ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

March 31, 2026

Ministry of the Environment, Conservation and Parks
3rd floor, 101 17th Street East
Owen Sound, Ontario
N4K 0A5

RE: 2025 Southampton Sewage Treatment Plant Annual Sewage Performance Report (ECA #7640-D6FQP3) and Municipal Sewage Collection System Performance Report (CLI-ECA 093-W601) – Town of Saugeen Shores

Please see attached for the 2025 Annual Sewage and Collection System Performance Reports prepared by the Ontario Clean Water Agency on behalf of the Town of Saugeen Shores for the:

- Southampton Sewage Treatment Plant
- Town of Saugeen Shores Municipal Sewage Collection System

This report was completed in accordance with the requirements set out in ECA #7640-D6FQP3 *Condition 11(4)*, issued November 5, 2024 and Municipal Sewage Collection System CLI-ECA #093-W601 *Schedule E (4.6)*, issued January 10, 2023. Your receipt of this report by or before March 31, satisfies the regulatory requirements:

- ECA #7640-D6FQP3 that "The owner shall prepare performance reports on a calendar year basis and submit to the the District Manager by March 31 of the calendar year following the period being reported upon." and;
- CLI-ECA #093-W601 that "The Owner shall prepare an annual performance report for the Authorized System that is submitted to the Director on or before March 31st of each year and covers the period from January 1st to December 31st of the preceding calendar year.

In addition, CLI-ECA #093-W601 requires that report shall be made available, on request and without charge, to members of the public who are served by the Authorized System; and made available, by June 1 of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet. We kindly ask that notification is provided once the report is posted on the Town's Municipal website.

Lastly, the Ministry has indicated that the Municipal Collection System ECA Annual Reports can either be prepared as a separate report or as a subsection of the Annual Sewage Report for the Wastewater Treatment Facility, attached you will find one report that satisfies the reporting requirements of both Environmental Compliance Approvals.

Should you require further clarification on the information found within the Annual Sewage Performance Report, please feel free to contact me.

Sincerely,

Dan MacLeod
Senior Operations Manager
OCWA, Georgian Highlands Region

2025
ANNUAL PERFORMANCE REPORT

SOUTHAMPTON SEWAGE TREATMENT PLANT AND COLLECTION SYSTEM

For the period of:
JANUARY 1, 2025 TO DECEMBER 31, 2025

Prepared for the Town of Saugeen Shores by the Ontario Clean Water Agency

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

SaugeenShores

1. System Description

The Southampton Sewage Treatment Plant began operating in its current configuration in 1996. The plant is a modified extended aeration activated sludge facility, which includes:

- Four (4) secondary clarifiers;
- Two (2) aeration tanks (oxidation ditches);
- Phosphorus removal (by continuous alum addition) and;
- Disinfection of final effluent by ultra-violet light.

The sludge is aerobically digested in the primary and secondary digester and stored in four aerated holding tanks. Digested sludge is land applied as farm fertilizer in accordance with the Non-Agricultural Source Materials (NASM) Guidelines. The plant has storage capability for approximately six months in the event that conditions are not favorable for land application.

An overview of Southampton Sewage Treatment Plant can be found in Table 1:

Table 1. Southampton Sewage Treatment Plant Overview

Facility Name	Southampton Sewage Treatment Plant
Facility Type	Modified Extended Aeration
Plant Classification	II WWT
Works Number	110001453
Design Capacity	3,042 m^3/day
Number of Households	2,318 Residential + 162 Commercial
Receiving Water	Saugeen River
Environmental Compliance Approval/Certificate of Approval	7640-D6FQP3 (Sewage Treatment Plant) (issued November 5, 2024)
	8-1070-95-006 (Air)

2. Monitoring Data

As per Section 11, 4(a), (b) and (g) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates; a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;* and *a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations: (i) when any of the design objectives is not achieved more than 50% of the time in a year, or there is an increasing trend in deterioration of Final Effluent quality; (ii) when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity*; is required.

The Southampton Sewage Treatment Plant was within all effluent objectives and limits (with the exception of Total Phosphorus in February) for the reporting period. Therefore, the design objectives for $CBOD_5$, Total Suspended Solids and E. coli were achieved 100% of the time and 92% of the time for

Total Phosphorus. The annual average daily influent flow for 2025 was 2,180 m^3/day and was 71.7% of the Rated Capacity of 3,042 m^3/day.

2.1 Sampling Frequency

Both raw sewage and effluent are sampled on a regular basis. The sampling types and frequencies are summarized in Table 2 and Table 3. The sampling frequencies either meet or exceed the requirements set out in ECA 7640-D6FQP3.

Table 2. Raw Sewage Monitoring - Sampling Frequencies as required by ECA 7640-D6FQP3 for Southampton Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
BOD_5[2a]	24 hour composite	Monthly
Total Suspended Solids[2a]	24 hour composite	Monthly
Total Phosphorus[2a]	24 hour composite	Monthly
Total Kjeldahl Nitrogen[2a]	24 hour composite	Monthly
Alkalinity[2a]	24 hour composite	Monthly

[2a]Refer to Appendix A for monthly sample results.

Table 3. Effluent Monitoring - Sampling Frequencies as required by ECA 7640-D6FQP3 for Southampton Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
$CBOD_5$[3a]	24 hour composite	Monthly
Total Suspended Solids[3a]	24 hour composite	Monthly
Total Phosphorus[3a]	24 hour composite	Twice per month
Total Ammonia Nitrogen[3a]	24 hour composite	Monthly
Total Kjeldahl Nitrogen[3a]	24 hour composite	Monthly
Nitrate as Nitrogen[3a]	24 hour composite	Monthly
Nitrite as Nitrogen[3a]	24 hour composite	Monthly
E.Coli[3a]	Grab	Monthly
Alkalinity	24 hour composite	Monthly
pH	Grab/Probe/Analyzer	Monthly
Temperature	Grab/Probe/Analyzer	Monthly
Un-ionized Ammonia	As Calculated	Monthly

[3a]Refer to Appendix A for monthly sample results.

2.2 Effluent Objectives and Effluent Limits

The effluent objectives for the Southampton Sewage Treatment Plant are:

Table 4. Effluent Objectives as required by ECA 7640-D6FQP3 for Southampton Sewage Treatment Plant

Parameter	Averaging Calculator	Objective
$CBOD_5$	Annual Average Effluent Concentration	20.0 mg/L
Total Suspended Solids	Annual Average Effluent Concentration	20.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.5 mg/L
E.Coli	Monthly Geometric Mean Density	150 CFU/100 mL
pH	Single Sample Result	6.5 – 8.5 inclusive

The effluent limits and effluent loading limits that are to be met for the Southampton Sewage Treatment Plant are found in Tables 5 and 6. Any exceedance with the limits found in Table 5 or 6 constitutes a non-compliance.

Table 5. Effluent Limits as required by ECA 7640-DFQP3 for Southampton Sewage Treatment Plant

Parameter	Averaging Calculator	Limit
$CBOD_5$	Annual Average Effluent Concentration	25.0 mg/L
Total Suspended Solids	Annual Average Effluent Concentration	25.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	1.0 mg/L
E.Coli	Monthly Geometric Mean Density	200 CFU/100 mL
pH	Single Sample Result	6.0 – 9.5 inclusive

Table 6. Effluent Loading Limits as required by ECA 7640-DFQP3 for Southampton Sewage Treatment Plant

Parameter	Averaging Calculator	Limit
$CBOD_5$	Annual Average Daily Effluent Loading	76.1 kg/d
Total Suspended Solids	Annual Average Daily Effluent Loading	76.1 kg/d
Total Phosphorus	Monthly Average Daily Effluent Loading	3.0 kg/d

2.3 Comparison of Data to Effluent Objectives and Effluent Limits

Analytical and monitoring data for the Southampton sewage treatment is stored in OCWA's data management system (PDM). Annual and monthly averages for flows, $CBOD_5$, Total Suspended Solids, Total Phosphorus as P, Nitrogen-series and *E.coli* can be found in Appendix A. A comparison of analytical data from effluent samples to the effluent objectives and effluent limits show the following removal efficiencies:

Table 7. 2025 Effluent Annual Average Concentrations and Removal Efficiencies

Parameter	Annual Average Concentration (mg/L)	Annual Average Removal Efficiency (%)
Total Suspended Solids	18.40	87.2%
Total Phosphorus as P	0.30	88.9%

The Southampton Sewage Treatment Plant effectively provided effluent that was well within the effluent limits and effluent objectives set out in the ECA, except for Total Phosphorus for the month of February. Refer to Table 8 for a monthly summary of analytical samples with the effluent limits and objectives for the ECA 7640-DFQP3 (issued November 5, 2024).

