar Screens	Increased raking frequency and scheduled staff to come in on the weekend.
	SPS 10 Pump 2 Fault	Reset pump. Reverse pump to clear any potential blockages.
	SPS 7 High Level	Reset pump and tested pumps in hand.
	SPS 9 High Level	Tested pumps in hand and reviewed trends.
October	UV Faults	Hose down UV weirs/banks and raked bar screens.
	SPS 9 High Level	Removed grease around transducer and installed new resistor.
	Supernatant Pump 1 & 2 Fail	Pulled pump and vacuumed debris from pump. Replaced overloads.
	Scum Hopper Clogged	Removed debris.

Month	Challenges	Corrective Actions
	Sludge Build Up in Middle Grit Channel	Sprayed down grit channel.
	Blower Routing	Blower routing on SCADA not set up properly. Contractor fixed issue.
	Digester Capacity	Reduce/stop wasting and haul sludge.
November	UV Faults	Rake bar screen to divert flow to train 2 and increase wasting.
	Scum Hopper Clogged	Removed debris.
	Pin Floc/Old Sludge	Increase wasting.
	Digester Capacity	Reduce/stop wasting and haul sludge.
December	DO Levels	Adjusted air valves to increase flow into train 2.
	SPS 10 Communication Issue	Replaced dead UPS.
	Digester Capacity	Reduce/stop wasting and haul sludge.
	Scum Boxes & Hopper Frozen	Install heat traces.
	UV Faults	Raked both bar screens. Reset tripped GFI.
	Train 2 Low Sample Volume	Removed debris from sample line intake.

Maintenance Summary

(c) OCWA uses a Work Maintenance System (WMS) that can generate work orders as well as give summaries of completed and scheduled work. During the year, the operating authority at the facility generates scheduled work orders on a weekly, monthly and annual basis. The service work is recorded in the work order history. This ensures routine and preventative maintenance is carried out and assets are maintained to manufacturer's and/or industry standards. Emergency and capital repair maintenance is completed and added to the system.

Refer to **Appendix III: Maintenance Summary** for details of equipment upgrades, repairs and service performed in 2025.

Effluent Quality Assurance or Control

(d) Effluent quality assurance is maintained in several ways. Laboratory samples are sent to an accredited laboratory (SGS Canada Inc. – Lakefield) for analysis of all effluent parameters.

Sampling calendars are issued to the operator which denote frequency of sampling. Calendars are used as a tracking mechanism throughout the month to ensure all required samples are collected. These calendars are submitted to the Process Compliance Technician at the end of each month for review. Raw and effluent samples are collected as per the Amended Environmental Compliance Approval and the results are reviewed on a regular basis to ensure compliance with the site’s objectives and limits.

Work orders illustrating all scheduled and preventative maintenance to be completed are issued to the operator and/or mechanic. OCWA conducts internal audits of the facility and develops Action Plans to ensure deficiencies are identified.

Continuous phosphorus removal is achieved with the dosing of aluminum sulfate.

Table 4. 2025 Summary of Aluminum Sulfate Usage and Dosage

Month	Total Aluminum Sulfate Used (Kg)	Aluminum Sulfate Average Dosage (mg/L)
January	2198.76	39.32
February	1689.80	41.16
March	3370.17	43.62
April	4919.20	39.45
May	2968.62	45.71
June	2669.75	53.71
July	1780.16	39.82
August	1800.37	41.67
September	1615.71	41.59
October	1662.05	41.20
November	1970.80	42.60
December	2378.72	44.30

Calibrations

(e) Calibrations on effluent monitoring equipment were performed by Franklin Empire on August 6, 2025 for equipment located at the Bobcaygeon Wastewater Treatment Plant. Please see **Appendix IV: Calibration Report**.

Records of maintenance carried out on effluent monitoring equipment can be found in **Appendix III: Maintenance Summary**.

Best Efforts to Achieve Design Objectives of Condition 6

(f) OCWA uses a number of best efforts to achieve the Effluent Objectives. Effluent quality assurance and control measures include in-house sampling and testing for operational parameters

such as suspended solids, pH, phosphorus, dissolved oxygen, etc. In-house testing provides real time results which are then used to enhance process and operational performance. OCWA also collects raw sewage and effluent samples as per the ECA and reviews these results on a regular basis to ensure compliance with ECA objectives and limits.

OCWA uses a computerized maintenance management system which generates work orders to ensure maintenance of equipment is proactively performed. In addition, OCWA provides regular status reports to the Owner which includes operational data, equipment inventory, financial statements, maintenance activities and capital improvement recommendations.

OCWA has developed comprehensive manuals detailing operations, maintenance, instrumentation and emergency procedures. To ensure facilities are operated in compliance with applicable legal requirements, facility staff have access to a network of operational compliance and support experts at the cluster, regional and corporate level.

Continuous efforts were made to meet the Effluent Objectives in 2025 including:

- Sampling effluent as per the ECA.
- Visual Inspection of the effluent while performing rounds.
- Influent monitoring.
- Ensuring that chemicals are being dosed.
- Calibration of lab equipment.
- Annual calibration of the flow meters.
- Performing preventative maintenance activities in accordance with work order schedules.
- Performing in-house lab tests on days that data is collected.
- Monitoring treatment processes by performing regular laboratory analysis and review of lab results.
- Sludge monitoring of primary clarifiers & adjustments to pumping volume based on tank levels to reduce solids carryover to the secondary clarifiers.
- Visual review of microbiological activity of activated sludge to ensure appropriate F/M ratio.

Effluent Samples

Carbonaceous Biochemical Oxygen Demand (CBOD₅)

ECA #3028-AEUKDQ sets the CBOD₅ monthly average concentration objective at 15.0 mg/L

Table 5. 2025 Monthly CBOD₅ Final Effluent Concentration Objective Comparisons

	Average Concentration (mg/L)	Concentration Objective Target (mg/L)	Objective Achieved
January	7.50	15.0	Yes
February	7.25	15.0	Yes

	Average Concentration (mg/L)	Concentration Objective Target (mg/L)	Objective Achieved
March	9.00	15.0	Yes
April	7.36	15.0	Yes
May	4.50	15.0	Yes
June	4.75	15.0	Yes
July	4.60	15.0	Yes
August	5.25	15.0	Yes
September	4.25	15.0	Yes
October	4.00	15.0	Yes
November	4.00	15.0	Yes
December	5.00	15.0	Yes

Total Suspended Solids (TSS)

ECA #3028-AEUKDQ sets the Total Suspended Solids monthly average concentration objective at 15.0 mg/L. In the month of April the objective was not achieved due to snow melt/heavy rains.

Table 6. 2025 Monthly TSS Final Effluent Concentration Objective Comparisons

	Average Concentration (mg/L)	Concentration Objective Target (mg/L)	Objective Achieved
January	15.0	15.0	Yes
February	12.50	15.0	Yes
March	11.75	15.0	Yes
April	17.09	15.0	No
May	6.75	15.0	Yes
June	4.25	15.0	Yes
July	4.00	15.0	Yes
August	4.00	15.0	Yes
September	2.25	15.0	Yes
October	6.60	15.0	Yes
November	5.00	15.0	Yes
December	8.40	15.0	Yes

Total Phosphorus (TP)

ECA #3028-AEUKDQ sets the Total Phosphorus monthly average concentration objective at 0.5 mg/L.

Table 7. 2025 Monthly Total Phosphorus Final Effluent Concentration Objective Comparisons

	Average Concentration (mg/L)	Concentration Objective Target (mg/L)	Objective Achieved
January	0.11	0.5	Yes
February	0.12	0.5	Yes
March	0.12	0.5	Yes
April	0.08	0.5	Yes
May	0.04	0.5	Yes
June	0.05	0.5	Yes
July	0.06	0.5	Yes
August	0.05	0.5	Yes
September	0.06	0.5	Yes
October	0.10	0.5	Yes
November	0.06	0.5	Yes
December	0.08	0.5	Yes

E. Coli

ECA #3028-AEUKDQ sets the monthly E. Coli geometric mean objective at 100 cfu/100 mL. The monthly objective was higher in April 2025 due to suspected sample contamination from the sample pole/container, the sample pole/container was replaced.

Table 8. 2025 Monthly E. Coli Final Effluent Concentration Objective Comparisons

	Geometric Mean (cfu/100mL)	Concentration Objective Target (cfu/100mL)	Objective Achieved
January	18.98	100	Yes
February	4.12	100	Yes
March	74.43	100	Yes
April	109.65	100	No
May	5.42	100	Yes
June	2.06	100	Yes
July	5.40	100	Yes
August	5.94	100	Yes
September	4.90	100	Yes
October	2.33	100	Yes
November	2.21	100	Yes
December	3.50	100	Yes

pH

ECA #3028-AEUKDQ has a pH compliance objective within the range of 6.50 to 8.50, inclusive, at all times.

Table 9. 2025 Monthly pH Final Effluent Concentration Objective Comparisons

	Minimum	Maximum	Objective Achieved
January	7.08	7.14	Yes
February	6.94	7.22	Yes
March	7.00	7.25	Yes
April	7.13	7.41	Yes
May	7.01	7.46	Yes
June	7.01	7.21	Yes
July	7.01	7.24	Yes
August	7.08	7.55	Yes
September	7.06	7.25	Yes
October	6.86	7.46	Yes
November	6.84	7.14	Yes
December	6.95	7.23	Yes

Unionized Ammonia

Unionized ammonia has an objective of 0.1 mg/L (100 µg/L). Using total ammonia nitrogen, along with field pH and temperature, the following are the results for the monthly calculated unionized ammonia average. The final unionized ammonia average was less than the objective each month.

Table 10. 2025 Monthly Unionized Ammonia Final Effluent Concentration Objective Comparisons

	Average Concentration (µg/L)	Concentration Objective (µg/L)	Objective Achieved
January	3.48	100	Yes
February	8.68	100	Yes
March	10.16	100	Yes
April	15.61	100	Yes
May	85.95	100	Yes
June	2.59	100	Yes
July	13.54	100	Yes
August	16.43	100	Yes
September	0.98	100	Yes

	Average Concentration (µg/L)	Concentration Objective (µg/L)	Objective Achieved
October	1.14	100	Yes
November	0.25	100	Yes
December	4.79	100	Yes

Temperature

The final effluent temperature ranged from 4.5°C to 23.7°C.

Influent Samples

Influent sampling is completed in order to make the necessary process adjustments to stay within the Final Effluent Objectives and Limits set in the ECA.

Table 11. 2025 Monthly Influent Sample Results Concentration Averages

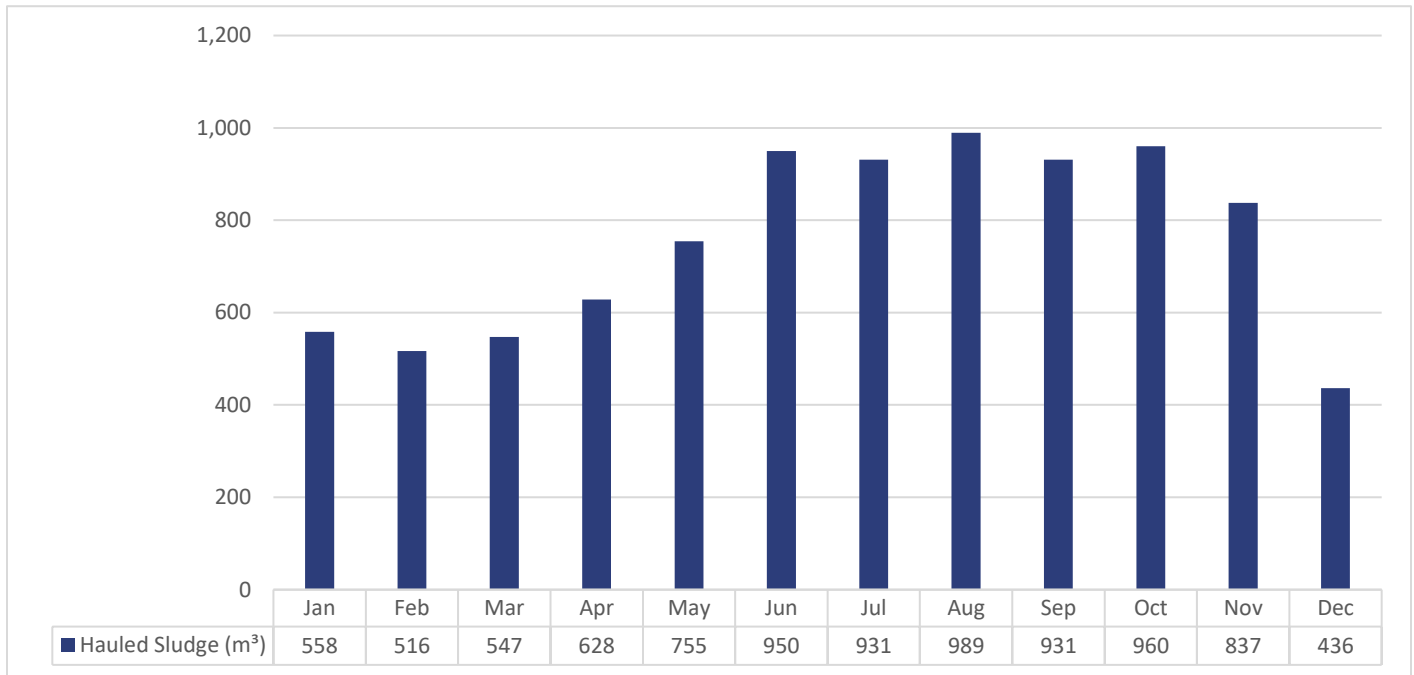
	Carbonaceous Biochemical Oxygen Demand – CBOD ₅ (mg/L)	Biochemical Oxygen Demand – BOD ₅ (mg/L)	Total Suspended Solids – TSS (mg/L)	Total Kjeldahl Nitrogen – TKN (mg/L)	Total Phosphorus – TP (mg/L)
January	261.50	330.25	247.50	33.53	3.75
February	736.25	824.75	445.25	40.93	6.12
March	423.75	605.75	335.25	34.58	5.62
April	111.63	125.00	84.88	10.95	1.12
May	407.75	404.25	357.00	28.03	3.66
June	560.75	629.50	614.50	29.73	5.26
July	484.60	734.60	429.80	42.40	5.49
August	481.25	696.00	246.25	37.10	4.08
September	524.25	582.75	315.00	35.00	4.31
October	564.40	664.20	432.60	41.62	4.90
November	488.50	606.50	292.25	29.45	4.39
December	466.40	501.40	237.60	26.96	2.18