Table 8: Comparison of Effluent Limits and Objectives to Sampled Effluent as required by ECA 7640-D6FQP3 for Southampton Sewage Treatment Plant (2025)

	$CBOD_5$					**Total Suspended Solids**					**Total Phosphorus**					**E. Coli**			**pH**			
	Average Annual Concentration (mg/L)	Within Objectives (20 mg/L)	Within Limits (25 mg/L)	Average Annual Loading (kg/d)	Within Limits (76.1 kg/d)	Average Annual Concentration (mg/L)	Within Objectives (20 mg/L)	Within Limits (25 mg/L)	Average Annual Loading (kg/d)	Within Limits (76.1 kg/d)	Average Monthly Concentration (mg/L)	Within Objectives (0.5 mg/L)	Within Limits (1 mg/L)	Average Monthly Loading (kg/d)	Within Limits (3 kg/d)	Monthly Geometric Mean Density (mg/L)	Within Objectives (150 CFU/ 100 mL)	Within Limits (200 CFU/ 100 mL)	2025 Minimum	2025 Maximum	Within Objectives (6.5 - 8.5 inclusive)	Within Limits (6.0 – 9.0 inclusive)
January	3.36	Yes	Yes	6.62	Yes	18.40	Yes	Yes	35.1	Yes	0.09	Yes	Yes	0.17	Yes	2.45	Yes	Yes	7.02	7.99	Yes	Yes
February											1.57	**No**	**No**	2.54	Yes	1.73	Yes	Yes				
March											0.25	Yes	Yes	0.82	Yes	14.97	Yes	Yes				
April											0.13	Yes	Yes	0.40	Yes	15.68	Yes	Yes				
May											0.14	Yes	Yes	0.27	Yes	1.00	Yes	Yes				
June											0.14	Yes	Yes	0.25	Yes	1.41	Yes	Yes				
July											0.22	Yes	Yes	0.40	Yes	9.00	Yes	Yes				
August											0.31	Yes	Yes	0.58	Yes	9.59	Yes	Yes				
September											0.29	Yes	Yes	0.45	Yes	4.90	Yes	Yes				
October											0.23	Yes	Yes	0.36	Yes	2.83	Yes	Yes				
November											0.18	Yes	Yes	0.27	Yes	4.47	Yes	Yes				
December											0.19	Yes	Yes	0.36	Yes	1.00	Yes	Yes				

2.4 Additional Monitoring Parameters

The following parameters do not have limits or objectives but are monitored on a regular basis (see Section 3.1 for sampling frequency) as required by ECA 7640-D6FQP3. Table 9 and 10 summarizes the monitoring data for the reporting period. Appendix A presents the monthly results; however, the maximum values reported in Tables 9 and 10 may differ. This is because Tables 9 and 10 show the highest individual results, while Appendix A reflects the maximum of the monthly average values.

Table 9. Raw Sewage Monitoring Parameters as required for Southampton Sewage Treatment Plant, 2025

Parameters	Average	Minimum	Maximum
BOD_5[9a] (mg/L)	106.68	38.00	227.00
Total Suspended Solids[9a] (mg/L)	171.72	52.00	433.00
Total Phosphorus[9a] (mg/L)	2.87	0.83	7.10
Total Kjeldahl Nitrogen[9a] (mg/L)	24.33	9.00	43.00
Alkalinity (mg/L as $CaCO_3$)	274.68	241.00	307.00

[9a]Refer to Appendix A for monthly sample results.

Compared to the previous year, 2025 average concentrations for BOD_5, TKN, and alkalinity remained stable, while TSS and TP showed slight increases. Minimum values for all parameters (BOD_5, TSS, TP, TKN, and alkalinity) were lower in 2025. Maximum results decreased for BOD_5, TP, and alkalinity, whereas TSS and TKN exhibited higher maximum values.

Table 10. Effluent Monitoring Parameters as required for Southampton Sewage Treatment Plant, 2025

Parameters	Average	Minimum	Maximum
Total Kjeldahl Nitrogen (mg/L)	0.88	0.50	4.80
Total Ammonia Nitrogen[10a] (mg/L)	0.32	0.10	4.80
Nitrite and Nitrate[10a] (mg/L)	17.81	0.06	27.60
Alkalinity (mg/L as $CaCO_3$)	93.96	37.00	174.00
Temperature (°C)	13.09	4.00	22.50

[10a]Refer to Appendix A for monthly sample results.

Compared to the previous year, 2025 average concentrations for Nitrite + Nitrate, alkalinity and temperature remained stable, while TKN and TAN showed increases. Minimum values were unchanged for TKN, TAN and alkalinity but declined for Nitrite + Nitrate and temperature. In contrast, maximum concentrations increased across all parameters in 2025.

2.5 Influent Flow Summary

The below table (Table 11) outlines the influent average monthly flow data and average monthly flowrates. Figure 1 below shows the monthly average flow rate compared to the previous 4 years.

Table 11. Influent Monthly Average Flows and Flowrates, 2025

2025	Average Influent Flow (m^3/d)	Average Influent Flowrate (L/s)
January	2,033	23.79
February	1,653	19.33
March	3,594	42.19
April	3,371	39.04
May	2,211	25.81
June	1,993	23.30
July	2,013	23.47
August	2,016	23.57
September	1,717	19.44
October	1,726	19.85
November	1,686	19.67
December	2,095	24.41
2025 Annual Average	**2,180**	**25.37**

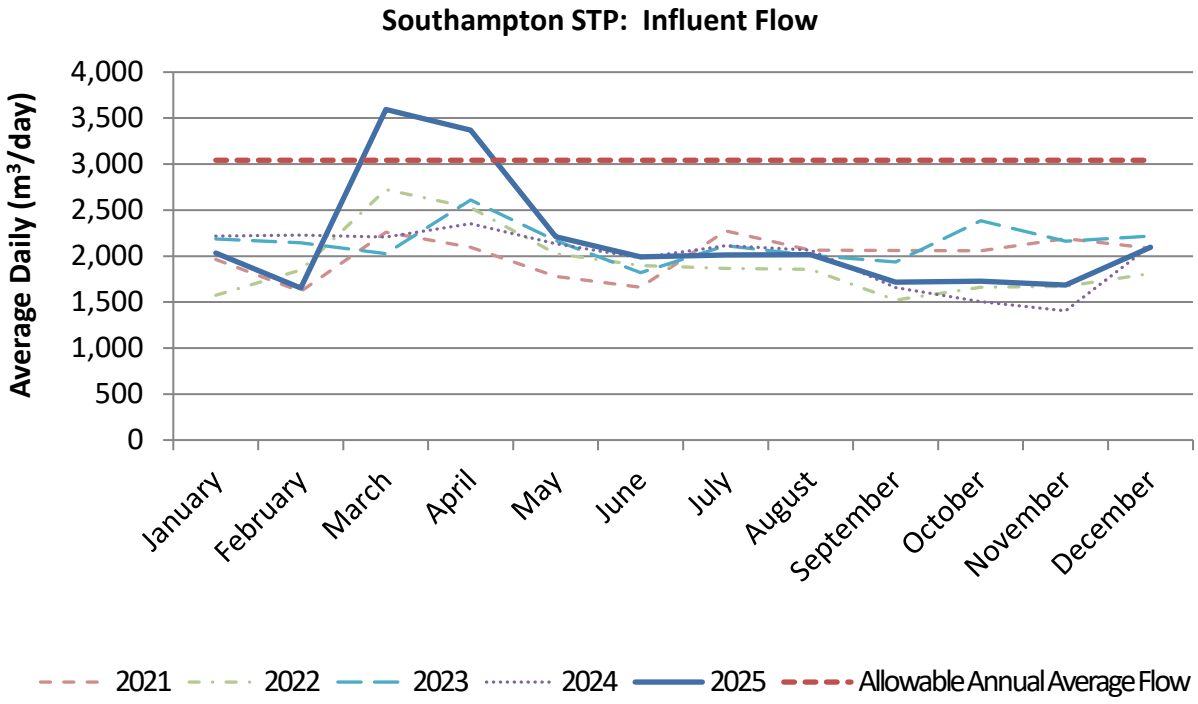

Figure 1. Southampton STP Influent Flow (2021-2025)

Table 12. Influent flows, 2025

Pump Station	**Average Daily Flow** (m^3/day)	**Total Annual Flow** (m^3)	**Percentage of Rated Capacity** (3,042 m^3/d)
Influent	2,180	795,590	71.7%

The 2025 influent total annual flow and average daily flow are higher when compared to the previous year.

2.6 Effluent Flow Summary

The below table (Table 13) outlines the effluent average monthly flow data and average monthly flowrates. Figure 2 below shows the monthly average flow rate compared to the previous 4 years.