Sludge

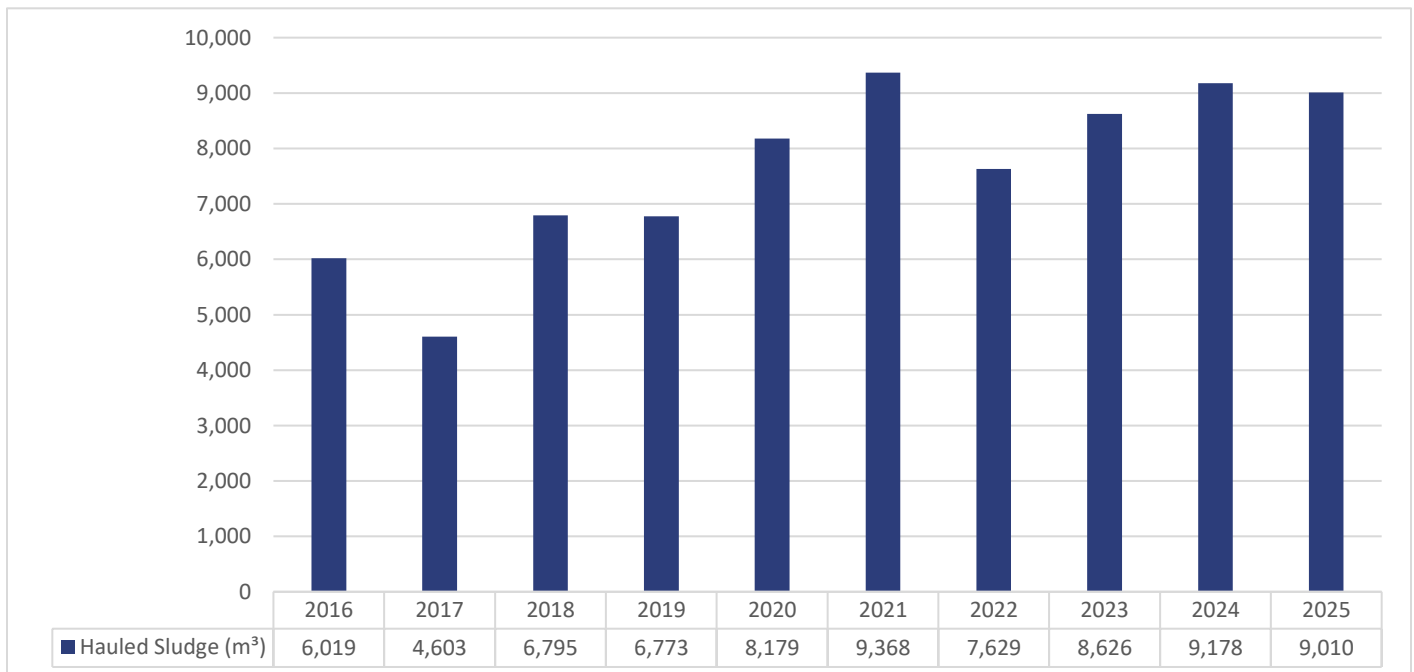
(g) The total volume of sludge generated in 2025 was 9,041.39 m³, which was a 1.49% decrease in the amount of sludge generated in 2024. Shepherd Environmental Services has been

contracted to haul, land apply and store the Biosolids on their approved sites and certified holding lagoon during the winter.

Graph 13. 2025 Monthly Sludge Volumes



Graph 14. Historical Sludge Volume Comparisons



The anticipated volume of biosolids for the next reporting period is expected to be appreciably similar to this reporting period and no change is expected from the current sludge handling methods and disposal areas currently utilized.

Refer to **Appendix V: Biosolids Summary** for biosolids sampling results.

Complaints

(h) a summary of any complaints received and any steps taken to address the complaints.

Table 12. 2025 Complaints Received

Date	Issue	Actions Taken
June 15, 2025	By-Law received complaint about light penetration into yard/house from the WPCP.	Light at plant used for safety is on at night for operations to see where they are going. Storms have broken branches from trees that might have been shielding the light direction from being a concern before. Have moved the direction of the lights so it is not directing light in that general direction.
September 20, 2025	Resident reported carbon filter on the vent at SPS 5 had fallen off and that there was a bad smell.	Bottom gear clamp had come loose. Resecured carbon filter on vent.

By-pass, Spill or Abnormal Discharge Events

(i) A summary of By-pass, Spill or Abnormal Discharge Events

Bypasses

There was one bypass event at the Bobcaygeon WWTP during 2025. The incident occurred on April 29, 2025 and was due to the generator failing to start up for a power failure. This caused no power to run the plant, leading to the loss of process (no aeration or UV disinfection) for an hour. The generator was repaired and the power to the process restored. Samples were collected as per the ECA and tested for BOD, CBOD, TSS, P, NH₃+NH₄ and EC. Monthly limits were met for April 2025. The estimated volume bypassed was 120m³ combined. Refer to **Appendix VI: Bypass, Overflow, Spills or Abnormal Events** for Report.

Spills

There was one spill that occurred at the Bobcaygeon WWTP during 2025. The incident occurred on March 31, 2025 and was due to the generator failing to start up for a power failure. This caused no

power to run the plant, leading to the loss of process (no UV disinfection) for an hour. The generator voltage was restored and batteries replaced. Samples were collected as per the ECA and tested for BOD, CBOD, TSS, P, NH₃+NH₄ and EC. Monthly limits were met for March 2025. The estimated volume bypassed was 200m³ combined. Refer to **Appendix VI: Bypass, Overflow, Spills or Abnormal Events** for Report.

Overflows

There were not any overflows at the Bobcaygeon WWTP or pumping stations in 2025.

Abnormal Discharge Events

There were not any abnormal discharge events at the Bobcaygeon WWTP in 2025.

Refer to **Appendix VI: Bypasses, Overflows, Spills or Abnormal Events** for copies of the quarterly Bypass and Overflow reports, and Notice of Exceedance submitted to the Ministry of Environment, Conservation and Parks.

Notice of Modifications to Sewage Works

(j) There were not any Notices of Modifications to Sewage Works initiated, worked on or completed in 2025.

Schedule B, Section 3 Modifications

(k) A summary of all modifications completed as a result of Schedule B, Section 3 are included in **Appendix III: Maintenance Summary**

Additional Request by Water Supervisor

(l) The Water Supervisor has not requested any additional information be included in this report.

Reporting Requirements – Wastewater Collection System

In accordance with the Consolidated Linear Infrastructure – Environmental Compliance Approval #141-W601 the owner shall prepare a performance report on a calendar basis and submit to the Ministry of Environment, Conservation and Parks by March 31 of the calendar year following the period being reported upon.

4.6 (a) a summary of all required monitoring data along with an interpretation of the data and any conclusions drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.

There are no required monitoring data requirements for the Bobcaygeon Sewage Collection System.

4.6 (b) a summary of any operating problems encountered and corrective actions taken.

A summary of any operating problems encountered within the Bobcaygeon Sewage Collection System are included in **Table 3. Bobcaygeon WWTP Operational Challenges** above.

4.6 (c) a summary of all calibration, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanisms, or thing forming part of the Municipal Sewage Collection System.

Calibrations on effluent monitoring equipment were performed by Franklin Empire in August 6, 2025 for equipment located at the Bobcaygeon Wastewater Treatment Plant and associated Pumping Stations, as required. Refer to **Appendix IV: Calibration Reports**.

Attached is **Appendix III: Maintenance Summary**, a Work Order Summary report, showing all preventative and corrective maintenance activities performed at the Bobcaygeon WWTP, including the collection system, during 2025.

All other collection system repairs are summarized in the table below:

Table 13. Summary of Major Structure & Equipment Maintenance and Repair

Major Structure	Work Performed
Manhole Repair	MH1796 Lance St. @ Park St. – Replace approximately 11” moduloc, replace 1 ladder rung and new frame and cover MH1862 Mansfield St. @ Park St. – Replace approximately 11” moduloc, replace 1 ladder rung and new frame and cover MH1790 Maple Court Dead End – Replace broken frame and cover
Full Sanitary Sewer Flushing	Entire collection system flushing

4.6 (d) a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.

A summary of complaints received for the entire Bobcaygeon Sewage System are included in **Table 12. 2025 Complaints Received** above.

4.6 (e) a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat.

The table below provides a summary of the projects that saw alterations to the collection system in 2025.

Table 14. Summary of Alterations to Authorized System

Alteration to the Authorized System Project Name	Project Details	Does This Project Pose a Significant Drinking Water Threat (SDWT)?

4.6 (f) a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including:

i) Dates;

ii) Volumes and durations

iii) If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E. coli;

iv) Disinfection, if any; and

v) Any adverse impact(s) and any corrective actions, if applicable.

The Bobcaygeon Sewage Collection system did not experience any collection system Overflows or Spills in 2025.

4.6 (g) a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:

i) A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted.

Regular manhole inspections are completed by City operations staff to identify deficiencies that may contribute to inflow and infiltration (I&I) and increase the risk of overflows. The City maintains an ongoing manhole rehabilitation program, which includes grouting, modoloc replacement, and frame and cover replacement.

In areas where manholes are located in low-lying or flood-prone locations, rain stoppers are installed to prevent inflow during wet weather events, further reducing the risk of system overflows.

During the 2025 reporting period, there were no collection system overflows or bypasses. One bypass occurred at the Bobcaygeon WWTP on April 29, 2025, due to a generator failure during a power outage. This resulted in a temporary loss of treatment processes, including aeration and UV disinfection, for approximately one hour. The generator was repaired and full operation was restored.

Samples were collected as accordance with ECA requirements and analyzed for BOD, CBOD₅, TSS, total phosphorus, ammonia (NH₃+NH₄), and *E. coli*. All monthly compliance limits April 2025 were met. The estimated volume bypassed was 120m³ combined. Refer to **Appendix VI: Bypass, Overflow, Spills or Abnormal Events** for additional details.

Work summarized in Table 13 above, were projects undertaken to aid in overall overflow reduction.

Full System Flushing - \$28,060

Manhole Rehabilitation - \$9,341

For 2026, \$13,000 has been budgeted to address any manhole deficiencies and \$8,750 has been budgeted to perform sanitary sewer flushing in dead-end/troubled areas.

ii) Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timeline.

N/A

iii) An assessment of the effectiveness of each action taken.

N/A

iv) An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.

N/A

v) Public reporting approach including proactive efforts

SOP WWC02 Wastewater Bypass/Overflow Notification Procedure has been developed and has been in practice since 2021, which clearly outlines all reporting protocols to both regulatory agencies and the public in various situations. This procedure was developed in consultation with Ontario Clean Water Agency, Ministry of Environment, Conservation and Parks and Ministry of Health.



Ontario Clean Water Agency
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Appendix I:
Performance Assessment Report

6005 BOBCAYGEON WASTEWATER TREATMENT PLANT 110002498

	1 / 2025	2 / 2025	3 / 2025	4 / 2025	5 / 2025	6 / 2025	7 / 2025	8 / 2025	9 / 2025	10 / 2025	11 / 2025	12 / 2025	<-Total-->	<-Avg-->	<-Max-->	<-Criteria-->
Flows																
Raw Flow: Total - Raw m ³ /d	55,921.00	41,293.00	74,136.00	124,820.00	65,087.00	49,224.00	44,775.00	43,279.00	38,858.00	40,534.00	46,368.00	47,492.00	671,787.00			0.00
Raw Flow: Avg - Raw m ³ /d	1,803.90	1,474.75	2,391.48	4,160.67	2,099.58	1,640.80	1,444.35	1,396.10	1,295.27	1,307.55	1,545.60	1,532.00		1,840.51		
Raw Flow: Max - Raw m ³ /d	2,226.00	1,904.00	4,720.00	6,901.00	2,817.00	1,961.00	1,552.00	1,646.00	1,605.00	1,628.00	1,960.00	2,260.00			6,901.00	0.00
Raw Flow: Count - Raw m ³ /d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
Eff. Flow: Total - Eff m ³ /d	55,921.00	41,293.00	74,136.00	124,820.00	65,087.00	49,224.00	44,775.00	43,279.00	38,858.00	40,534.00	46,368.00	47,492.00	671,787.00			0.00
Eff. Flow: Avg - Eff m ³ /d	1,803.90	1,474.75	2,391.48	4,160.67	2,099.58	1,640.80	1,444.35	1,396.10	1,295.27	1,307.55	1,545.60	1,532.00		1,840.51		
Eff. Flow: Max - Eff m ³ /d	2,226.00	1,904.00	4,720.00	6,901.00	2,817.00	1,961.00	1,552.00	1,646.00	1,605.00	1,628.00	1,960.00	2,260.00			6,901.00	0.00
Eff Flow: Count - Eff m ³ /d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Raw: Avg cBOD5 - Raw mg/L	261.50	736.25	423.75	111.63	407.75	560.75	484.60	481.25	524.25	564.40	488.50	466.40		436.47	736.25	0.00
Raw: # of samples of cBOD5 - Raw	4.00	4.00	4.00	8.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	55.00			0.00
Eff: Avg cBOD5 - Eff mg/L	7.50	7.25	9.00	7.36	4.50	4.75	4.60	4.25	4.25	4.00	4.00	5.00		5.78	9.00	25.00
Eff: # of samples of cBOD5 - Eff	4.00	4.00	4.00	11.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	58.00			0.00
Loading: cBOD5 - Eff kg/d	13.529	10.692	21.523	30.638	9.448	7.794	6.644	7.330	5.505	5.230	6.182	7.660		10.63	30.64	
Percent Removal: cBOD5 - Raw %	97.13	99.02	97.88	93.40	98.90	99.15	99.05	98.91	99.19	99.29	99.18	98.93		98.34	99.29	0.00
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw mg/L	330.25	824.75	605.75	125.00	404.25	629.50	734.60	696.00	582.75	664.20	606.50	501.40		521.73	824.75	0.00
Raw: # of samples of BOD5 - Raw	0.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00		12.00	0.00	
Eff: Avg BOD5 - Eff mg/L	0.000	0.000	0.000	49.928	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		22.09	49.93	
Loading: BOD5 - Eff kg/d	0.000	0.000	0.000	49.928	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		22.09	49.93	
Percent Removal: BOD5 - Raw %	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	0.00	0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw mg/L	247.50	445.25	335.25	84.88	357.00	614.50	429.80	246.25	315.00	432.60	292.25	237.60		319.84	614.50	0.00
Raw: # of samples of TSS - Raw	4.00	4.00	4.00	8.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	55.00			0.00
Eff: Avg TSS - Eff mg/L	15.00	12.50	11.75	17.09	6.75	4.25	4.00	4.00	2.25	6.60	5.00	8.40		9.12	17.09	25.00
Eff: # of samples of TSS - Eff	4.00	4.00	4.00	11.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	58.00			0.00
Loading: TSS - Eff kg/d	27.059	18.434	28.100	71.110	14.172	6.973	5.777	5.584	2.914	8.630	7.728	12.869		16.79	71.11	
Percent Removal: TSS - Raw %	93.94	97.19	96.50	79.86	98.11	99.31	99.07	98.38	99.29	98.47	98.29	96.46		96.24	99.31	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw mg/L	3.75	6.12	5.62	1.12	3.66	5.26	5.49	4.08	4.31	4.90	4.39	2.18		4.01	6.12	0.00
Raw: # of samples of TP - Raw	4.00	4.00	4.00	8.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	55.00			0.00
Eff: Avg TP - Eff mg/L	0.11	0.12	0.12	0.08	0.04	0.05	0.06	0.05	0.06	0.10	0.08	0.08		0.08	0.12	1.00
Eff: # of samples of TP - Eff	4.00	4.00	4.00	11.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	58.00			0.00
Loading: TP - Eff kg/d	0.189	0.173	0.293	0.318	0.089	0.082	0.090	0.066	0.071	0.131	0.093	0.119		0.14	0.32	
Percent Removal: TP - Raw %	97.20	98.08	97.82	93.20	98.84	99.05	98.87	98.84	98.72	97.96	98.63	96.43		97.80	99.05	0.00
Nitrogen Series																
Raw: Avg TKN - Raw mg/L	33.53	40.93	34.58	10.95	28.03	29.73	42.40	37.10	35.00	41.62	29.45	26.96		31.20	42.40	0.00
Raw: # of samples of TKN - Raw	4.00	4.00	4.00	8.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	55.00			0.00
Eff: Avg TAN - Eff mg/L	1.65	5.30	5.08	3.03	14.00	0.60	2.08	1.35	0.18	0.16	0.10	2.54		2.93	14.00	
Eff: # of samples of TAN - Eff	4.00	4.00	4.00	9.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	56.00			0.00
Loading: TAN - Eff kg/d	2.976	7.816	12.137	12.621	29.394	0.984	3.004	1.885	0.227	0.209	0.155	3.891		5.40	29.39	
Disinfection																
Eff: GMD E. Coli MPN - Eff MPN	18.98	4.12	74.43	109.65	5.42	2.06	5.40	5.94	4.90	2.33	2.21	3.50				
Eff: # of samples of E. Coli MPN - Eff	4.00	4.00	4.00	11.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	58.00			0.00



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix II: Acute Lethality Results

Work Order : 256971
 Sample Number : 85686

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-01-29
Location :	Bobcaygeon ON	Sampling Time :	10:03
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-01-30
Sampling Method :	Grab	Time Received :	13:50
Sampled By :	Z. White	Temperature at Receipt :	1 °C
Sample Description :	Clear, light yellow	Date Tested :	2025-01-31
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	8.3 days
Organism Batch :	Dm25-01	Average Brood Size :	26.7
Culture Mortality :	1.7% (previous 7 days)		

TEST CONDITIONS


Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	None	Organisms per Replicate :	10
Pre-aeration Rate :	~30 mL/min/L	Organisms per Test Level :	30
Duration of Pre-Aeration :	0 minutes	Organism Loading Rate :	15.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	None	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Sodium Chloride		
Date Tested :	2025-01-28	LC50 :	6.2 g/L
Organism Batch :	Dm25-01	95% Confidence Limits :	6.0 - 6.4 g/L
Analyst(s) :	CB, PG, CYW	Historical Mean LC50 :	6.5 g/L
Statistical Method :	Spearman-Kärber	Warning Limits (± 2SD) :	5.7 - 7.4 g/L

COMMENTS

- All test validity criteria as specified in the test method were satisfied.

Approved By : 
 Conrad Neufeld
 I am approving this document
 Nautilus
 2025-02-05 13:07:05:00
 Project Manager

Work Order : 256971

Sample Number : 85686

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%)*	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	7.0	7.8	650	21	93	140 mg/L

0 HOURS

Date & Time : 2025-01-31 11:45

Analyst(s) : PG

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation*	Hardness
100	A	0	0	7.0	7.8	650	21	93	140
100	B	0	0	7.0	7.8	650	21	93	140
100	C	0	0	7.0	7.8	650	21	93	140
Control	A	0	0	8.3	8.3	480	21	98	150
Control	B	0	0	8.3	8.3	480	21	98	150
Control	C	0	0	8.3	8.3	480	21	98	150

Notes:

24 HOURS

Date & Time : 2025-02-01 10:55

Analyst(s) : FM

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	-	0	-	-	-	21
100	B	-	0	-	-	-	21
100	C	-	0	-	-	-	21
Control	A	-	0	-	-	-	21
Control	B	-	0	-	-	-	21
Control	C	-	0	-	-	-	21

Notes:

48 HOURS

Date & Time : 2025-02-02 11:45

Analyst(s) : FM

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	0	0	8.1	6.9	666	21
100	B	0	0	8.1	7.0	666	21
100	C	0	0	8.2	7.1	666	21
Control	A	0	0	8.3	8.3	494	21
Control	B	0	0	8.3	8.3	494	21
Control	C	0	0	8.3	8.3	490	21

Notes:

Number immobile does not include number dead.

"-" = not measured/not required

* adjusted for temperature and barometric pressure

 Test Data Reviewed By : JL

 Date : 2025-02-04

Work Order : 256971
 Sample Number : 85686

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-01-29
Location :	Bobcaygeon ON	Sampling Time :	10:03
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-01-30
Sampling Method :	Grab	Time Received :	13:50
Sampled By :	Z. White	Temperature at Receipt :	1 °C
Sample Description :	Clear, light yellow	Date Tested :	2025-01-31

Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout. Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	43.5 mm
Organism Batch :	T24-29	Range of Fork Lengths :	36 - 48 mm
Control Sample Size :	10	Mean Wet Weight :	0.8 g
Cumulative stock mortality rate :	0% (previous 7 days)	Organism Loading Rate :	0.4 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS

Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	30 minutes	Volume of Sample :	18 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	18 L
Duration of Control Pre-aeration:	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride	LC50 :	4317 mg/L
Organism Batch :	T24-29	95% Confidence Limits :	4026 - 4628 mg/L
Date Tested :	2025-01-13	Historical Mean LC50 :	3552 mg/L
Analyst(s) :	NWP, CB	Warning Limits (± 2SD) :	2476 - 5097 mg/L
Statistical Method :	Spearman-Kärber		

COMMENTS

•All test validity criteria as specified in the test method were satisfied.

Conrad Neufeld
Approved By : _____
 Conrad Neufeld
 I am approving this document
 Nautilus
 2025-02-05 13:07:05:00
 Project Manager

Work Order : 256971

Sample Number : 85686

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	6.7	8.5	599	15	89
After 30 min pre-aeration :	6.9	8.7	596	15	92

0 HOURS

Date & Time	2025-01-31	8:45					
Analyst(s) :	AJS						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	6.9	8.7	596	15	92
Control	0	0	8.0	9.8	686	14	100

Notes:

24 HOURS

Date & Time	2025-02-01	9:00					
Analyst(s) :	GR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

48 HOURS

Date & Time	2025-02-02	8:45					
Analyst(s) :	GR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

72 HOURS

Date & Time	2025-02-03	8:25					
Analyst(s) :	CB (JGR)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

96 HOURS

Date & Time	2025-02-04	8:20					
Analyst(s) :	CB (JGR)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	7.8	8.9	598	15	
Control	0	0	8.1	9.1	636	15	

Notes:

"-" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

 Test Data Reviewed By : FM

 Date : 2025-02-05

Work Order : 257445
 Sample Number : 86374

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-04-07
Location :	Bobcaygeon ON	Sampling Time :	07:26
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-04-08
Sampling Method :	Grab	Time Received :	14:10
Sampled By :	M. James	Temperature at Receipt :	9 °C
Sample Description :	Clear, yellow	Date Tested :	2025-04-09
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	8.6 days
Organism Batch :	Dm25-06	Average Brood Size :	30.4
Culture Mortality :	1.0% (previous 7 days)		

TEST CONDITIONS

Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	None	Organisms per Replicate :	10
Pre-aeration Rate :	~30 mL/min/L	Organisms per Test Level :	30
Duration of Pre-Aeration :	0 minutes	Organism Loading Rate :	15.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	None	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Sodium Chloride	LC50 :	6.1 g/L
Date Tested :	2025-04-08	95% Confidence Limits :	5.6 - 6.5 g/L
Organism Batch :	Dm25-06	Historical Mean LC50 :	6.5 g/L
Analyst(s) :	CYW, CB	Warning Limits (± 2SD) :	5.7 - 7.4 g/L
Statistical Method :	Linear Regression (MLE)		

COMMENTS

- All test validity criteria as specified in the test method were satisfied.

Approved By : 
 Cintia Glasner Regis
 I am approving this document
 Nautilus Environmental
 2025-04-23 08:29:04:00
 Project Manager

Work Order : 257445

Sample Number : 86374

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%)*	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	7.2	7.4	969	20	86	250 mg/L

0 HOURS

Date & Time : 2025-04-09 9:10

Analyst(s) : CB (NM)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation*	Hardness
100	A	0	0	7.2	7.4	969	20	86	250
100	B	0	0	7.2	7.4	969	20	86	250
100	C	0	0	7.2	7.4	969	20	86	250
Control	A	0	0	8.3	8.7	456	20	100	140
Control	B	0	0	8.3	8.7	456	20	100	140
Control	C	0	0	8.3	8.7	456	20	100	140

Notes:

24 HOURS

Date & Time : 2025-04-10 8:20

Analyst(s) : CYW (PG)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	–	0	–	–	–	20
100	B	–	0	–	–	–	20
100	C	–	0	–	–	–	20
Control	A	–	0	–	–	–	20
Control	B	–	0	–	–	–	20
Control	C	–	0	–	–	–	20

Notes:

48 HOURS

Date & Time : 2025-04-11 9:40

Analyst(s) : CYW (MK)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	0	0	8.4	7.8	983	20
100	B	0	0	8.4	7.8	981	20
100	C	0	0	8.4	7.9	973	20
Control	A	0	0	8.3	8.2	472	20
Control	B	0	0	8.3	8.1	471	20
Control	C	0	0	8.3	8.2	472	20

Notes:

Number immobile does not include number dead.

"–" = not measured/not required

* adjusted for temperature and barometric pressure

 Test Data Reviewed By : EM

 Date : 2025-04-16

Work Order : 257445
Sample Number : 86374

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-04-07
Location :	Bobcaygeon ON	Sampling Time :	07:26
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-04-08
Sampling Method :	Grab	Time Received :	14:10
Sampled By :	M. James	Temperature at Receipt :	9 °C
Sample Description :	Clear, yellow	Date Tested :	2025-04-09

Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout. Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	42.4 mm
Organism Batch :	T25-07	Range of Fork Lengths :	35 - 49 mm
Control Sample Size :	10	Mean Wet Weight :	0.7 g
Cumulative stock mortality rate :	0% (previous 7 days)	Organism Loading Rate :	0.4 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS

Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	30 minutes	Volume of Sample :	18 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	18 L
Duration of Control Pre-aeration :	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride		
Organism Batch :	T25-07	LC50 :	4661 mg/L
Date Tested :	2025-04-01	95% Confidence Limits :	4255 - 5124 mg/L
Analyst(s) :	GF, JGR, NWP, SV	Historical Mean LC50 :	4029 mg/L
Statistical Method :	Linear Regression (MLE)	Warning Limits (± 2SD) :	2972 - 5460 mg/L

COMMENTS

•All test validity criteria as specified in the test method were satisfied.