Table 13. Effluent Monthly Average Flows and Flowrates, 2025

2025	**Average Effluent Flow** (m^3/d)	**Average Effluent Flowrate**
January	1,970	23.02
February	1,615	18.87
March	3,446	39.82
April	3,185	36.90
May	2,026	23.65
June	1,865	21.81
July	1,870	21.80
August	1,897	22.18
September	1,644	18.47
October	1,612	18.32
November	1,550	18.10
December	1,958	22.82
2025 Annual Average	**2,057**	**23.86**

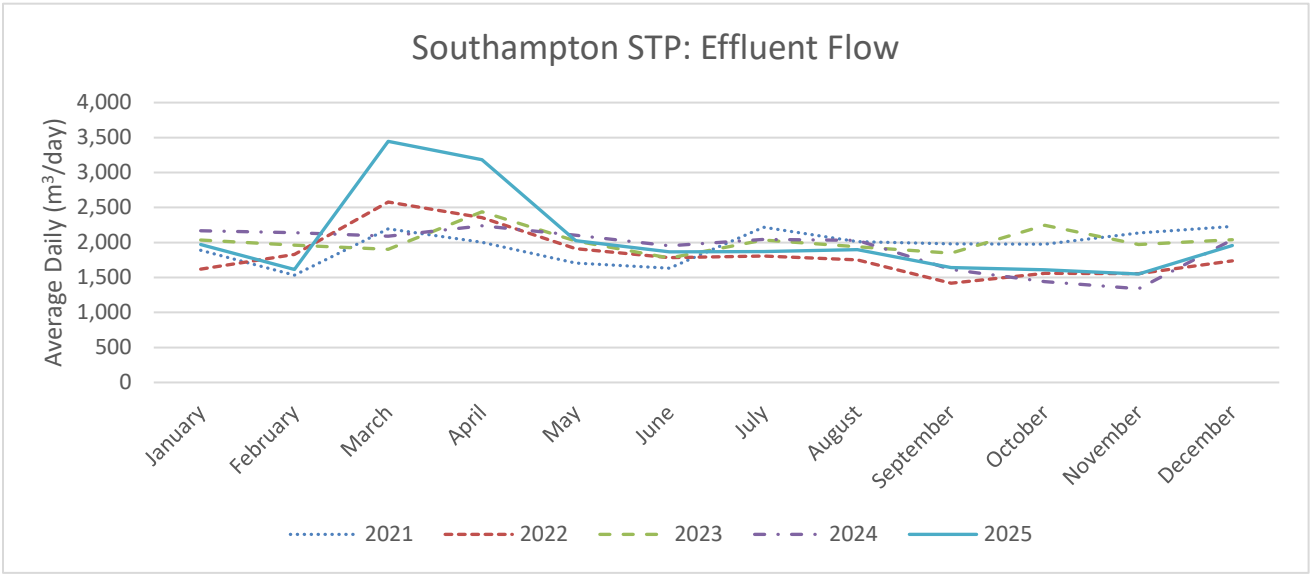

Figure 2. Southampton STP Effluent Flow (2021-2025)

2.7 Review of Historical Trends of Influent Characteristics

A review of the historical trends for influent sewage characteristics, shown in Figures 3 to 7, indicate the following:

- Alkalinity – Since 2021, Alkalinity has remained stable. The annual average concentrations were as follows: 2021 (282.32 mg/L), 2022 (283.44 mg/L), 2023 (274.92 mg/L), 2024 (279.77 mg/L) and 2025 (274.68mg/L as $CaCO_3$).
- Biochemical Oxygen Demand$_5$ (BOD_5) – Since 2021, BOD_5 has increased. The annual average concentrations were as follows: 2021 (90.44 mg/L), 2022 (84.18 mg/L), 2023 (88.29 mg/L), 2024 (101.42 mg/L) and 2025 (106.68 mg/L).
- Total Kjeldahl Nitrogen (TKN) – Since 2021, TKN has remained stable. The annual average concentrations were as follows: 2021 (24.78 mg/L), 2022 (28.36 mg/L), 2023 (22.51 mg/L), 2024 (24.18 mg/L) and 2025 (24.33 mg/L).
- Total Phosphorus (TP) – Since 2021, TP has remained stable. The annual average concentrations were as follows: 2021 (2.83 mg/L), 2022 (3.08 mg/L), 2023 (2.96 mg/L), 2024 (3.00 mg/L) and 2025 (2.87 mg/L).
- Total Suspended Solids (TSS) – Since 2021, TSS has increased. The annual average concentrations were as follows: 2021 (130.76 mg/L), 2022 (130.96 mg/L), 2023 (150.04 mg/L), 2024 (137.38 mg/L) and 2025 (171.72 mg/L).

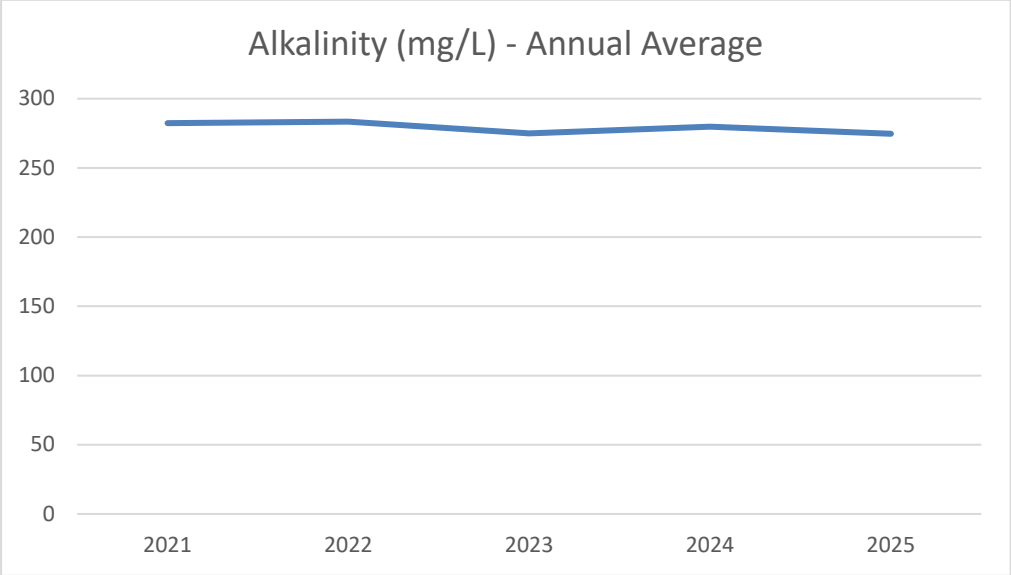

Figure 3. Southampton STP Influent Alkalinity (2021-2025)

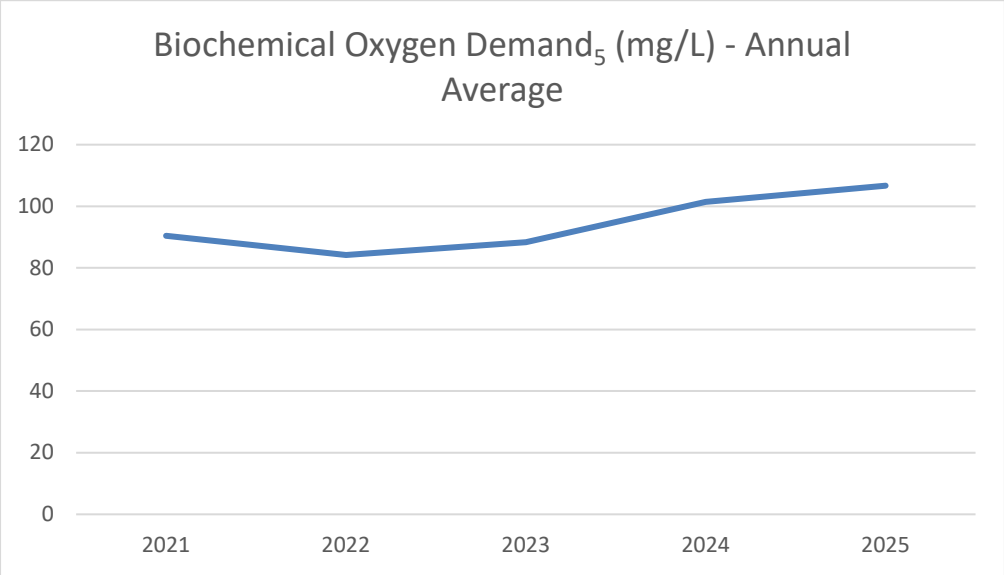

Figure 4. Southampton STP Influent BOD_5 (2021-2025)

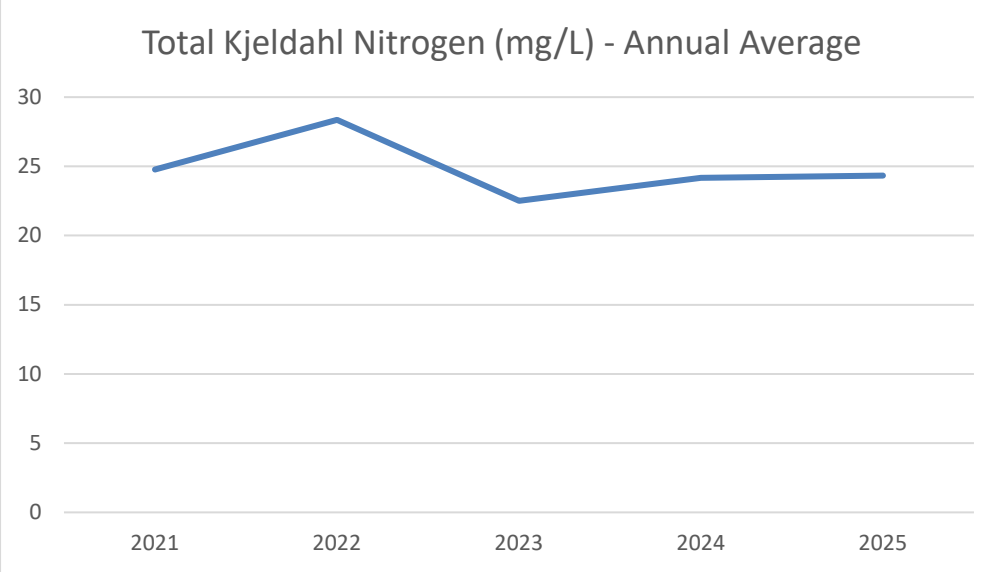

Figure 5. Southampton STP Influent Total Kjeldahl Nitrogen (2021-2025)