Approved By :



Cintia Glasner Regis
I am approving this
document
Nautilus Environmental
2025-04-23 08:29:04:00

Project Manager

Work Order : 257445

Sample Number : 86374

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	6.7	6.6	993	14	68
After 30 min pre-aeration :	6.9	7.3	996	14	75

0 HOURS

Date & Time	2025-04-09	9:35					
Analyst(s) :	GF (JGR)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	6.9	7.3	996	14	75
Control	0	0	8.1	9.8	764	14	100

Notes:

24 HOURS

Date & Time	2025-04-10	8:05					
Analyst(s) :	NWP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	16	
Control	0	0	–	–	–	16	

Notes:

48 HOURS

Date & Time	2025-04-11	9:05					
Analyst(s) :	GF (JGR)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	15	
Control	0	0	–	–	–	15	

Notes:

72 HOURS

Date & Time	2025-04-12	9:05					
Analyst(s) :	GR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	15	
Control	0	0	–	–	–	15	

Notes:

96 HOURS

Date & Time	2025-04-13	8:50					
Analyst(s) :	GR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	8.0	9.1	991	15	
Control	0	0	8.1	9.2	728	15	

Notes:

"-" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

 Test Data Reviewed By : EM

 Date : 2025-04-15

Work Order : 258309
 Sample Number : 87598

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-07-09
Location :	Bobcaygeon ON	Sampling Time :	07:29
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-07-10
Sampling Method :	Grab	Time Received :	13:30
Sampled By :	M. James	Temperature at Receipt :	23 °C
Sample Description :	Clear, pale yellow	Date Tested :	2025-07-14
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	7.0 days
Organism Batch :	Dm25-13	Average Brood Size :	35.0
Culture Mortality :	1.3% (previous 7 days)		

TEST CONDITIONS

Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	None	Organisms per Replicate :	10
Pre-aeration Rate :	~30 mL/min/L	Organisms per Test Level :	30
Duration of Pre-Aeration :	30 minutes	Organism Loading Rate :	15.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	None	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Sodium Chloride		
Date Tested :	2025-07-14	LC50 :	6.3 g/L
Organism Batch :	Dm25-13	95% Confidence Limits :	5.8 - 6.8 g/L
Analyst(s) :	CYW, ACS	Historical Mean LC50 :	6.4 g/L
Statistical Method :	Binomial	Warning Limits (± 2SD) :	5.8 - 7.1 g/L

COMMENTS

•All test validity criteria as specified in the test method were satisfied.



Emma Kunert
 I am approving this document
 2025-07-18
 10:06-04:00

Approved By :

Project Manager

Work Order : 258309

Sample Number : 87598

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%)*	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	7.4	9.9	580	20	114	130 mg/L

0 HOURS

Date & Time : 2025-07-14 12:35

Analyst(s) : ACS (SSF)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation*	Hardness
100	A	0	0	7.7	8.9	579	21	103	130
100	B	0	0	7.7	8.9	579	21	103	130
100	C	0	0	7.7	8.9	579	21	103	130
Control	A	0	0	8.2	8.5	484	20	99	150
Control	B	0	0	8.2	8.5	484	20	99	150
Control	C	0	0	8.2	8.5	484	20	99	150

Notes:

24 HOURS

Date & Time : 2025-07-15 12:10

Analyst(s) : CYW (NM)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	–	0	–	–	–	21
100	B	–	0	–	–	–	21
100	C	–	0	–	–	–	21
Control	A	–	0	–	–	–	21
Control	B	–	0	–	–	–	21
Control	C	–	0	–	–	–	21

Notes: Two test organisms in Control replicate A, and one test organism in Control replicate C, were floating but mobile.

48 HOURS

Date & Time : 2025-07-16 12:35

Analyst(s) : ACS/CYW (SSF)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	0	0	8.4	7.8	587	21
100	B	0	0	8.4	7.8	583	21
100	C	0	0	8.4	7.9	579	21
Control	A	0	0	8.3	8.1	492	21
Control	B	0	0	8.3	8.1	494	21
Control	C	0	0	8.3	8.1	491	21

Notes: One test organism in each of Control replicates A and C was floating but mobile.

Number immobile does not include number dead.

"–" = not measured/not required

* adjusted for temperature and barometric pressure

 Test Data Reviewed By : JL

 Date : 2025-07-17

Work Order : 258309
 Sample Number : 87598

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-07-09
Location :	Bobcaygeon ON	Sampling Time :	07:29
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-07-10
Sampling Method :	Grab	Time Received :	13:30
Sampled By :	M. James	Temperature at Receipt :	23 °C
Sample Description :	Clear, pale yellow	Date Tested :	2025-07-11

Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout. Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	34.0 mm
Organism Batch :	T25-17	Range of Fork Lengths :	29 - 38 mm
Control Sample Size :	10	Mean Wet Weight :	0.3 g
Cumulative stock mortality rate :	0.2% (previous 7 days)	Organism Loading Rate :	0.2 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS

Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	30 minutes	Volume of Sample :	18 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	18 L
Duration of Control Pre-aeration:	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride	LC50 :	3661 mg/L
Organism Batch :	T25-17	95% Confidence Limits :	3264 - 4089 mg/L
Date Tested :	2025-07-02	Historical Mean LC50 :	3958 mg/L
Analyst(s) :	JGR, OHC, NM	Warning Limits (± 2SD) :	2961 - 5290 mg/L
Statistical Method :	Linear Regression (MLE)		

COMMENTS

•All test validity criteria as specified in the test method were satisfied.



Emma Kunert
 I am approving
 this document
 2025-07-18
 10:07-04:00

Approved By :

Project Manager

Work Order : 258309

Sample Number : 87598

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	7.3	6.4	548	15	68
After 30 min pre-aeration :	7.4	7.5	558	15	79

0 HOURS

Date & Time	2025-07-11	12:00					
Analyst(s) :	GF (JGR)/JGR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	7.4	7.5	558	15	79
Control	0	0	8.4	9.4	646	16	100

Notes:

24 HOURS

Date & Time	2025-07-12	11:25					
Analyst(s) :	GF (PG)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

48 HOURS

Date & Time	2025-07-13	10:35					
Analyst(s) :	GF (PG)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

72 HOURS

Date & Time	2025-07-14	10:20					
Analyst(s) :	NWP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	-	-	-	15	
Control	0	0	-	-	-	15	

Notes:

96 HOURS

Date & Time	2025-07-15	12:10					
Analyst(s) :	GF (JGR)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	8.0	9.6	560	15	
Control	0	0	8.0	9.2	593	15	

Notes:

"-" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

 Test Data Reviewed By : JL

 Date : 2025-07-15

Work Order : 259123
 Sample Number : 88804

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-10-14
Location :	Bobcaygeon ON	Sampling Time :	08:20
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-10-15
Sampling Method :	Grab	Time Received :	14:00
Sampled By :	H. Albis	Temperature at Receipt :	17 °C
Sample Description :	Clear, yellow.	Date Tested :	2025-10-16
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	9.0 days
Organism Batch :	Dm25-21	Average Brood Size :	27.8
Culture Mortality :	3.3% (previous 7 days)		

TEST CONDITIONS

Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	None	Organisms per Replicate :	10
Pre-aeration Rate :	~30 mL/min/L	Organisms per Test Level :	30
Duration of Pre-Aeration :	0 minutes	Organism Loading Rate :	15.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	None	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Sodium Chloride		
Date Tested :	2025-10-07	LC50 :	6.0 g/L
Organism Batch :	Dm25-21	95% Confidence Limits :	5.6 - 6.5 g/L
Analyst(s) :	SSF, NM, ACS	Historical Mean LC50 :	6.3 g/L
Statistical Method :	Linear Regression (MLE)	Warning Limits (± 2SD) :	5.7 - 6.9 g/L

COMMENTS

- All test validity criteria as specified in the test method were satisfied.



Emma Kunert
 I am approving this document
 2025-10-31
 11:32-04:00

Approved By : _____

Project Manager

Work Order : 259123

Sample Number : 88804

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%)*	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	6.9	8.2	609	21	96	140 mg/L

0 HOURS

Date & Time : 2025-10-16 9:15

Analyst(s) : ACS (SF)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation*	Hardness
100	A	0	0	6.9	8.2	609	21	96	140
100	B	0	0	6.9	8.2	609	21	96	140
100	C	0	0	6.9	8.2	609	21	96	140
Control	A	0	0	8.3	8.6	490	21	100	150
Control	B	0	0	8.3	8.6	490	21	100	150
Control	C	0	0	8.3	8.6	490	21	100	150

Notes:

24 HOURS

Date & Time : 2025-10-17 9:05

Analyst(s) : MZG (NM)

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	–	0	–	–	–	20
100	B	–	0	–	–	–	20
100	C	–	0	–	–	–	20
Control	A	–	0	–	–	–	20
Control	B	–	0	–	–	–	20
Control	C	–	0	–	–	–	20

Notes:

48 HOURS

Date & Time : 2025-10-18 9:40

Analyst(s) : CB

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	Conductivity	Temperature
100	A	0	0	7.9	8.4	626	20
100	B	0	0	7.9	8.4	623	20
100	C	0	0	7.9	8.4	621	20
Control	A	0	0	8.3	8.5	505	20
Control	B	0	0	8.3	8.5	501	20
Control	C	0	0	8.3	8.5	500	20

Notes:

Number immobile does not include number dead.

"–" = not measured/not required

* adjusted for temperature and barometric pressure

 Test Data Reviewed By : JJ

 Date : 2025-10-24

Work Order : 259123
Sample Number : 88804

SAMPLE IDENTIFICATION

Company :	Ontario Clean Water Agency, Kawartha Hub	Sampling Date :	2025-10-14
Location :	Bobcaygeon ON	Sampling Time :	08:20
Substance :	Combined Effluent 1 and 2 Final	Date Received :	2025-10-15
Sampling Method :	Grab	Time Received :	14:00
Sampled By :	H. Albis	Temperature at Receipt :	17 °C
Sample Description :	Clear, yellow.	Date Tested :	2025-10-16

Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout. Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	40.7 mm
Organism Batch :	T25-26	Range of Fork Lengths :	35 - 50 mm
Control Sample Size :	10	Mean Wet Weight :	0.6 g
Cumulative stock mortality rate :	0% (previous 7 days)	Organism Loading Rate :	0.3 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS


Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	30 minutes	Volume of Sample :	19 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	20 L
Duration of Control Pre-aeration:	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride		
Organism Batch :	T25-26	LC50 :	3841 mg/L
Date Tested :	2025-10-15	95% Confidence Limits :	3450 - 4223 mg/L
Analyst(s) :	JCS, GF	Historical Mean LC50 :	3686 mg/L
Statistical Method :	Linear Regression (MLE)	Warning Limits (± 2SD) :	2924 - 4646 mg/L

COMMENTS

•All test validity criteria as specified in the test method were satisfied.

Approved By :  Emma Kunert
I am approving this document
2025-10-31
11:34-04:00
Project Manager

Work Order : 259123

Sample Number : 88804

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	6.8	8.4	617	15	85
After 30 min pre-aeration :	7.0	8.7	617	15	90

0 HOURS

Date & Time	2025-10-16	12:05					
Analyst(s) :	JCS						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	7.0	8.7	617	15	90
Control	0	0	8.3	9.6	692	15	100

Notes:

24 HOURS

Date & Time	2025-10-17	13:10					
Analyst(s) :	JCS						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	15	
Control	0	0	–	–	–	15	

Notes:

48 HOURS

Date & Time	2025-10-18	12:30					
Analyst(s) :	GF						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	15	
Control	0	0	–	–	–	15	

Notes:

72 HOURS

Date & Time	2025-10-19	11:30					
Analyst(s) :	GF						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	–	–	–	15	
Control	0	0	–	–	–	15	

Notes:

96 HOURS

Date & Time	2025-10-20	12:45					
Analyst(s) :	JGR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	7.8	9.5	623	15	
Control	0	0	8.2	8.9	681	15	

Notes:

"–" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

Test Data Reviewed By : JJ

Date : 2025-10-27



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix III: Maintenance Summary

Work Order	Description	Location	Asset	Status	Work Type	Classification	Target Start	Reported Date
4144390	DEFERRED 6005, Bobcaygeon WWT, Digester Decant Actuator Failure, Replace	6005-WWBC-P-PI	0000204789	CLOSE	CAP	REFURBISH/REPLACE	9/16/24 12:59 PM	1/1/25 12:59 PM
4379928	6005, Bobcaygeon WWT Digester Tank Repair	6005-WWBC-P-SH-DGST	0000291391	CLOSE	CAP	REFURBISH/REPLACE		2/11/25 1:44 PM
4486550	6005, Bobcaygeon WWT, Alum Pump Replacement	6005-WWBC-P-ST	0000208893	CLOSE	CAP	REFURBISH/REPLACE		4/9/25 1:11 PM
4608989	6005, Bobcaygeon WWT, Blower Repair/Replace	6005-WWBC-P-SH-DGST	0000329165	CLOSE	CAP	REFURBISH/REPLACE		6/25/25 1:43 PM
4762219	6005, Bobcaygeon WWT, Blower Rebuild	6005-WWBC-P		CLOSE	CAP	REFURBISH/REPLACE		9/15/25 1:25 PM
4863613	6005, Bobcaygeon Wastewater Collection - Operations and Maintenance Manual Annual Review	6005-WCBC		COMP	CAP	COMPLIANCE		11/19/25 6:58 PM
4001306	DEFERRED 6005, Bobcaygeon WWT, Decant Control Cabinet Disconnect Broken, Order/Replace	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE	6/24/24 11:08 AM	1/1/25 11:08 AM
4236710	DEFERRED 6005, Bobcaygeon WWT, Pump Leak Near Out Flow, Repair	6005-WWBC-P-ST	0000208893	CLOSE	CORR	REFURBISH/REPLACE	11/12/24 9:15 AM	1/1/25 9:15 AM
4276571	DEFERRED 6005, Bobcaygeon WWT, ESA Action: PVC Conduit on Holding Tank Requires Support	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE	12/3/24 6:41 AM	1/1/25 6:41 AM
4276594	DEFERRED 6005, Bobcaygeon WWT, Heaters In Garage Not Functioning, Repair	6005-WWBC-F-HV	0000295997	CLOSE	CORR	REFURBISH/REPLACE	12/3/24 10:31 AM	1/1/25 10:31 AM
4278176	DEFERRED 6005, SPS 10, Heat Trace Ground Fault, Investigate/Flash Circuit Board	6005-SP10	0000295958	CLOSE	CORR	REFURBISH/REPLACE	12/9/24 1:29 PM	1/1/25 1:29 PM
4278584	DEFERRED 6005, SPS 10, Sewer Main Heat Trace Replacement	6005-SP10	0000295958	CLOSE	CORR	REFURBISH/REPLACE	12/12/24 3:41 PM	1/1/25 3:41 PM
4336117	6005, Bobcaygeon WWT, Alum Line to Tank 1, Repair	6005-WWBC-P-ST	0000208892	CLOSE	CORR	REFURBISH/REPLACE		1/15/25 1:46 PM
4335611	6005, Bobcaygeon WWT, New USB Receptical, Install	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		1/14/25 9:30 AM
4336418	6005, Bobcaygeon WWT, Scum Pump 2 Overload Tripping, Investigate/Repair	6005-WWBC-P-SH		CLOSE	CORR	REFURBISH/REPLACE		1/17/25 9:28 AM
4335629	6005, Bobcaygeon WWT, Train #2 Scum Pit Pump Fault, Unable to Reset Fault	6005-WWBC-P-ST	0000329040	CLOSE	CORR	REFURBISH/REPLACE		1/14/25 1:25 PM
4337305	6005, Bobcaygeon WWT, Aeration Blower Repair	6005-WWBC-P-SH-DGST	0000208937	CLOSE	CORR	REFURBISH/REPLACE		1/22/25 9:55 AM
4337311	6005, Bobcaygeon WWT, Facility - Emergency Lights Fail, Generator Room	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		1/22/25 10:24 AM
4337318	6005, Bobcaygeon WWT, Tree & Brush Removal Surrounding Clarifiers & Outfall Locations	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		1/22/25 11:11 AM
4378973	6005, SPS 10, Pump 2 Overload, Investigate/Repair	6005-SP10		CLOSE	CORR	REFURBISH/REPLACE		2/7/25 2:53 PM
4379898	6005, Bobcaygeon WWT Install Power Monitors	6005-WWBC-F-PD	0000106001	CLOSE	CORR	REFURBISH/REPLACE		2/11/25 10:57 AM
4381191	6005, SPS 6, Repair Pump 2 Fault	6005-SPS6	0000291160	CLOSE	CORR	REFURBISH/REPLACE		2/20/25 9:00 AM
4381192	6005, SPS 6, Repair SPS6 Bridge Heat Trace	6005-SPS6		CLOSE	CORR	REFURBISH/REPLACE		2/20/25 9:11 AM
4381197	6005, Bobcaygeon WWT, Decant Pump # 2 Overload Tripped, Investigate/Reset	6005-WWBC-P-SH		CLOSE	CORR	REFURBISH/REPLACE		2/20/25 9:21 AM
4381242	6005, SPS 6, No Pump Failure Alarm, Investigate/Repair	6005-SPS6		CLOSE	CORR	REFURBISH/REPLACE		2/21/25 7:39 AM
4381244	6005, SPS 6, Low Pumping Volume for Pump 1, Investigate / Repair	6005-SPS6	0000291109	COMP	CORR	REFURBISH/REPLACE		2/21/25 7:45 AM
4382244	6005, Bobcaygeon WWT, Digester Pin Hole Repair	6005-WWBC-P-SH-DGST	0000291391	CLOSE	CORR	REFURBISH/REPLACE		2/27/25 12:05 PM

4424727	6005, Bobcaygeon WWT, Chemical Feed Pump Line Repair	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		3/6/25 2:12 PM
4424086	6005, SPS 8, DSC Battery Low, Replace	6005-SPS8		CLOSE	CORR	REFURBISH/REPLACE		3/5/25 7:14 AM
4428808	6005, Bobcaygeon WWT, Pump 2 Fault Repair	6005-SP10	0000106183	CLOSE	CORR	REFURBISH/REPLACE		3/28/25 9:11 AM
4485801	6005, Bobcaygeon WWT, Purchase New Level Controller SPS 5	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		4/7/25 9:10 AM
4486520	6005, Bobcaygeon WWT, Clarifier Gear Drive Replacement	6005-WWBC-P-ST-CLAR	0000295989	CLOSE	CORR	REFURBISH/REPLACE		4/9/25 10:03 AM
4552216	6005, Bobcaygeon WWT, Ice Storm Clean Up	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		5/8/25 7:06 AM
4553302	6005, Bobcaygeon WWT, UV Parts Sensor Damaged	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		5/12/25 11:03 AM
4555312	6005, SPS 1, Pump 1 and 2 Fault, Investigate/Repair	6005-SPS1		CLOSE	CORR	REFURBISH/REPLACE		5/23/25 2:02 PM
4555992	6005, Bobcaygeon WWT, PLC Upgrade	6005-WWBC-P-PC		CLOSE	CORR	PREDICTIVE MAINTENANCE		5/27/25 8:18 AM
4556382	6005, Bobcaygeon WWT, ICP-101A UPS Failure, Replace	6005-WWBC-F-PG-BACK		CLOSE	CORR	REFURBISH/REPLACE		5/29/25 1:08 PM
4553495	6005, Bobcaygeon WWT, Sampler Line	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		5/13/25 1:44 PM
4604687	6005, SPS 5, WIN911 SPS5 High Level Alarm	6005-SPS5		CLOSE	CORR	COMPLIANCE		6/5/25 9:31 AM
4604726	6005, SPS 2, Generator Repairs	6005-SPS2	0000106226	CLOSE	CORR	REFURBISH/REPLACE		6/5/25 12:41 PM
4604274	6005, Bobcaygeon WWT, SPS 3 Pump Install	6005-SPS3	0000291176	CLOSE	CORR	REFURBISH/REPLACE		6/3/25 11:33 AM
4604887	6005, SPS 3, High Level issues, Investigate/Resolve	6005-SPS3		CLOSE	CORR	PREDICTIVE MAINTENANCE		6/6/25 12:08 PM
4606239	6005, Bobcaygeon WWT, SPS Stations Control Cabnet Upgrades, Plan	6005-WWBC		CLOSE	CORR	REFURBISH/REPLACE		6/12/25 7:19 AM
4660523	6005, Bobcaygeon WWT, AC In Garage Not Functioning	6005-WWBC-F-HV	0000400940	CLOSE	CORR	REFURBISH/REPLACE		7/8/25 3:31 PM
4661117	6005, SPS 10, Exhaust Fan Failure, Investigate/Repair	6005-SP10		CLOSE	CORR	REFURBISH/REPLACE		7/10/25 9:40 AM
4663472	6005, Bobcaygeon WWT, Sludge Judge Purchase	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		7/22/25 2:11 PM
4664907	6005, Bobcaygeon WWT, Leaking Oil	6005-WWBC-P-SH-DGST	0000329165	CLOSE	CORR	REFURBISH/REPLACE		7/30/25 6:58 AM
4709476	6005, Bobcaygeon WWT, Flygt Submersible Purchase	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		8/14/25 1:47 PM
4709478	6005, Bobcaygeon WWT, Purchase Parts for Sampler	6005-WWBC-P-PC	0000400951	CLOSE	CORR	REFURBISH/REPLACE		8/14/25 1:53 PM
4710554	6005, SPS 10, Battery Low alarm for DSC, Investigate	6005-SP10		CLOSE	CORR	REFURBISH/REPLACE		8/21/25 7:55 AM
4759583	6005, Bobcaygeon WWT, Atlas Pump No Start	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		9/4/25 12:01 PM
4816215	6005, Bobcaygeon WWT, Supernatant Pump 2 Tripping Overload, Investigate/Replace	6005-WWBC-P-SH-DGST		CLOSE	CORR	REFURBISH/REPLACE		10/9/25 7:24 AM
4817485	6005, SPS 3, Pump Repair	6005-SPS3	0000291176	CLOSE	CORR	REFURBISH/REPLACE		10/17/25 2:38 PM
4818183	6005, Bobcaygeon WWT, Pump 2 Tripping OL	6005-WWBC-P	0000329163	CLOSE	CORR	REFURBISH/REPLACE		10/21/25 7:15 AM
4818191	6005, Bobcaygeon WWT, Supernatant Pump Overloads Undersized, Order/Replace	6005-WWBC-P		CLOSE	CORR	REFURBISH/REPLACE		10/21/25 8:19 AM

4818192	6005, Bobcaygeon WWT, Supernatant Pump Panel Ground Issue, Investigate	6005-WWBC-P-SH-DGST		COMP	CORR	REFURBISH/REPLACE		10/21/25 8:44 AM
4818429	6005, Bobcaygeon WWT, Clarifier 1, Gear Drive, Chain Repair	6005-WWBC-P-ST-CLAR	0000291389	CLOSE	CORR	REFURBISH/REPLACE		10/23/25 6:55 AM
4861410	6005, SPS 5, Intermittant SPS 5 Fault Alarms, Investigate	6005-SPS5		COMP	CORR	REFURBISH/REPLACE		11/6/25 2:31 PM
4862560	6005, Bobcaygeon WWT, GFCI Receptacles Not Working, Order/Replace	6005-WWBC-F		CLOSE	CORR	REFURBISH/REPLACE		11/12/25 8:06 AM
4862854	6005, Bobcaygeon WWT, SPS 5 Fault Alarms	6005-WWBC-F		COMP	CORR	REFURBISH/REPLACE		11/14/25 2:06 PM
4907860	6005, Bobcaygeon WWT, ESA Corrective Action: Check For Flexible Conduit Separation And Repair All	6005-WWBC-F		COMP	CORR	REFURBISH/REPLACE		12/8/25 1:20 PM
4909889	6005, SPS 9, Wetwell, Clean Grease Under Level Transducer	6005-SPS9	0000106179	COMP	CORR	REFURBISH/REPLACE		12/22/25 1:52 PM
4284045	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 12:55 AM
4285358	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:15 AM
4285367	Daily Operational Activities (1y) - 6005 Plant - KTC	6005-WWBC		COMP	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4285372	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4285391	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4285410	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4285429	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4285441	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:16 AM
4286630	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 1:36 AM
4286841	Blower #1 Insp/Service (1y) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000329165	CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 1:39 AM
4286854	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 1:39 AM
4286857	UV Light Cleaning & Insp. (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 1:40 AM
4292856	Blower #2 Insp/Service (1y) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000329093	CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 3:08 AM
4292869	Blower #3 Insp/Service (1y) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000329081	CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 3:08 AM
4294952	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 3:38 AM
4301075	Daily Operational Activities (1y) - 6005 SPS - KTC	6005-WWBC		COMP	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 7:04 AM
4306106	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 8:59 AM
4307490	Actuator Electric Inspection/Service (1y) - 6005 - KTC	6005-WWBC-P-PI		CLOSE	PM	REFURBISH/REPLACE	1/1/25 12:00 AM	1/1/25 9:20 AM
4307354	HS03 H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	1/1/25 12:00 AM	1/1/25 9:18 AM
4318238	ESA Inspection By Contractor (1y) # 1 Visits - 6005 - KTC	6005-WWBC-F		COMP	PM	CALIBRATION	1/1/25 12:00 AM	1/1/25 12:05 PM
4319954	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	1/1/25 12:00 AM	1/1/25 12:30 PM

4342049	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:03 AM
4342051	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:03 AM
4342070	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:03 AM
4342089	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:03 AM
4342108	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:04 AM
4342120	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:04 AM
4343096	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 1:20 AM
4343190	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	2/1/25 12:00 AM	2/1/25 1:22 AM
4349269	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 3:03 AM
4341038	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 12:46 AM
4358576	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	2/1/25 12:00 AM	2/1/25 8:42 AM
4357769	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 8:25 AM
4367448	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	2/1/25 12:00 AM	2/1/25 11:00 AM
4384356	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:39 AM
4385436	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:53 AM
4385438	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:53 AM
4385457	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:53 AM
4385476	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:53 AM
4385495	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:54 AM
4385507	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 12:54 AM
4386593	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:10 AM
4386407	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 1:07 AM
4386919	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SPS1	0000158978	COMP	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:15 AM
4386930	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SPS2	0000106229	CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:15 AM
4386941	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SPS4	0000158979	CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:15 AM
4386952	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SPS6	0000106209	COMP	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:15 AM
4386963	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SPS7	0000158980	CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:16 AM
4386974	Panel Transfer Insp. (1y) - 6005 - KTC	6005-SP10	0000204930	CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:16 AM

4387391	Panel Transfer Insp. (1y) - 6005 - KTC	6005-WWBC-F-PD	0000106002	CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 1:22 AM
4393504	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 2:52 AM
4402379	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 5:40 AM
4402711	Grit Channel Clean-out by Contractor (6m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	3/1/25 12:00 AM	3/1/25 5:46 AM
4403147	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	3/1/25 12:00 AM	3/1/25 5:53 AM
4411994	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	3/1/25 12:00 AM	3/1/25 8:04 AM
4427440	6005, Bobcaygeon WWT, Purchase Spare Submersible RAS	6005-WWBC-F		CLOSE	PM	REFURBISH/REPLACE		3/21/25 10:40 AM
4432163	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:04 AM
4432165	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:04 AM
4432184	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:05 AM
4432203	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:05 AM
4432222	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:05 AM
4432234	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:05 AM
4433191	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 1:19 AM
4433367	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	4/1/25 12:00 AM	4/1/25 1:22 AM
4431151	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 12:50 AM
4441528	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 3:22 AM
4452902	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	4/1/25 12:00 AM	4/1/25 7:07 AM
4451964	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 6:47 AM
4464488	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	4/1/25 12:00 AM	4/1/25 10:23 AM
4491892	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 12:45 AM
4494334	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 2 - KTC	6005-SPS2	0000106230	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:28 AM
4494349	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 3 - KTC	6005-SPS3	0000106248	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:28 AM
4494364	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 4 - KTC	6005-SPS4	0000106239	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:28 AM
4493986	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:21 AM
4494379	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 5 - KTC	6005-SPS5	0000106241	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:29 AM
4494394	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 7 - KTC	6005-SPS7	0000106175	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:29 AM
4494409	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 8 - KTC	6005-SPS8	0000106176	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:29 AM