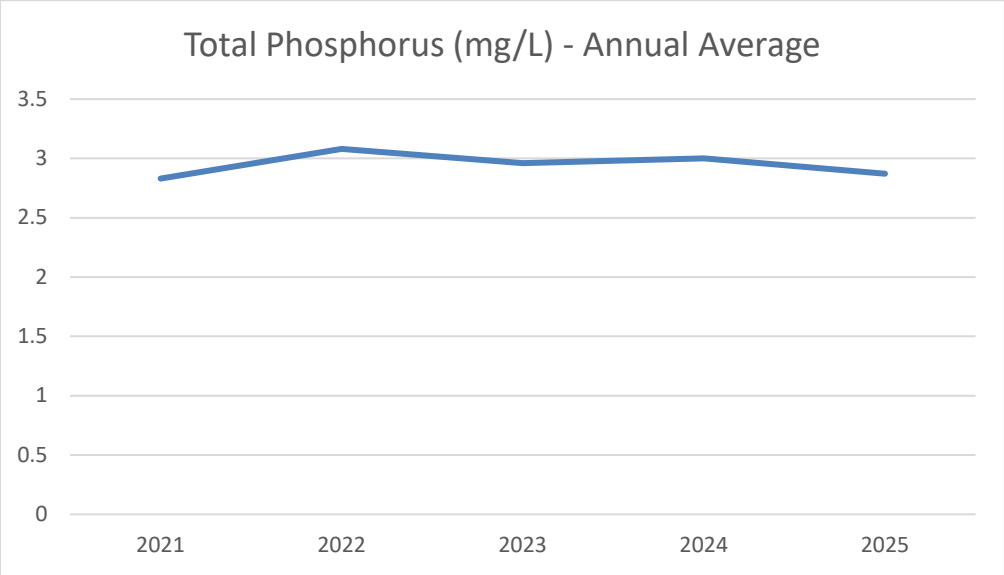

Figure 6. Southampton STP Influent Total Phosphorus (2021-2025)

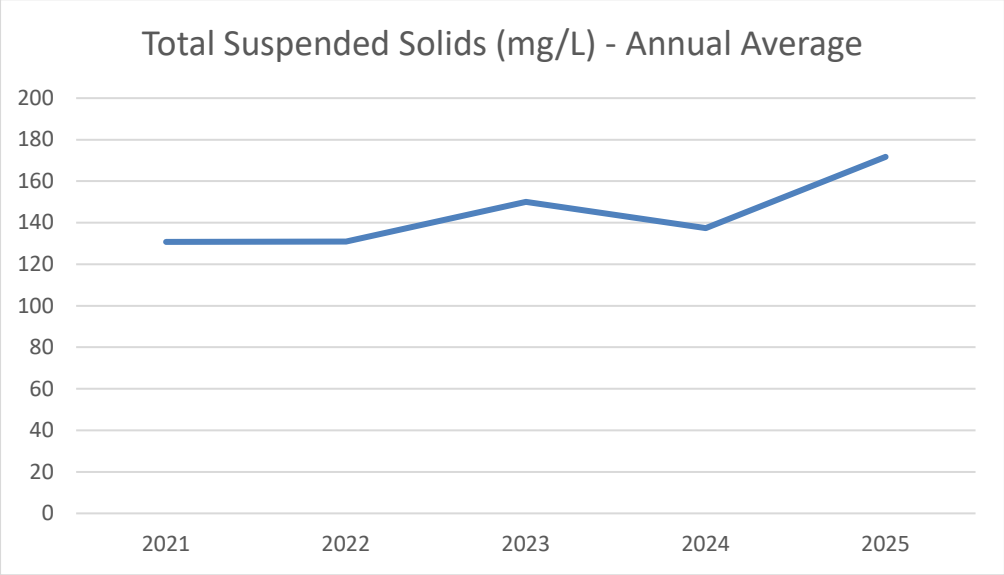

Figure 7. Southampton STP Influent Total Suspended Solids (2021-2025)

3. Operational Issues and Corrective Actions

As per Section 11,(4)(c) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of all operating issues encountered and corrective actions taken* is required.

In 2025, there following operating problems were encountered:

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
Total Phosphorus Regulatory Limit Exceedance	February	• Adjusted operations to counteract • Reported to MECP • Samples taken

See Appendix H for notifications sent to the Ministry.

4. Major Maintenance Activities

As per Section 11, (4)(d) of Environmental Compliance Approval (ECA) 7640-D6FQP3*, a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;* is required.

For 2025, major maintenance activities that occurred include:

- Replaced damaged chain links in clarifier 3
- Repaired decant arm cable in secondary digester
- Replaced inboard bearing on ditch #1
- Installed new gear reducer in ditch #2
- Replaced rotor drive gear reducer
- Replaced swivel joint on digester
- Replaced chains in clarifier 3
- Replaced gear reducer in clarifier 1

4.1 Completed Notice of Modifications

As per Section 11, (4)(k) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification*, is required.

There were no Notice of Modification forms submitted during the reporting period.

4.2 Summary of Efforts Made to Achieve Conformance with Procedure F-5-1

As per Section 11, (4)(l) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted*, is required.

See Section 4.1 for summary of modifications completed. Southampton Sewage Treatment Plant was within all effluent objectives and limits for the reporting period (with the exception of Total Phosphorus in February). However, considering the systems age and the projected growth of the municipality, modifications for increased capacity are required in the near future.

4.3 Changes/Updates to Construction and Commissioning Schedule in Proposed Works

As per Section 11, (4)(m) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es)/equipment groups in the Proposed Works,* is required.

There have not been any changes or updates to construction schedules.

5. Effluent Quality Assurance and Control

As per Section 11,(4)(e) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of any effluent quality assurance or control measures undertaken,* is required.

All laboratory analyzed raw sewage and effluent samples are analyzed by SGS Canada Inc., a laboratory audited by the Canadian Association for Laboratory Accreditation Inc. (CALA) and accredited by the Standards Council of Canada (SCC). Accreditation ensures that the laboratory has acceptable laboratory protocols and test methods in place. It also requires the laboratory to provide evidence and assurances of the proficiency of the analysts performing the test methods. In-house tests are conducted for monitoring purposes by licensed operators using standardized methods. The results from in-house tests are used to determine treatment efficiency and how effectively process control is maintained. Calibrations and preventative maintenance are performed on facility equipment and monitoring equipment, see Section 6 for more details. In addition to sample analysis, preventative maintenance is scheduled for equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Preventative maintenance activities were scheduled within the work management system (WMS).

6. Calibration and Maintenance Procedures

As per Section 11, (4)(f) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of the calibration and maintenance procedures carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;* is required.

All in-house monitoring equipment is calibrated/verified as per manufacturer's recommendations. Monitoring and metering equipment is also calibrated by a third party on an annual basis. Preventative maintenance is scheduled for all equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the work management system (WMS), upon completion, operators set the work order to complete. On a monthly basis, preventative work orders are reviewed for completion.

On May 14 and 15, 2025, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge and pumping station flow meters. All flow meters passed the annual verification. On April 7 and October 7, 2025 SPD Sales Ltd. calibrated the gas detection equipment. On May 23, 2025, SPD Sales Ltd. calibrated spectrophotometers, portable meters, colourimeters, and DO probes, used in the Southampton Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were calibrated and verified that the devices were performing to factory specifications.

All records for the calibrations/ verifications mentioned above can be found in Appendix D.

7. Sludge Generation & Disposal

As per Section 11, (4)(h) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed* is required.

A total volume of 2,904 m^3 of sludge was generated from the Southampton Sewage Treatment Plant and applied to agricultural land during the reporting period. Table 14 summarizes the sludge haulage volumes for 2025. The hauling and spreading of sludge from the Southampton Sewage Treatment Plant was conducted by Bartels Environmental Services Inc.

A chemical analysis of the sludge/biosolids quality can be found in Appendix B.

Table 14. Volume of Sludge Generated from Southampton Sewage Treatment Plant

Site	Volume of Sludge Generated (m^3)	Hauler	Haulage Dates
25069	1,452	Bartel's Environmental	April 30, May 1 and 2, 2025
61280	1,452	Bartel's Environmental	October 8 and 9, 2025

Based on a linear regression with an R^2 value of 70%, the anticipated volume to be generated over the next reporting period is approximately 3,100 m^3.

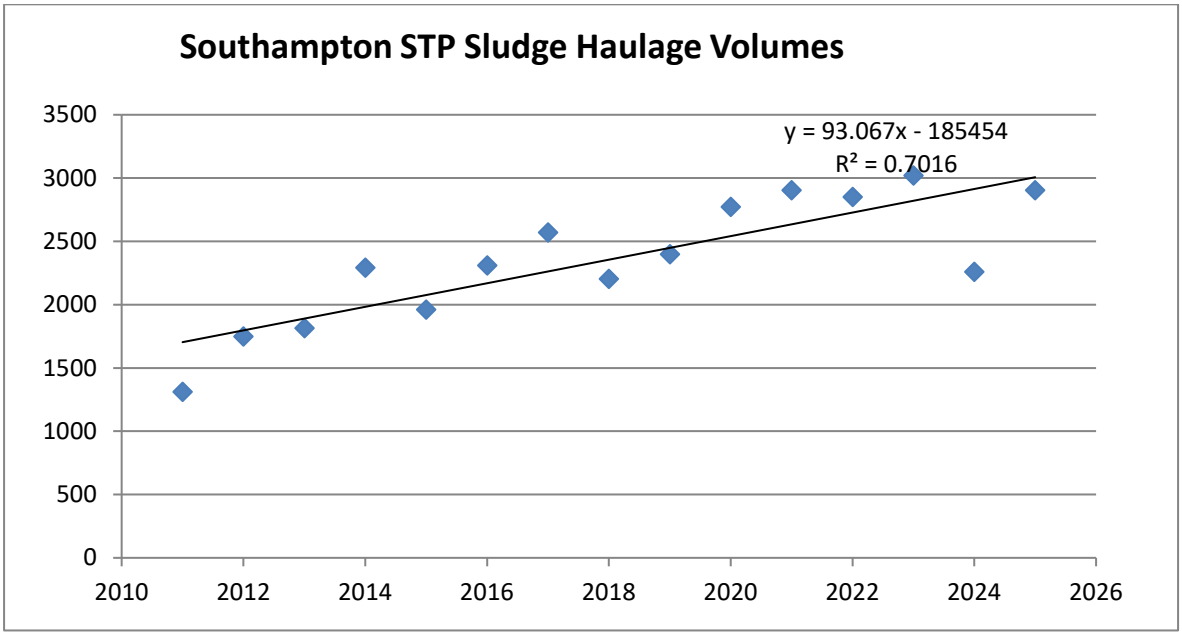

Figure 8. Southampton Sewage Treatment Plant Haulage Volumes (2011 to 2026)

In 2025, sludge was handled and hauled by Bartel's Environmental Services Inc. and applied to Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) approved Non-Agricultural Source Material Plans (NASM Plans) and C of As based on Ontario Regulation 338/09 made under the Nutrient Management Act, 2002. NASM Plans under the Nutrient Management Act are issued to the owner (farmer) who is responsible for managing this plan with assistance from the NASM Plan Developer. See Appendix C for Sludge Haulage Records for Southampton Sewage Treatment Plant.

Grab samples of digested (aerobic) sludge were collected as the sludge was being transferred from the digester to the hauling truck (see Appendix B for laboratory results). With the exception of total solids and volatile suspended solids, all other samples were analyzed by SGS Canada Inc. Sludge analyses

showed that the sludge met the quality criteria specified in the Ontario Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land (Guidelines). A summary of sludge haulage are attached in Appendix C and sample and quality report results are attached in Appendix B.

8. Community Complaints

As per Section 11, (4)(i) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of complaints received and any steps taken to address the complaints,* is required.

During the reporting period for both the sewage treatment plant and the collection system, OCWA staff received four (4) community complaints, all pertaining to odour. Typically, the Town will address complaints by verifying if there are odours in the surrounding area physically by attending the location of the complaint and creating an odour log. Bioxide, an odourless, colourless non-hazardous liquid, was added at Pump Station 4 in 2025. Bioxide prevents the formation of H2S and as a result aids in eliminating foul odours within the collection system. A pilot study was performed through the Winter 2025/2026 to see if this product may be a long term solution.

See Appendix E for a record of community complaints made to OCWA during the reporting period.

9. By-passes, Spills & Discharge Events

As per Section 11, (4)(j) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;* is required.

Quarterly summary reports of Bypass and Overflow Event(s) were prepared and submitted to the MECP in accordance with the facility's most current ECA, Section 4.6 and 5.6. See Appendix H for the quarterly submissions to the Ministry.

The following events occurred in 2025:

Date (yyyy/mm/dd)	**Event**	**Details**
N/A	N/A	N/A

10. Monitoring Schedule

As per Section 11, (4)(n) of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year*, is required.

There were six (6) deviations from the monitoring schedule during the reporting period. The following dates had deviations:

- February 11, 2025 – The autosampler line was frozen. A sample was taken February 12, 2025.
- April 22, 2025 – The autosampler line was leaking. A sample was taken April 23, 2025.
- May 6, 2025 – The autosampler aborted halfway through the sample set. A sample was taken May 7, 2025.
- July 1, 2025 – This was a statutory holiday. A sample was taken July 2, 2025.

- July 29, 2025 – The effluent channel had just been cleaned that day and the sample would not have been representative of the effluent. A sample was taken July 30, 2025.
- September 23, 2025 – The autosampler stopped due to rags being caught in the raw intake line. A sample was take September 24, 2025.

As per Section 9, (1)(d)of Environmental Compliance Approval (ECA) 7640-D6FQP3, *a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week/month for the scheduled sampling program,* is required. In 2025, the sample day was Tuesday according to the schedule. The sampling schedule has been updated for 2026 with a sample day of Wednesday. See Appendix F for the 2026 Monitoring Schedule.

11. Municipal Sewage Collection System – Annual Performance Report

This report was prepared in accordance with the requirements of the Environmental Compliance Approval for a Municipal Sewage Collection Systems, Schedule E, Section 4.6.1.

Municipal Sewage Collection System ECA #	093-W601, Issue 1
Sewage Works	Saugeen Shores Municipal Sewage Collection System
Collection System Owner	The Corporation of the Town of Saugeen Shores
Reporting Period	January 1, 2025 to December 31, 2025

Is the Annual Report available to the public at no charge on a website on the Internet?

Yes

Note: As per Schedule E, Section 4.7.1 of CLI-ECA #093-W601, the annual performance report must be made available, on request and without charge, to members of the public who are served by the Authorized System; and 4.7.2 must be made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

Location where Annual Performance Report required under CLI-ECA #093-W601 Schedule E will be available for inspection. *(CLI-ECA #093-W601, Schedule E, Section 4.7.1 & 4.7.2):*

- Town of Saugeen Shores Municipal Office, 600 Tomlinson Dr., Port Elgin, ON N0H 2C0
- https://www.saugeenshores.ca/en/town-hall/water-reports.aspx

Pursuant to Schedule E, sections 4.6.3 to 4.6.9, this Annual Performance Report shall:

a) If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.

b) If applicable, include a summary of any operating problems encountered and corrective actions taken.

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

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

e) Include 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.

f) Include a summary of all Collection System Overflow(s) and Spill(s) of Sewage.

g) Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses.

11.1 Description of the Works

The Town of Saugeen Shores Municipal Sewage Collection System consists of two separate subsystems; the Port Elgin Wastewater Collection Subsystem and the Southampton Wastewater Collection Subsystem. For the purposes of this annual report, only the Southampton Wastewater Collection Subsystem will be included. For further information on the Port Elgin Wastewater Collection System, please refer to the Port Elgin WPCP 2025 Annual Performance Report.

The Southampton Wastewater Collection Subsystem consists of sewage works for the collection and transmission of sewage, consisting of trunk sewers, separate sewers, sewage pumping stations, and forcemains, with discharge into the Southampton Water Pollution Control Plant.

The sewage pumping station in Authorized System include:

- Southampton Sewage Pumping Station #1 – located at 86 Saugeen St. Consists of drywell, control building, two pumps, a stand-by diesel generator and discharges to the Southampton Sewage Treatment Plant.
- Southampton Sewage Pumping Station #2 – located at 3 Beach Rd. Consists of wetwell, control building, two pumps, a stand-by diesel generator and discharges to a gravity sewer on Huron St and then flows to PS #1.
- Southampton Sewage Pumping Station #3 – located at 315 Clarendon St. Consists of wetwell, two pumps, a stand-by diesel generator and discharges to the Southampton Sewage Treatment Plant into the same forcemain as PS #1.
- Southampton Sewage Pumping Station #4 – located at 489 Eckford Ave. Consists of wetwell, two pumps, a stand-by diesel generator (shared with Turner St. Control Station) and discharges to a gravity sewage collection system near Blanchfield and Turner St., which then flows by gravity to PS #5.
- Southampton Sewage Pumping Station #5 – located at 130 Shore Rd. Consists of wetwell, two pumps, a stand-by diesel generator (shared with Turner St. Control Station) and discharges to the Southampton Sewage Treatment Plant.

11.2 Summary of Monitoring Data and Interpretation

No monitoring data was required within the municipal sewage collection system for the reporting period.

11.3 Summary of Operating Problems Encountered and Corrective Actions Taken

There were no operating problems encountered within the municipal sewage collection system for the reporting period.

11.4 Summary of Calibration, Maintenance and Repairs

All in-house monitoring equipment is calibrated/verified as per manufacturer's recommendations. Monitoring and metering equipment is also calibrated by a third party on an annual basis. Preventative maintenance is scheduled for all equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the work management system Maximo, upon completion, operators set the work order to complete. On a monthly basis, preventative work orders are reviewed for completion.

On May 14 and 15, 2025, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge and pumping station flow meters. All flow meters passed the annual verification. On April 7 and October 7, 2025 SPD Sales Ltd. calibrated the gas detection equipment. On May 23, 2025, SPD Sales Ltd. calibrated spectrophotometers, portable meters, colourimeters, and DO probes, used in the Southampton Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were calibrated and verified that the devices were performing to factory specifications.

All records for the above mentioned calibrations/ verifications can be found in Appendix D.

Major maintenance activities for the sewage pump stations can be found in section 11.6 of this report.