4494424	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 9 - KTC	6005-SPS9	0000106179	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:29 AM
4494439	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 10 - KTC	6005-SP10	0000106191	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:30 AM
4494454	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 11 - KTC	6005-SP11	0000106223	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:30 AM
4494139	Lifting Devices & Fall Arrest Inspection by Contractor (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:24 AM
4494143	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:24 AM
4494848	Valve Backflow Preventer Testing/Inspection by Contractor (1y) - 6005 - KTC	6005-WWBC-P-PI		CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:39 AM
4492963	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:03 AM
4492965	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:03 AM
4492984	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:03 AM
4493003	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:03 AM
4493022	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:04 AM
4493034	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 1:04 AM
4494319	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 1 - KTC	6005-SPS1	0000106204	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 1:28 AM
4502587	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 4:10 AM
4506723	Tank Wetwell Cleaning/Inspection (1y) - 6005 SPS 6 - KTC	6005-SPS6	0000291159	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 6:25 AM
4500629	Blower Digester Insp/Service (1y) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000208983	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 3:31 AM
4510134	Air Conditioning Unit Service by Contractor (1y) - 6005 - KTC	6005-WWBC-F-HV	0000305866	CLOSE	PM	REFURBISH/REPLACE	5/1/25 12:00 AM	5/1/25 7:46 AM
4511894	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 8:23 AM
4512738	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	5/1/25 12:00 AM	5/1/25 8:39 AM
4522105	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	5/1/25 12:00 AM	5/1/25 12:02 PM
4558472	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:41 AM
4559574	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:55 AM
4559576	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:55 AM
4559595	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:56 AM
4559614	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:56 AM
4559633	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC-F-IT	0000208063	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:56 AM
4559645	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 12:56 AM
4560620	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 1:09 AM

4560997	Clarifier Inspection & Service (1y) - 6005 - KTC	6005-WWBC-P-ST	0000106031	CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:15 AM
4561007	Engine Diesel Inspection/Service by Contractor (1y) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:16 AM
4561013	Engine Diesel Inspection/Service by Contractor (1y) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:16 AM
4561019	Engine Diesel Inspection/Service by Contractor (1y) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:16 AM
4561025	Engine Diesel Inspection/Service by Contractor (1y) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:16 AM
4568922	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 3:15 AM
4560802	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	6/1/25 12:00 AM	6/1/25 1:12 AM
4579299	Analyzer DO Calibration Service by Contractor (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	CALIBRATION	6/1/25 12:00 AM	6/1/25 7:15 AM
4580666	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	6/1/25 12:00 AM	6/1/25 7:36 AM
4579617	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 7:20 AM
4590536	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	6/1/25 12:00 AM	6/1/25 9:51 AM
4621940	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 12:28 PM
4622964	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:12 PM
4622966	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:12 PM
4622985	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:13 PM
4623004	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:13 PM
4623023	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:13 PM
4623035	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:14 PM
4623946	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 1:56 PM
4624171	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	7/1/25 12:00 AM	7/1/25 2:12 PM
4630838	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	7/1/25 12:00 AM	7/1/25 9:15 PM
4642628	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	7/2/25 12:00 AM	7/2/25 9:11 AM
4640526	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	7/2/25 12:00 AM	7/2/25 7:38 AM
4654352	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	7/3/25 12:00 AM	7/3/25 2:35 PM
4666712	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:14 AM
4667770	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:52 AM
4667772	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:52 AM
4667791	Gear Drive Clarifier #2 SPARE Service (1y) - 6005 - KTC	6005-WWBC-P-ST-CLAR	0000295989	CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 1:52 AM

4667819	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:53 AM
4667838	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:53 AM
4667857	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:54 AM
4667869	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 1:54 AM
4667888	Gear Drive Clarifier #1 Service (1y) - 6005 - KTC	6005-WWBC-P-ST-CLAR	0000291389	CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 1:55 AM
4668962	Online Process Equipment Calibration Service by Contractor (1y) - 6005 - KTC	6005-WWBC		COMP	PM	CALIBRATION	8/1/25 12:00 AM	8/1/25 2:37 AM
4668967	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 2:37 AM
4668860	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 2:33 AM
4675424	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 6:59 AM
4682364	Drive VFD Inspection (1y) - 6005 Route - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 11:48 AM
4684953	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	8/1/25 12:00 AM	8/1/25 1:28 PM
4684205	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 12:59 PM
4693992	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	8/1/25 12:00 AM	8/1/25 6:45 PM
4701123	Panel Control Pump Service (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 10:11 PM
4701332	Sampler Insp/Service (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 10:17 PM
4701270	Gear Drive Clarifier #2 Service (1y) - 6005 - KTC	6005-WWBC-P-ST-CLAR	0000388085	CLOSE	PM	REFURBISH/REPLACE	8/1/25 12:00 AM	8/1/25 10:15 PM
4713528	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:13 AM
4714564	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:51 AM
4714566	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:51 AM
4714585	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:51 AM
4714604	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:52 AM
4714623	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:52 AM
4714635	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:53 AM
4715543	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 2:31 AM
4715718	Heater Unit Insp. (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	9/1/25 12:00 AM	9/1/25 2:39 AM
4715723	HVAC, Fans, Heaters (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	9/1/25 12:00 AM	9/1/25 2:39 AM
4715735	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	9/1/25 12:00 AM	9/1/25 2:39 AM
4716199	HS09 Chemical Review (1y) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	9/1/25 12:00 AM	9/1/25 2:52 AM

4723678	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 7:46 AM
4734329	Grit Channel Clean-out by Contractor (6m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	9/1/25 12:00 AM	9/1/25 2:13 PM
4733893	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 1:59 PM
4734870	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	9/1/25 12:00 AM	9/1/25 2:31 PM
4744798	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	9/1/25 12:00 AM	9/1/25 8:01 PM
4764105	MCC Panel Insp/Service (3y) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	9/26/25 12:00 AM	9/26/25 7:57 AM
4766769	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:10 AM
4767803	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:41 AM
4767805	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:41 AM
4767824	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:42 AM
4767843	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:42 AM
4767862	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:42 AM
4767874	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:43 AM
4768777	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 2:13 AM
4769023	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	10/1/25 12:00 AM	10/1/25 2:20 AM
4769765	Heat Trace Insp (6m) - 6005 - KTC	6005-SPS6		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 2:41 AM
4776891	UPS Insp/Service (1y) - 6005 - KTC	6005-WWBC		COMP	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 6:50 AM
4776088	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 6:21 AM
4787149	Air Relief Chamber Clean-out by Contractor (1y) - 6005 - KTC	6005-WCBC		CLOSE	PM	REFURBISH/REPLACE	10/1/25 12:00 AM	10/1/25 12:28 PM
4787689	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	10/1/25 12:00 AM	10/1/25 12:46 PM
4786437	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 12:06 PM
4790252	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:30 PM
4791992	Tank Storage Diesel Fuel Inspection by Contractor (10y) - 6005 SPS 6 - KTC	6005-SPS6	0000291329	COMP	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:56 PM
4791964	Tank Storage Diesel Fuel Inspection by Contractor (10y) - 6005 Main Plant - KTC	6005-WWBC		COMP	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:55 PM
4791975	Tank Storage Diesel Fuel Inspection by Contractor (10y) - 6005 SPS 10 - KTC	6005-SP10	0000291327	COMP	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:55 PM
4791981	Tank Storage Diesel Fuel Inspection by Contractor (10y) - 6005 SPS 2 - KTC	6005-SPS2	0000291331	COMP	PM	INSPECTION	10/1/25 12:00 AM	10/1/25 1:55 PM
4821402	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4822444	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM

4822457	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4822476	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4822495	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4822514	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4822526	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4823481	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4823567	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	11/1/25 12:00 AM	11/1/25 1:00 AM
4829809	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4837976	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4839134	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	11/1/25 12:00 AM	11/1/25 1:00 AM
4847802	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		CLOSE	PM	INSPECTION	11/1/25 12:00 AM	11/1/25 1:00 AM
4866503	Blower Inspection (1m) - 6005 - KTC	6005-WWBC		COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867523	Building and Grounds Maintenance (1m) - 6005 - KTC	6005-WWBC	0000423299	COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867525	Engine Diesel (1m) - 6005 Plant - KTC	6005-WWBC-F-PG-ENGN	0000106010	CLOSE	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867545	Engine Diesel (1m) - 6005 SPS 10 - KTC	6005-SP10	0000106189	CLOSE	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867565	Engine Diesel (1m) - 6005 SPS 2 - KTC	6005-SPS2	0000106226	CLOSE	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867585	Alarm Dialer (1m) - 6005 - KTC	6005-WWBC		COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4867604	Engine Diesel (1m) - 6005 SPS 6 - KTC	6005-SPS6	0000291308	CLOSE	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4868551	Analyzer DO Insp. (1m) - 6005 - KTC	6005-WWBC		COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4868739	Tank Alum Inspection (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	REFURBISH/REPLACE	12/1/25 12:00 AM	12/1/25 12:00 AM
4875324	Sludge Haul Maintenance (1m) - 6005 - KTC	6005-WWBC-P-SH-DGST	0000291391	COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4884393	H & S Equipment Check (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	HEALTH AND SAFETY	12/1/25 12:00 AM	12/1/25 12:00 AM
4883674	Chemical Feed System Insp (1m) - 6005 - KTC	6005-WWBC		CLOSE	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM
4893110	UV Light Bank Cleaning & Insp. (1m) - 6005 - KTC	6005-WWBC-P-DI-ULVL		COMP	PM	INSPECTION	12/1/25 12:00 AM	12/1/25 12:00 AM



Ontario Clean Water Agency
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Appendix IV:
Calibration Reports



Franklin Empire Inc,
550 Braidwood Ave. Unit 4.
Peterborough ON K9J 1W1, CANADA

Tel: (705) 745-1626
Fax: (705) 745-3493

OCWA Kawartha

2025 Calibrations Bobcaygeon WWTP

Leaders in Instrumentation and Control

	CALIBRATION REPORT	Report No.: OCWA 2025 FIT 402
		Date: 6-Aug-25

SITE: Bobcaygeon WWTP
PROCESS AREA: WWTP Train 2 Outfall
INSTR. TAG: FIT 402
MANUFACTURER: Toshiba
MODEL: LF424
SERIAL No.: 54241656
OCWA CODE: 0000208987

SERVICE DATE: 8/6/2025
TECHNICIAN: M Manley
JOB REFERENCE: OCWA 2025

Input	(Test)			Output	(Signal)	(Process)
Type:	%			Type or EGU:	mA	m3/d
Min:	0.00			Min:	4.00	0.00
Max:	100.00			Max:	20.00	3500.00
Size	12"	12 hz				
Ex Curr	0.1664A					
			Before Calibration		After Calibration	
%	mA	Calculated	mA	m3/day	mA	m3/day
0	4.00	0	4.00	0.0	4.00	0.0
50	12.00	1750	11.99	1751.3	11.99	1751.3
100	20.00	3500	19.98	3502.5	19.98	3502.5

Calibration Equipment			
Type:	DMM		
Manufacturer:	Fluke		
Model:	Model 87		
Serial No.:	13440128		
Last Cal. Date:	Feb. 11, 2025		

Comments: No available velocity simulator for these mag flowmeters, performed internal flow cal using transmitter. Excitation 0.1663A.

AS FOUND: PASS

AS LEFT: PASS

CERTIFIED BY: 

	CALIBRATION REPORT	Report No.: OCWA 2025 FIT 202
		Date: 6-Aug-25

SITE: Bobcaygeon WWTP
PROCESS AREA: WWTP RAS/WAS Train 2
INSTR. TAG: FIT 202
MANUFACTURER: Toshiba
MODEL: LF424
SERIAL No.: 54241658
OCWA CODE: 0000208986

SERVICE DATE: 8/6/2025
TECHNICIAN: M Manley
JOB REFERENCE: OCWA 2025

Input	(Test)		Output	(Signal)	(Process)	
Type:	%		Type or EGU:	mA	m3/d	
Min:	0.00		Min:	4.00	0.00	
Max:	100.00		Max:	20.00	6000.00	
Size	6"	24 hz				
Ex Curr	0.1732A					
			Before Calibration		After Calibration	
%	mA	Calculated	mA	m3/day	mA	m3/day
0	4.00	0	4.00	0.0	4.00	0.00
50	12.00	3000	11.99	3000.8	11.99	3000.8
100	20.00	6000	19.97	6000.8	19.97	6000.8

Calibration Equipment			
Type:	DMM		
Manufacturer:	Fluke		
Model:	Model 87		
Serial No.:	13440128		
Last Cal. Date:	Feb. 11, 2025		

Comments: No available velocity simulator for these mag flowmeters, performend internal flow cal using transmitter.
 Excitation 0.1731A.
 TOT 2711980 m3

AS FOUND: PASS

AS LEFT: PASS

CERTIFIED BY:



	CALIBRATION REPORT	Report No.: OCWA 2025 FIT 201
		Date: 6-Aug-25

SITE: Bobcaygeon WWTP
PROCESS AREA: WWTP RAS/WAS Train 1
INSTR. TAG: FIT 201
MANUFACTURER: Toshiba
MODEL: LF424
SERIAL No.: 54241659
OCWA CODE: 0000208985

SERVICE DATE: 8/6/2025
TECHNICIAN: M Manley
JOB REFERENCE: OCWA 2025

Input	(Test)					Output	(Signal)	(Process)
Type:	%					Type or EGU:	mA	m3/d
Min:	0.00					Min:	4.00	0.00
Max:	100.00					Max:	20.00	6000.00
Size	6"							
Ex Curr	0.1038A							
			Before Calibration		After Calibration			
%	mA	Calculated	mA	m3/day	m3/day	m3/day		
0	4.00	0	4.00	0.0	4.00	0.0		
50	12.00	3000	11.99	3002.5	11.99	3002.5		
100	20.00	6000	19.97	6001.5	19.97	6001.5		

Calibration Equipment			
Type:	DMM		
Manufacturer:	Fluke		
Model:	Model 87		
Serial No.:	13440128		
Last Cal. Date:	Feb. 11, 2025		

Comments: No available velocity simulator for these mag flowmeters, performed internal flow cal using transmitter.
 Excitation 0.1037A.
 TOT 2728890 m3

AS FOUND: PASS

AS LEFT: PASS

CERTIFIED BY:



	CALIBRATION REPORT	Report No.: OCWA 2025 FIT 401
		Date: 6-Aug-25

SITE: Bobcaygeon WWTP
PROCESS AREA: WWTP Outfall Train 1
INSTR. TAG: FIT 401
MANUFACTURER: Toshiba
MODEL: LF424
SERIAL No.: 54241660
OCWA CODE: 0000208984

SERVICE DATE: 8/6/2025
TECHNICIAN: M Manley
JOB REFERENCE: OCWA 2025

Input	(Test)					Output	(Signal)	(Process)
Type:	%					Type or EGU:	mA	m3/d
Min:	0.00					Min:	4.00	0.00
Max:	100.00					Max:	20.00	3500.00
Size	12"	24 hz						
Ex Curr	0.1606A							
			Before Calibration		After Calibration			
%	mA	Calculated	mA	m3/day	m3/day	m3/day		
0	4.00	0	4.00	0.0	4.00	9.0		
50	12.00	1750	11.99	1752.5	11.99	1752.5		
100	20.00	3500	19.98	3505.2	19.98	3505.2		

Calibration Equipment			
Type:	DMM		
Manufacturer:	Fluke		
Model:	Model 87		
Serial No.:	13440128		
Last Cal. Date:	Feb. 11, 2025		

Comments: No available velocity simulator for these mag flowmeters, performed internal flow cal using transmitter. Excitation 0.1605A.