11.5 Community Complaints Received in Relation to the Sewage Works

Refer to Section 8 of this report for community complaints received during the reporting period. See Appendix E for a record of community complaints made to OCWA during the reporting period.

11.6 Alterations to the Authorized System

For 2025, major maintenance activities that occurred within the Authorized System include:

- Replaced H_2S sensor in PS1
- Installed new methane sensor at PS1
- Installed Bioxide odour control system at PS4

See Appendix G for any submissions to the Ministry for alterations to the collection system.

11.7 Summary of Collection System Overflow(s) and Spill(s) of Sewage

There were no collection system overflow or spill events that occurred during the reporting period.

11.8 Efforts Made to Reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses.

The sewage pump stations are equipped with alarm monitoring for high flow events. Preventative maintenance procedures are in place to ensure the sewage pump stations are operating as designed and include:

- Wet well cleanouts
- Daily inspections of pump stations
- Annual cleanouts
- Pump inspections
- Alarm testing
- Generator inspection and maintenance

ONTARIO CLEAN WATER AGENCY
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Appendix A

Performance Assessment Report

Performance Assessment Report

From 1/1/2025 to 12/31/2025 11:59:59 PM

5613 SOUTHAMPTON WASTEWATER TREATMENT FACILITY 110001453

	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 Sewage m³/d	63,017.60	46,272.99	111,402.27	101,137.69	68,539.53	59,783.90	62,402.52	62,488.50	51,510.87	53,522.94	50,570.00	64,941.29	795,590.08			0.00
Raw Flow: Avg - Raw Sewage m³/d	2,032.83	1,652.61	3,593.62	3,371.26	2,210.95	1,992.80	2,012.98	2,015.76	1,717.03	1,726.55	1,685.67	2,094.88		2,179.70		6,083.00
Raw Flow: Max - Raw Sewage m³/d	3,262.40	2,048.08	5,968.89	5,541.53	2,518.06	2,459.12	2,304.35	2,303.04	2,197.87	2,100.13	1,865.92	3,112.81			5,968.89	0.00
Raw Flow: Count - Raw Sewage m³/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 - Final Effluent m³/d	61,104.00	45,233.00	104,378.00	95,586.00	62,835.00	55,971.00	57,989.00	58,860.00	47,510.00	48,624.00	46,512.00	60,712.00	745,314.00			0.00
Eff. Flow: Avg - Final Effluent m³/d	1,971.10	1,615.46	3,367.03	3,186.20	2,026.94	1,865.70	1,870.61	1,898.71	1,583.67	1,568.52	1,550.40	1,958.45		2,057.00		
Eff. Flow: Max - Final Effluent m³/d	2,740.00	1,858.00	6,160.00	5,486.00	2,289.00	2,344.00	2,059.00	2,267.00	2,110.00	2,054.00	1,814.00	2,968.00			6,160.00	0.00
Eff Flow: Count - Final Effluent m³/d	93.00	84.00	93.00	90.00	93.00	90.00	93.00	93.00	90.00	93.00	90.00	93.00	1,095.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Final Effluent mg/L	3.00	10.00	3.00 <	2.00 <	4.50 <	3.50 <	3.00 <	2.50 <	2.50	2.50	2.00 <	2.00		3.36	10.00	
Eff: # of samples of cBOD5 - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Loading: cBOD5 - Final Effluent kg/d	5.913	16.155	10.101 <	6.372 <	9.121 <	6.530 <	5.612 <	4.747 <	3.959	3.921	3.101 <	3.917		6.621	16.15	
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw Sewage mg/L	96.00	120.00	80.50	61.50	181.50	89.00	82.00	124.50	142.00	100.50	118.00	97.00		106.68	181.50	0.00
Raw: # of samples of BOD5 - Raw Sewage	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Eff: Avg BOD5 - Final Effluent mg/L	< 4.00	13.50	4.50	4.50	3.00 <	3.00 <	2.00	2.00	3.50	2.00 <	2.00	3.00		< 3.92	< 13.50	25.00
Loading: BOD5 - Final Effluent kg/d	< 7.884	21.809	15.152	14.338	6.081 <	5.597 <	3.741	3.797	5.543	3.137 <	3.101	5.875		< 2.67	< 21.81	76.100
Percent Removal: BOD5 - Raw Sewage %	95.83	88.75	94.41	92.68	98.35	96.63	97.56	98.39	97.54	98.01	98.31	96.91		96.11	98.39	0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw Sewage mg/L	145.00	154.00	85.50	73.50	357.50	209.50	180.00	186.00	224.00	130.50	124.00	187.00		171.72	357.50	0.00
Raw: # of samples of TSS - Raw Sewage	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Eff: Avg TSS - Final Effluent mg/L	10.00	111.00	14.50	8.00	8.50	9.00	5.67	8.50	17.00	8.00	14.00	13.00		18.40	111.00	25.00
Eff: # of samples of TSS - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Loading: TSS - Final Effluent kg/d	19.711	179.317	48.822	25.490	17.229	16.791	10.600	16.139	26.922	12.548	21.706	25.460		35.061	179.32	76.100
Percent Removal: TSS - Raw Sewage %	93.10	27.92	83.04	89.12	97.62	95.70	96.85	95.43	92.41	93.87	88.71	93.05		87.24	97.62	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw Sewage mg/L	2.37	3.19	1.54	1.31	5.05	3.15	3.10	4.15	3.16	3.14	1.78	2.42		2.87	5.05	0.00
Raw: # of samples of TP - Raw Sewage	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Eff: Avg TP - Final Effluent mg/L	0.09	1.57	0.25	0.13	0.14	0.14	0.22	0.31	0.29	0.23	0.18	0.19		0.30	1.57	1.00
Eff: # of samples of TP - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Loading: TP - Final Effluent kg/d	0.168	2.536	0.825	0.398	0.274	0.252	0.405	0.579	0.451	0.361	0.271	0.362		0.21	2.54	3.000
Percent Removal: TP - Raw Sewage %	96.41	50.71	84.09	90.46	97.33	95.71	93.00	92.64	90.97	92.68	90.14	92.34		88.87	97.33	0.00
Nitrogen Series																
Raw: Avg TKN - Raw Sewage mg/L	20.70	29.60	12.90	11.55	31.20	23.55	28.27	32.45	26.95	30.00	20.10	22.70		24.33	32.45	0.00
Raw: # of samples of TKN - Raw Sewage	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Eff: Avg TAN - Final Effluent mg/L	< 0.10	< 0.10	< 0.15	< 0.10	< 0.20	2.50 <	0.20 <	0.10 <	0.10 <	0.10 <	0.10 <	0.10		< 0.32	< 2.50	
Eff: # of samples of TAN - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Loading: TAN - Final Effluent kg/d	< 0.197	< 0.162	< 0.505	< 0.319	< 0.405	4.664 <	0.374 <	0.190 <	0.158 <	0.157 <	0.155 <	0.196		< 0.22	< 4.66	
Eff: Avg NO3-N - Final Effluent mg/L	16.85	16.95	11.10	12.10	19.95	17.65 <	13.62	17.30	22.15	27.15	20.80	18.85		17.87	27.15	0.00
Eff: # of samples of NO3-N - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Eff: Avg NO2-N - Final Effluent mg/L	< 0.03	< 0.03	< 0.03	< 0.03	< 0.16	1.19 <	0.03 <	0.03 <	0.03 <	0.03 <	0.03 <	0.03		< 0.14	< 1.19	0.00
Eff: # of samples of NO2-N - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00
Disinfection																
Eff: GMD E. Coli MPN - Final Effluent MPN	2.45	1.73	14.97	15.68	1.00	1.41	9.00	9.59	4.90	2.83	4.47	1.00				
Eff: # of samples of E. Coli MPN - Final Effluent	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	25.00			0.00

ONTARIO CLEAN WATER AGENCY
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Appendix B

Sludge Quality Sample Analysis

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110001453
Project : PO#017018

07-May-2025

OCWA-Bruce (Southampton WPCP)
Attn : Karla Young

P.O. Box 760
Southampton, ON
N0H 2L0, Canada

Phone: 519-797-2561
Fax:pdf

Date Rec. : 01 May 2025
LR Report: **CA13015-MAY25**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Bslq Bslq-Sludge Quality Hauled Sludge
Sample Date & Time					30-Apr-25 06:45
Temperature Upon Receipt [°C]	---	---	---	---	8.0
Total Solids [mg/L]	01-May-25	20:03	05-May-25	07:29	28000
Total Solids (ASH) [mg/L]	01-May-25	20:03	05-May-25	07:29	9230
Total Solids (LOI) [mg/L]	45778	0.84	05-May-25	07:29	18800
pH [pH Units]	06-May-25	08:26	06-May-25	15:37	4.40
Total Kjeldahl Nitrogen [as N mg/L]	02-May-25	10:43	06-May-25	12:05	1080
Ammonia+Ammonium (N) [as N mg/L]	02-May-25	10:39	05-May-25	10:49	2.7
Nitrite (as N) [mg/L]	02-May-25	08:05	05-May-25	13:27	< 3
Nitrate (as N) [mg/L]	02-May-25	08:05	05-May-25	13:27	460
Nitrate + Nitrite (as N) [mg/L]	02-May-25	08:05	05-May-25	13:27	460
Arsenic [mg/L]	05-May-25	14:18	06-May-25	15:44	0.1
Cadmium [mg/L]	05-May-25	14:18	06-May-25	15:44	0.019
Cobalt [mg/L]	05-May-25	14:18	06-May-25	15:44	0.05
Chromium [mg/L]	05-May-25	14:18	06-May-25	15:44	0.31
Copper [mg/L]	05-May-25	14:18	06-May-25	15:44	11
Mercury [mg/L]	05-May-25	14:18	06-May-25	15:44	0.005
Potassium [mg/L]	05-May-25	14:18	06-May-25	15:44	60
Molybdenum [mg/L]	05-May-25	14:18	06-May-25	15:44	0.12
Nickel [mg/L]	05-May-25	14:18	06-May-25	15:44	0.28
Phosphorus (Total) [mg/L]	05-May-25	14:18	06-May-25	15:44	801
Lead [mg/L]	05-May-25	14:18	06-May-25	15:44	0.3
Selenium [mg/L]	05-May-25	14:18	06-May-25	15:44	0.1
Zinc [mg/L]	05-May-25	14:18	06-May-25	15:44	11
E. Coli [MPN/1g dried wgt]	01-May-25	14:07	02-May-25	17:23	<36
E. Coli [MPN/100mL]	01-May-25	14:07	02-May-25	17:23	< 100