AS FOUND: PASS

AS LEFT: PASS

CERTIFIED BY: 



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix V: Biosolids Summary

Solids & Nutrients	Metals & Criteria	Last 4 Samples
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Facility Works Number:	110002498	Receiver:	Big Bob Channel
Facility Owner:	Municipality: City of Kawartha Lakes	Service Population:	2472
Facility Classification:	Class 2 Wastewater Treatment	Total Design Capacity:	10440 m3/day

Note: all parameters in this report are derived from the Bslq Station

Month	Hauled Vol. (m³)	Total Solids (mg/L)	Volatile Solids (mg/L)	Total Phosphorus (mg/L)	Total Ammonia Nitrogen	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Total Kjeldahl Nitrogen	Ammonia + Nitrate (mg/L)	Potassium (mg/L)
Parameter Short Name	HauledVol	TS	VS	TP	NH3p_NH4p_N	NO3-N	NO2-N	TKN	Calculation in Report	K
T/S	IH Month.Total	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	- no T/S	Lab Published Month Mean
Jan	558.26	30,400.00	27,100.00	470.50	125.50	3.00	3.00	1,615.00	64.25	123.50
Feb	516.49	34,400.00	30,050.00	503.00	147.50	3.00	3.00	2,250.00	75.25	132.00
Mar	547.47	28,600.00	24,166.67	309.67	56.43	3.00	3.00	1,640.00	29.72	91.67
Apr	628.36	33,600.00	27,700.00	447.67	237.33	3.00	3.00	2,043.33	120.17	116.33
May	754.65	29,600.00	24,600.00	362.50	282.50	3.00	3.50	2,025.00	142.75	94.00
Jun	950.25	19,250.00	15,200.00	281.50	107.05	3.00	3.00	1,255.00	55.03	64.00
Jul	931.20	18,300.00	15,550.00	281.50	130.00	3.00	3.00	1,160.00	66.50	60.50
Aug	989.40	16,600.00	14,000.00	315.00	147.00	3.00	3.00	1,250.00	75.00	61.00
Sep	931.20	15,200.00	12,350.00	330.00	116.50	3.00	3.00	1,080.00	59.75	65.50
Oct	960.30	16,800.00	13,150.00	342.50	120.00	3.00	3.00	1,089.00	61.50	56.00
Nov	837.45	20,050.00	16,200.00	273.00	84.85	3.00	3.00	1,125.00	43.93	58.00
Dec	436.36	23,100.00	19,100.00	367.00	60.90	3.00	3.00	1,580.00	31.95	84.00
Average	753.45	23,825.00	19,930.56	356.99	134.63	3.00	3.04	1,509.36	68.82	83.88
Total	9,041.39	285,900.00	239,166.67	4,283.83	1,615.57	36.00	36.50	18,112.33	825.78	1,006.50

Solids & Nutrients

Metals & Criteria

Last 4 Samples

Note: all parameters in this report are derived from the Bslq Station

Month	Arsenic (mg/L)	Cadmium (mg/L)	Cobalt (mg/L)	Chromium (mg/L)	Copper (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Lead (mg/L)	Selenium (mg/L)	Zinc (mg/L)
Parameter Short Name	As	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Se	Zn
T/S	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean
Jan	0.10	0.01	0.02	0.16	2.23	0.00	0.07	0.14	0.10	0.10	3.29
Feb	0.10	0.01	0.02	0.19	2.31	0.01	0.07	0.15	0.10	0.10	3.48
Mar	0.10	0.01	0.01	0.13	1.43	0.00	0.05	0.09	0.10	0.10	2.33
Apr	0.10	0.01	0.02	0.20	1.97	0.01	0.06	0.14	0.10	0.10	4.00
May	0.10	0.01	0.02	0.16	1.65	0.01	0.06	0.12	0.10	0.10	4.50
Jun	0.10	0.01	0.01	0.15	1.35	0.00	0.05	0.10	0.10	0.10	3.00
Jul	0.10	0.01	0.01	0.13	1.45	0.00	0.05	0.10	0.10	0.10	3.00
Aug	0.10	0.01	0.01	0.13	1.65	0.00	0.05	0.10	0.10	0.10	4.50
Sep	0.10	0.01	0.02	0.12	1.80	0.01	0.06	0.10	0.10	0.10	4.50
Oct	0.10	0.01	0.02	0.14	1.90	0.01	0.06	0.12	0.10	0.10	4.50
Nov	0.10	0.01	0.02	0.16	1.60	0.01	0.06	0.12	0.10	0.10	3.50
Dec	0.10	0.03	0.02	0.15	2.00	0.00	0.06	0.12	0.10	0.10	3.00
Average	0.10	0.01	0.02	0.15	1.78	0.00	0.06	0.12	0.10	0.10	3.63
Max. Permissible Metal Concentrations (mg/kg of Solids)	170.00	34.00	340.00	2,800.00	1,700.00	11.00	94.00	420.00	1,100.00	34.00	4,200.00
Metal Concentrations in Sludge (mg/kg)	4.20	0.34	0.64	6.32	74.62	0.19	2.42	4.90	4.20	4.20	152.48

Solids & Nutrients

Metals & Criteria

Last 4 Samples

Note: all parameters in this report are derived from the Bslq Station

Parameter Short Name	Time Series	10/28/2025	11/18/2025	11/26/2025	12/15/2025	Average	Metal Concentrations in Sludge (mg/kg)	Max. Permissible Metal Concentrations (mg/kg of Solids)
As (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	5.22	170
Cd (mg/L)	Lab Published	0.01	0.01	0.01	0.03	0.01	0.65	34
Co (mg/L)	Lab Published	0.01	0.02	0.01	0.02	0.02	0.78	340
Cr (mg/L)	Lab Published	0.11	0.22	0.09	0.15	0.14	7.43	2800
Cu (mg/L)	Lab Published	1.50	2.00	1.20	2.00	1.68	87.35	1700
Hg (mg/L)	Lab Published	0.00	0.01	0.00	0.00	0.01	0.27	11
Mo (mg/L)	Lab Published	0.05	0.06	0.05	0.06	0.06	2.87	94
Ni (mg/L)	Lab Published	0.10	0.15	0.09	0.12	0.12	6.00	420
Pb (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	5.22	1100
Se (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	5.22	34
Zn (mg/L)	Lab Published	3.00	5.00	2.00	3.00	3.25	169.49	4200
TS (mg/L)	Lab Published	13,500.00	20,000.00	20,100.00	23,100.00	19,175.00		
VS (mg/L)	Lab Published	10,600.00	16,000.00	16,400.00	19,100.00	15,525.00		
TP (mg/L)	Lab Published	259.00	350.00	196.00	367.00	293.00		
NO2-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		
TKN (mg/L)	Lab Published	818.00	1,080.00	1,170.00	1,580.00	1,162.00		
K (mg/L)	Lab Published	51.00	63.00	53.00	84.00	62.75		
NH3p_NH4p_N (mg/L)	Lab Published	106.00	96.30	73.40	60.90	84.15		
NO3-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix VI:
Bypasses, Overflows, Spills or Abnormal Events



Brad Jackson
Drinking Water Supervisor
Peterborough District Office
Ministry of the Environment, Conservation and Parks
300 Water Street, 2nd Floor, South Tower
Peterborough, ON
K9J 3C7

April 23, 2025

Dear Mr. Jackson:

Re: Bobcaygeon WWTP 2025 Q1 Bypass and Plant Overflow Event Report

Amended Environmental Compliance Approval #3028-AEUKDQ Sections 4(5) and 5(5) issued April 10, 2017 and Amended Environmental Compliance Approval #4705-AFRJQM Section 4(5) issued April 10, 2017 for the Bobcaygeon WWTP require a quarterly Bypass and Overflow report be submitted to the Water Supervisor no later than February 15, May 15, August 15, and November 15 each year.

There were no incidents of a Plant Overflow Event or Bypass Event at the Bobcaygeon WWTP during the first quarter of 2025 (January, February, and March).

Please contact me if you have any questions or comments.

Best regards,

Katie Campbell
Process & Compliance Technician
Ontario Clean Water Agency
Kawartha Hub
(705) 934-0026

CC: Brent Martin, OCWA - Operations Manager
Allison McCann, OCWA - SPC Manager
Lynette Nicholson, OCWA – General Manager
Karen Lorente, OCWA - Regional Hub Manager
Amber Hayter, City of Kawartha Lakes – Manager, Water & Wastewater
Michelle Flaherty, Kawartha Lakes – Contract Coordinator
David Bradley, MECP - District Manager
Kayla Trofimczuk, MECP – Water Compliance Officer



Central Cluster - Operations Event Form

Project: Bobcaygeon WWTP - 6005

Location: 127 Boyd St, Bobcaygeon ON, K0M 1A0

Date: March 31, 2025

Nature of Event: (By-pass, Overflow, Spill, Odour, Noise etc...)

Was reported to MOH as Bypass and to SAC but Environmental Officer from SAC said it is an effluent spill and reported it as a spill.

Details of Event:

Generator Failed to produce 600V causing no power to run plant, flow leaving plant with no UV disinfection from March 31, 2025 16:18 to 17:20 (1hr 2min).

Call SAC: 1-800-268-6060

Time SAC notified: _16:20_____ SAC Incident Number __1-N58LL5_____

Name of Person at SAC: _Bilal Kidwai_____

MECP Water Supervisor Peterborough Notified 705-768-9245 (time): __16:54_____

District Health Unit Notified (time): __16:12_____

Name of Person at Health Unit: Rajesh Singh_____

All Other Phone calls placed (Managers, Client, MECP, MOH):

Manager already aware, MECP Inspector (reached out April 2, 2025)

Volume of By-pass or Spill: 200m3 (100m3 per treatment train)

Bypass Time: 1 hour 2 minutes

Start: _16:18_____ Finish: __17:20_____

Samples Taken? (BOD,TSS,Phos,NH3+NH4, e-coli): _Yes (April 1, 2025 from each treatment train)_____

Corrective Action Taken:



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Generator voltage restored and batteries replaced.
Ministry of Health asked for the lab report when it is received.

Prepared By: Katie Campbell



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110002498

Project : PO#017018

07-April-2025

OCWA-Kawartha (Bobcaygeon WWTF)

**P.O. Box 279 Boyd St. E.
Bobcaygeon, ON
K0M 1A0, Canada**

Date Rec. : 01 April 2025

LR Report: CA12003-APR25

Copy: #1

Phone: 705-738-4246, 705-741-6905 (Cell)

Fax:

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Train 1 Effluent	6: Eff Eff-Train 2 Effluent
Sample Date & Time					01-Apr-25 10:10	01-Apr-25 10:12
Temperature Upon Receipt [°C]	---	---	---	---	11.0	11.0
Field pH [no unit]	---	---	---	---	7.31	6.90
Field Temperature [celcius]	---	---	---	---	7.2	7.1
Biochemical Oxygen Demand (BOD5) [mg/L]	02-Apr-25	17:37	07-Apr-25	13:16	18	11
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	02-Apr-25	17:59	07-Apr-25	13:16	13	11
Total Suspended Solids [mg/L]	02-Apr-25	08:14	02-Apr-25	15:20	41	34
Phosphorus (total) [mg/L]	01-Apr-25	19:20	02-Apr-25	13:03	0.20	0.11
Total Kjeldahl Nitrogen [as N mg/L]	03-Apr-25	11:50	04-Apr-25	13:56	3.7	2.5
Ecoli [mpn/100mL]	02-Apr-25	10:21	03-Apr-25	11:09	1986	126



Carrie Greenlaw
Project Specialist,
Environment, Health & Safety



Aaron Gordon (A)
Drinking Water Supervisor
Peterborough District Office
Ministry of the Environment, Conservation and Parks
300 Water Street, 2nd Floor, South Tower
Peterborough, ON
K9J 3C7

July 17, 2025

Dear Mr. Gordon:

Re: Bobcaygeon WWTP 2025 Q2 Bypass and Plant Overflow Event Report

Amended Environmental Compliance Approval #3028-AEUKDQ Sections 4(5) and 5(5) issued April 10, 2017 and Amended Environmental Compliance Approval #4705-AFRJQM Section 4(5) issued April 10, 2017 for the Bobcaygeon WWTP require a quarterly Bypass and Overflow report be submitted to the Water Supervisor no later than February 15, May 15, August 15, and November 15 each year.

There was one incident of a Plant Overflow Event or Bypass Event at the Bobcaygeon WWTP during the second quarter of 2025 (April, May, and June). The incident was due to a generator failure causing the loss of process to the Aeration system and UV disinfection for an hour. Attached is the Operations Event Form with the corrective actions and sample results.

Please contact me if you have any questions or comments.

Best regards,

Katie Campbell
Process & Compliance Technician
Ontario Clean Water Agency
Kawartha Hub
(705) 934-0026

CC: Brent Martin, OCWA - Operations Manager
Allison McCann, OCWA - SPC Manager
Lynette Nicholson, OCWA – General Manager
Karen Lorente, OCWA - Regional Hub Manager
Amber Hayter, City of Kawartha Lakes – Manager, Water & Wastewater
Michelle Flaherty, Kawartha Lakes – Contract Coordinator
David Bradley, MECP - District Manager
Kayla Trofimczuk, MECP – Water Compliance Officer

Bobcaygeon WPCP - Quarterly Bypass Report
 Environmental Compliance Approval #3028-AEUKDQ
 Year: 2025
 Q2 = April, May, June

Did a Bypass occur during this quarter:
 Yes No

Condition 4. Bypasses	Event
4.2 a. the date and time of the beginning of the Bypass b. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed: c. the type of the Bypass (emergency or planned) the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.	SAC # 1-O66BAF Loss of Process to aeration and UV disinfection due to generator failure April 29, 2025 @ 9:00 Primary, Secondary with no aeration, Disinfection with no UV disinfection. Generator repaired and put back online. Samples collected of effluent.
4.3 a. the date and time of the end of the Bypass; b. the estimated or measured volume of Bypass.	April 29 2025 @ 10:00 Estimated 120 m3 combined.
4.4 For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require grab sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.	Sample collected April 29 2025. Operations Event Form Summary attached, and lab results with summary.
4.6The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 11. If there is no Bypass Event during a quarter, a statement of no occurrence of Bypass is deemed sufficient.	Compliant with ECA. Monthly limits met for April 2025. See attached Bobcaygeon WPCP PAR for April 2025.

Bobcaygeon WPCP - Quarterly Overflow Report
 Environmental Compliance Approval #30328-AEUKDQ
 Year: 2025
 Q2 = April, May and June

Did an Overflow occur during this quarter:
 Yes No

****There was no occurrence of an Overflow Event at the Sewage Pumping Stations to report as per CLI-ECA 141-W601.****

Condition 5. Overflow	Event
5.2 a. the date and time of the beginning of the Overflow: b. the location (point) of the Overflow and the reciever: c. the reason(s) of the Overflow; d. the level of treatment the Overflow has received and disinfection statud of same.	
5.3 a. the duration of the Overflow; b. the monitored or estimated volume of Overflow;	
c. the impact of Overflow on the receiver.	
5.4 a. For each Overflow event, the Owner shall collect samples, representative of the Event, consisting of a minimum of 2 grab samples of the Overflow, one at the beginning of the Event and one approximeately near the end of the Event, every 4 houts for the duration of the Event, and have them analyzed for effluent parameters outlined in the Effluent Limits condition. For raw sewage and primary treatment system Overflow BOD5shall be monitored instead	
5.5 ...The summary report shall contain, at a minimum, the types of information set out in Subsections (2), (3) and (4). If there is no Overflow Event during a quarter, a statement of no occurrence of Overflow is deemed sufficient.	No Occurance of Overflow.



Central Cluster - Operations Event Form

Project: Bobcaygeon WWTP - 6005

Location: 127 Boyd St, Bobcaygeon ON, K0M 1A0

Date: April 29, 2025

Nature of Event: (By-pass, Overflow, Spill, Odour, Noise etc...)

Loss of Aeration and UV Disinfection.

Details of Event:

Generator Failed to on start up for a power failure. This caused no power to run plant, causing no aeration or UV disinfection. Flow leaving facility to Pigeon Lake from April 29, 2025 9:00 to 10:00 (1hr). Total flow approximately left un-disinfected 120m3.

Call SAC: 1-800-268-6060

Time SAC notified: 12:37 SAC Incident Number 1-O66BAF

Name of Person at SAC: Jeremy Weiss

MECP Water Supervisor Peterborough Notified 705-768-9245 (time): 13:10

District Health Unit Notified (time): 11:00

Name of Person at Health Unit: Neha Gandhi

All Other Phone calls placed (Managers, Client, MECP, MOH):

Manager already aware, MECP Inspector (e-mailed April 29, 2025)

Volume of By-pass or Spill: 120m3

Bypass Time: 1 hour

Start: 9:00 Finish: 10:00

Samples Taken? (BOD,TSS,Phos,NH3+NH4, e-coli): Yes (April 29, 2025)

Corrective Action Taken:



Generator technician called to site to make repairs. Battery charging system replaced and operational.

Ministry of Health asked for the lab report when it is received.

Prepared By: Katie Campbell



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110002498

Project : PO#017018

06-May-2025

OCWA-Kawartha (Bobcaygeon WWTF)

**P.O. Box 279 Boyd St. E.
Bobcaygeon, ON
K0M 1A0, Canada**

Date Rec. : 29 April 2025

LR Report: CA15853-APR25

Copy: #1

Phone: 705-738-4246, 705-741-6905 (Cell)

Fax:

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Eff. Combined	6: Eff Eff-Final Eff. Combined (Bacti)
Sample Date & Time					29-Apr-25 10:38	29-Apr-25 10:38
Temperature Upon Receipt [°C]	---	---	---	---	7.0	7.0
Field pH [no unit]	---	---	---	---	7.55	---
Field Temperature [celcius]	---	---	---	---	15.3	---
Biochemical Oxygen Demand (BOD5) [mg/L]	29-Apr-25	04:30	05-May-25	14:23	7	---
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	29-Apr-25	15:57	05-May-25	14:23	7	---
Total Suspended Solids [mg/L]	30-Apr-25	13:41	01-May-25	15:45	13	---
Phosphorus (total) [mg/L]	30-Apr-25	15:18	01-May-25	09:41	0.05	---
Ammonia+Ammonium (N) [as N mg/L]	29-Apr-25	19:39	30-Apr-25	09:49	7.8	---
Ecoli [mpn/100mL]	29-Apr-25	14:16	01-May-25	08:46	---	18



Carrie Greenlaw
Project Specialist,
Environment, Health & Safety



Brittney Wielgos
Drinking Water Supervisor
Peterborough District Office
Ministry of the Environment, Conservation and Parks
300 Water Street, 2nd Floor, South Tower
Peterborough, ON
K9J 3C7

October 22, 2025

Dear Ms. Wielgos:

Re: Bobcaygeon WWTP 2025 Q3 Bypass and Plant Overflow Event Report

Amended Environmental Compliance Approval #3028-AEUKDQ Sections 4(5) and 5(5) issued April 10, 2017 and Amended Environmental Compliance Approval #4705-AFRJQM Section 4(5) issued April 10, 2017 for the Bobcaygeon WWTP require a quarterly Bypass and Overflow report be submitted to the Water Supervisor no later than February 15, May 15, August 15, and November 15 each year.

There was no incidents of a Plant Overflow Event or Bypass Event at the Bobcaygeon WWTP during the third quarter of 2025 (July, August, and September).

Please contact me if you have any questions or comments.

Best regards,

Katie Campbell
Process & Compliance Technician
Ontario Clean Water Agency
Kawartha Hub
(705) 934-0026

CC: Brent Martin, OCWA - Operations Manager
Allison McCann, OCWA - SPC Manager
Lynette Nicholson, OCWA – General Manager
Karen Lorente, OCWA - Regional Hub Manager
Amber Hayter, City of Kawartha Lakes – Manager, Water & Wastewater
Michelle Flaherty, Kawartha Lakes – Contract Coordinator
David Bradley, MECP - District Manager
Kayla Trofimczuk, MECP – Water Compliance Officer

Bobcaygeon WPCP - Quarterly Bypass Report
 Environmental Compliance Approval #3028-AEUKDQ
 Year: 2025
 Q3 = July, August, September

Did a Bypass occur during this quarter:
 Yes No

Condition 4. Bypasses	Event
4.2 a. the date and time of the beginning of the Bypass b. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed: c. the type of the Bypass (emergency or planned) the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.	
4.3 a. the date and time of the end of the Bypass; b. the estimated or measured volume of Bypass.	
4.4 For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require grab sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.	
4.6 The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 11. If there is no Bypass Event during a quarter, a statement of no occurrence of Bypass is deemed sufficient.	No occurrence of a Bypass.

Bobcaygeon WPCP - Quarterly Overflow Report
 Environmental Compliance Approval #30328-AEUKDQ
 Year: 2025
 Q3 = July, August and September

Did an Overflow occur during this quarter:
 Yes No

There was no occurrence of an Overflow Event at the Sewage Pumping Stations to report as per CLI-ECA 141-W601.

Condition 5. Overflow		Event
5.2	a. the date and time of the beginning of the Overflow:	
	b. the location (point) of the Overflow and the receiver:	
	c. the reason(s) of the Overflow;	
	d. the level of treatment the Overflow has received and disinfection status of same.	
5.3	a. the duration of the Overflow;	
	b. the monitored or estimated volume of Overflow;	
	c. the impact of Overflow on the receiver.	
5.4	a. For each Overflow event, the Owner shall collect samples, representative of the Event, consisting of a minimum of 2 grab samples of the Overflow, one at the beginning of the Event and one approximately near the end of the Event, every 4 hours for the duration of the Event, and have them analyzed for effluent parameters outlined in the Effluent Limits condition. For raw sewage and primary treatment system Overflow BOD5 shall be monitored instead	
5.5	...The summary report shall contain, at a minimum, the types of information set out in Subsections (2), (3) and (4). If there is no Overflow Event during a quarter, a statement of no occurrence of Overflow is deemed sufficient.	No Occurrence of Overflow.



January 16, 2026

Brittney Wielgos
Drinking Water Supervisor
Peterborough District Office
Ministry of the Environment, Conservation and Parks
300 Water Street, 2nd Floor, South Tower
Peterborough, ON
K9J 3C7

Dear Ms. Wielgos:

Re: Bobcaygeon WWTP 2025 Q4 Bypass and Plant Overflow Event Report

Amended Environmental Compliance Approval #3028-AEUKDQ Sections 4(5) and 5(5) issued April 10, 2017 and Amended Environmental Compliance Approval #4705-AFRJQM Section 4(5) issued April 10, 2017 for the Bobcaygeon WWTP require a quarterly Bypass and Overflow report be submitted to the Water Supervisor no later than February 15, May 15, August 15, and November 15 each year.

There were no incidents of a Plant Overflow Event or Bypass Event at the Bobcaygeon WWTP during the fourth quarter of 2025 (October, November, and December).

Please contact me if you have any questions or comments.

Best regards,

Ellen Campbell
Process & Compliance Technician
Ontario Clean Water Agency
Kawartha Hub
(705) 341-2096

CC: Brent Martin, OCWA - Operations Manager
Allison McCann, OCWA - SPC Manager
Lynette Nicholson, OCWA – General Manager
Karen Lorente, OCWA - Regional Hub Manager
Amber Hayter, City of Kawartha Lakes – Manager, Water & Wastewater
Michelle Flaherty, Kawartha Lakes – Contract Coordinator
David Bradley, MECP - District Manager
Kayla Trofimczuk, MECP – Water Compliance Officer

Bobcaygeon WPCP - Quarterly Bypass Report
 Environmental Compliance Approval #3028-AEUKDQ
 Year: 2025
 Q4 = October, November, December

Did a Bypass occur during this quarter:
 Yes No

Condition 4. Bypasses		Event
4.2	a. the date and time of the beginning of the Bypass	
	b. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed;	
	c. the type of the Bypass (emergency or planned)	
	the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.	
4.3	a. the date and time of the end of the Bypass;	
	b. the estimated or measured volume of Bypass.	
4.4	For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require grab sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.	
4.6 The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 11. If there is no Bypass Event during a quarter, a statement of no occurrence of Bypass is deemed sufficient.	No occurrence of a Bypass.

Bobcaygeon WPCP - Quarterly Overflow Report
 Environmental Compliance Approval #30328-AEUKDQ
 Year: 2025
 Q4 = October, November, December

Did an Overflow occur during this quarter:
 Yes No

There was no occurrence of an Overflow Event at the Sewage Pumping Stations to report as per CLI-ECA 141-W601.

Condition 5. Overflow		Event
5.2	a. the date and time of the beginning of the Overflow:	
	b. the location (point) of the Overflow and the receiver:	
	c. the reason(s) of the Overflow;	
	d. the level of treatment the Overflow has received and disinfection status of same.	
5.3	a. the duration of the Overflow;	
	b. the monitored or estimated volume of Overflow;	
	c. the impact of Overflow on the receiver.	
5.4	a. For each Overflow event, the Owner shall collect samples, representative of the Event, consisting of a minimum of 2 grab samples of the Overflow, one at the beginning of the Event and one approximately near the end of the Event, every 4 hours for the duration of the Event, and have them analyzed for effluent parameters outlined in the Effluent Limits condition. For raw sewage and primary treatment system Overflow BOD5 shall be monitored instead	
5.5	...The summary report shall contain, at a minimum, the types of information set out in Subsections (2), (3) and (4). If there is no Overflow Event during a quarter, a statement of no occurrence of Overflow is deemed sufficient.	No Occurrence of Overflow.