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110001453

Project : PO#017018
LR Report : **CA13015-MAY25**

Note: Metals and mercury were analyzed on the as-received sample.
The E.coli value reported in MPN/1g dried weight was calculated using Total Solids and MPN/100ml.

Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

OnLine LIMS

0004102821

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110001453
Project : PO#017018

17-October-2025

OCWA-Bruce (Southampton WPCP)
Attn : Karla Young

P.O. Box 760
Southampton, ON
N0H 2L0, Canada

Phone: 519-797-2561
Fax:pdf

Date Rec. : 09 October 2025
LR Report: **CA13455-OCT25**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Bpd Bpd-Primary Digester Contents
Sample Date & Time					07-Oct-25 07:30
Temperature Upon Receipt [°C]	---	---	---	---	11.0
Total Solids [mg/L]	09-Oct-25	19:47	13-Oct-25	18:30	26900
Total Solids (ASH) [mg/L]	09-Oct-25	19:47	13-Oct-25	18:30	11600
Total Solids (LOI) [mg/L]	09-Oct-25	19:47	13-Oct-25	18:30	15300
pH [pH Units]	14-Oct-25	15:03	14-Oct-25	14:46	6.03
Total Kjeldahl Nitrogen [as N mg/L]	14-Oct-25	13:39	16-Oct-25	11:02	934
Ammonia+Ammonium (N) [as N mg/L]	10-Oct-25	19:18	15-Oct-25	13:31	6.4
Nitrite (as N) [mg/L]	10-Oct-25	08:00	16-Oct-25	16:47	< 3
Nitrate (as N) [mg/L]	10-Oct-25	08:00	16-Oct-25	16:47	260
Nitrate + Nitrite (as N) [mg/L]	10-Oct-25	08:00	16-Oct-25	16:47	260
Arsenic [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.2
Cadmium [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.025
Cobalt [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.07
Chromium [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.41
Copper [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	13
Mercury [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.007
Potassium [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	63
Molybdenum [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.13
Nickel [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.38
Phosphorus (Total) [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	867
Lead [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.4
Selenium [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	0.1
Zinc [mg/L]	14-Oct-25	12:59	15-Oct-25	14:16	13
E. Coli [MPN/1g dried wgt]	09-Oct-25	14:11	14-Oct-25	08:46	3903
E. Coli [MPN/100mL]	09-Oct-25	14:11	14-Oct-25	08:46	10500

Note: Metals and mercury were analyzed on the as-received sample.
The E.coli value reported in MPN/1g dried weight was calculated using Total Solids and MPN/100ml.

*E.Coli was received/processed after the recommended holding time of 48 hours. Result maybe unreliable. Client was notified.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110001453

Project : PO#017018
LR Report : **CA13455-OCT25**

Hawley Anderson, Hon.B.Sc
Project Specialist,
Environment, Health & Safety

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix C

Sludge Haulage Records

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page

Plant/ Facility Name	Area	Date
Southampton		Apr. 13

Carrier/ Hauler	Site #
Bartels Env.	25069

NOTE: ONLY ONE S

Load No.	Time		Load Volume (m^3)	Carrier Information		Drive
	In	Out		Vehicle License #	Trailer #	
1	8:55	9:15	44	157	T-26	D
2	9:30	9:55	44	158	T 20	B
3	10:10	10:30	44	157	T-26	D
4	10:45	11:05	44	158	T 20	B
5	11:30	11:50	44	157	T-26	D
6	12:00	12:20	44	158	T20	B
7	12:45	1:05	44	157	T-26	D
8	1:20	1:45	44	158	T20	B
9	2:00	2:20	44	157	T-26	D
10	2:40	3:10	44	158	T20	B
11	3:15	3:35	44	157	T-26	D
12	4:00	4:25	44	158	T20	B
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 528

REMARKS

Date

OCWA Rep. Signature

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Southampton	Saugeen Shores	May 1-25

Carrier/ Hauler	Site #
Bartels - Env.	25069

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:00	7:20	44	157	T-26	DH
2	7:20	7:40	44	158	T20	BB
3	8:10	8:30	44	157	T-26	DH
4	8:40	9:00	44	158	T20	BB
5	9:25	9:45	44	157	T-26	DH
6	9:50	10:10	44	158	T20	BB
7	10:35	10:55	44	157	T-26	DH
8	11:10	11:30	44	158	T20	BB
9	11:50	12:10	44	157	T-26	DH
10	12:20	12:40	44	158	T20	BB
11	1:05	1:25	44	157	T-26	DH
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 484

REMARKS

Rained after 1:00 pm

Date

OCWA Rep. Signature

Carrier/ Hauler Signature

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Southampton	Saugeen Shores	May 2/25

Carrier/ Hauler	Site #
Bartels Environmental	25069

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:00	7:20	44	158	T20	BB
2	7:25	7:45	44	157	T-26	DH
3	8:10	8:30	44	158	T20	BB
4	8:40	9:00	44	157	T-26	DH
5	9:30	9:55	44	158	T20	BB
6	10.00	10:50	44	157	T-26	DH
7	11:00	11:20	44	158	T20	BB
8	11:45	12:05	44	157	T-26	DH
9	12:15	12:45	44	158	T20	BB
10	1:00	1:20	44	157	T-26	DH
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total

REMARKS

Date

OCWA Rep.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Southampton	Saugeen Shores	Oct 8-25

Carrier/ Hauler	Site #
Bartels - Env.	61280

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:15	7:30	44	157	26	DH
2	7:35	7:50	44	158	T20	BB
3	8:20	8:35	44	157	26	DH
4	8:55	9:20	44	158	T20	BB
5	9:20	9:35	44	157	26	DH
6	10:30	11:00	44	158	T20	BB
7	11:00	11:15	44	157	26	DH
8	11:30	11:55	44	158	T20	BB
9	11:55	12:10	44	157	26	DH
10	12:30	1:00	44	158	T20	BB
11	1:00	1:15	44	158	T26	BB
12	2:15	2:40	44	158	T26	BB
13	3:15	3:40	44	158	T26	BB
14	4:20	4:35	44	157	26	DH
15	4:40	5:00	44	158	T20	BB
16						
17						
18						
19						
20						

Daily Total 660 m^3

REMARKS

Date Oct 8/25

OCWA Rep. Signature Just Pt.

Carrier/ Hauler Signature BB

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Southampton	Saugeen Shores	Oct 9-25

Carrier/ Hauler	Site #
Bartels - Env.	61280

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:20	7:35	44	157	26	DH
2	8:00	8:25	44	158	20	BB
3	8:45	9:05	44	157	26	DH
4	9:10	9:40	44	158	20	BB
5	9:45	10:00	44	157	26	DH
6	10:10	10:40	44	158	20	BB
7	10:10	11:00	44	157	26	DH
8	11:10	11:40	44	158	20	BB
9	11:45	12:10	44	157	26	DH
10	12:10	12:40	44	158	20	BB
11	12:45	1:05	44	157	26	DH
12	1:15	1:45	44	158	20	BB
13	1:45	2:10	44	157	26	DH
14	2:15	2:45	44	158	20	BB
15	2:45	3:10	44	157	26	DH
16	3:15	3:45	44	158	20	BB
17	3:45	4:10	44	157	26	DH
18	4:25	5:00	44	158	20	BB
19						
20						

Daily Total 792 m^3

REMARKS

Date Oct 9/25

OCWA Rep. Signature

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix D
Calibration Reports

FLOWMETRIX TECHNICAL SERVICES

Krohne
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Bruce Hub
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: danmacleod@ocwa.com

VER. BY - FM Paris Machuk

Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

EQUIPMENT DETAIL

[MUT] MANUFACTURER	Krohne
MODEL	IFC 100W
SERIAL NUMBER	C12501984
FUSE	Wall switch to right of unit
PLANT ID	Southampton WWTP
METER ID	Return Activated Sludge #1 (West Side)
FIT ID	N/A
CLIENT TAG	N/A
OTHER	ORG #5613
GPS COORDINATES	N44 30.103 W081 21.236
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	150
F.S. FLOW - MAG	LPS	172.6
F.S. RANGE - O/P	LPS	63.09
CAL. k-FACTOR	GKL	6.4107
Zero Offset Flow	LPS	0.0000

FORWARD TOTALIZER INFORMATION

AS FOUND	6357787.24	M3
AS LEFT	6357795.01	M3
DIFFERENCE	7.77	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED

CONVERTER DISPLAY	yes
mA OUTPUT	yes
TOTALIZER	Yes
ACCURACY BASED ON [% o.r.]	yes

ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

FLOW TUBE SIMULATION

				0.0		**0.5**	**1.0**	**2.0**	**m/s**
				0.0		**5.0**	**10.0**	**20.0**	**% F.S. Flow**
				0.0		**13.7**	**27.4**	**54.7**	**% F.S. Range**
REF. FLOW RATE				**0.0**		**8.6**	**17.3**	**34.5**	LPS
MUT [Reading]				0.0		9.1	17.7	35.0	LPS
MUT [Difference]				0.0		0.5	0.4	0.5	LPS
MUT [% Error]				n/a		5.42	2.52	1.36	%
mA OUTPUT				**4.000**		**6.189**	**8.378**	**12.757**	mA
MUT [Reading]	min.	4.000	mA	3.995		6.319	8.501	12.884	mA
MUT [Difference]	max.	20.000	mA	-0.005		0.130	0.123	0.127	mA
MUT [% Error]				-0.12		2.10	1.46	1.00	%
TOTALIZER - REF. FLOW RATE								**34.530**	LPS
TOTALIZER [MUT]								4	M3
TEST TIME								114.53	SECONDS
CALC. TOTALIZER								3.955	M3
ERROR								1.13	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	KRO	3
PROCESS METER	PM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	Yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	3.10	PASS
mA OUTPUT	1.11	PASS
TOTALIZER	1.13	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

FLOWMETRIX
TECHNICAL SERVICES

Krohne
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Bruce Hub
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: danmacleod@ocwa.com

VER. BY - FM Paris Machuk

Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

EQUIPMENT DETAIL

[MUT] MANUFACTURER	Krohne
MODEL	IFC 100W
SERIAL NUMBER	C12501983
FUSE	Wall switch to right of unit
PLANT ID	Southampton WWTP
METER ID	Return Activated Sludge #2 (East Side)
FIT ID	N/A
CLIENT TAG	N/A
OTHER	ORG #5613
GPS COORDINATES	N44 30.103 W081 21.236
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	150
F.S. FLOW - MAG	LPS	165.9
F.S. RANGE - O/P	LPS	63.09
CAL. k-FACTOR	GKL	6.1613
Zero Offset Flow	LPS	0.0000

FORWARD TOTALIZER INFORMATION

AS FOUND	6522113.46	M3
AS LEFT	6522118.89	M3
DIFFERENCE	5.43	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED

CONVERTER DISPLAY	yes
mA OUTPUT	yes
TOTALIZER	Yes
ACCURACY BASED ON [% o.r.]	yes

ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

FLOW TUBE SIMULATION

				0.0		**0.5**	**1.0**	**2.0**	**m/s**
				0.0		**5.0**	**10.0**	**20.0**	**% F.S. Flow**
				0.0		**13.2**	**26.3**	**52.6**	**% F.S. Range**
REF. FLOW RATE				**0.0**		**8.3**	**16.6**	**33.2**	LPS
MUT [Reading]				0.0		8.3	16.6	33.2	LPS
MUT [Difference]				0.0		0.0	0.0	0.0	LPS
MUT [% Error]				n/a		0.04	0.04	0.04	%
mA OUTPUT				**4.000**		**6.104**	**8.208**	**12.416**	mA
MUT [Reading]	min.	4.000	mA	4.000		6.114	8.216	12.422	mA
MUT [Difference]	max.	20.000	mA	0.000		0.010	0.008	0.006	mA
MUT [% Error]				0.00		0.16	0.10	0.05	%
TOTALIZER - REF. FLOW RATE								**33.186**	LPS
TOTALIZER [MUT]								3	M3
TEST TIME								90.15	SECONDS
CALC. TOTALIZER								2.992	M3
ERROR								0.28	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	KRO	3
PROCESS METER	PM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.04	PASS
mA OUTPUT	0.08	PASS
TOTALIZER	0.28	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

FLOWMETRIX TECHNICAL SERVICES

v-Notch Weir
Verification/Calibration Report

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Bruce Hub
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: danmacleod@ocwa.com

VER. BY - FM Paris Machuk

Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

EQUIPMENT DETAIL

[MUT] MANUFACTURER	Greyline
MODEL	OCM (SLT-32)
CONVERTER SERIAL NUMBER	38872-R
PLANT ID	Southampton WWTP
METER ID	Final Effluent
FIT ID	LIT-1
CLIENT TAG	OCWA# 74302
OTHER	ORG# 5613
GPS COORDINATES	N44 30.103 W081 21.236
VERIFICATION DATE	May 15th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

NOTCH ANGLE (ϕ)	inches	90
EMPTY DISTANCE, TX to notch	m	0.755
TRANSDUCER (TX), to sump flc	m	1.112
SUMP LEVEL, zero flow	m	0.357
MAX. HEAD	m	0.325
BLANKING DISTANCE	m	0.305
DEAD ZONE	m	0.125
MAX. FLOW	M3/D	7179.6
F.S. RANGE - O/P	M3/D	7179.6

Ultrasonic sensor installed to ensure full scale flow condition

TOTALIZER

AS FOUND	11206836	M3
AS LEFT	11206872	M3
DIFFERENCE	36	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
ALLOWABLE [%] ERROR	15

COMPONENTS TESTED

CONVERTER DISPLAY	yes
mA OUTPUT	yes
TOTALIZER	yes
ACCURACY BASED ON [% o.r.]	No

ERROR DOCUMENTED IN THIS REPORT; BASED ON % F.S.

AS FOUND TEST RESULTS

				37.7	42.1	51.9	81.9	96.2	% F.S. Range
				0.220	0.230	0.250	0.300	0.320	m
REF. FLOW RATE				**2706.8**	**3024.9**	**3726.0**	**5877.5**	**6906.7**	M3/D
MUT [Reading]				2851.0	3185.0	3972.0	5860.0	7129.0	M3/D
MUT [Difference]				144.2	160.1	246.0	-17.5	222.3	M3/D
MUT [% Error]				2.0	2.2	3.4	-0.2	3.1	%
mA OUTPUT				**10.032**	**10.741**	**12.304**	**17.098**	**19.392**	mA
MUT [Reading]	min.	4.000	mA	10.337	11.098	12.838	17.055	19.869	mA
MUT [Difference]	max.	20.000	mA	0.305	0.357	0.534	-0.043	0.477	mA
MUT [% Error]				1.52	1.78	2.67	-0.22	2.39	%
TOTALIZER - REF. FLOW RATE								**6906.655**	M3/D
TOTALIZER [MUT]								11	M3
TEST TIME								134.30	SECONDS
CALC. TOTALIZER								10.736	M3
ERROR								2.40	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] LEVEL	Sim. BOARD	Yes
PROCESS METER	PM	20
STOP WATCH	SW	Yes

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	2.13	PASS
mA OUTPUT	1.63	PASS
TOTALIZER	2.40	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

Proportional Weir

Customer	OCWA - Southampton Area
Contact	Dan MacLeod
	Cluster Manager
	519-370-0431
Test Performed By:	*Paris Machuk*
	Field Representative

FLOWMETRIX TECHNICAL SERVICES

Plant ID	Southampton WWTP	Date of Verification	15-May-25
Meter ID	Influent - South Channel	Calibration Frequency	Annual
FIT ID	n/a	Date of Next Verification	May-26
Client Tag	OCWA# 74303		
GPS Coordinates	N44 30.103 & W081 21.236		

Converter Details

Manufacturer	Greyline
Model	SLT32-A
Converter S/N:	38873-R
Fuse	Panel

Totalizer Information

As Found	12383804	m3
As Left		m3
Difference	-12383804	m3

Programming Parameters

Weir Type	Proportional	
Weir Length	m	degrees
Max. Head	0.326	m
Max. Flow	5888.65	m3/d
Max Range	0.726	m

Note: off set from zero to bottom of South channel = 133mm

Note: off set from zero to bottom of North channel = 138mm

Verification Instruments

Steel Ruler/Simulation Board	Yes
Digital Multimeter (DMM)	3
Stop Watch	1/100 th second
Display Accuracy Verified	Yes
mA Output Accuracy Verified	Yes
Totalizer Accuracy Verified	Yes

AS FOUND	**0**	**29%**	**60%**	**91%**	**97%**	**% F.S. Flow**
FLOW TUBE SIMULATION*	0.00001	0.100	0.200	0.300	0.320	**m**
Display	**0.000**	**1704.000**	**3519.000**	**5349.000**	**5700.000**	m3/d
MUT (As Found)	0.00	1710.00	3552.00	5433.00	5875.00	m3/d
MUT (Error)**	n/a	0.10%	0.56%	1.43%	2.97%	%
mA Output	**4.000**	**8.630**	**13.561**	**18.534**	**19.487**	mA
MUT (As Found)	4.002	8.631	13.566	18.526	19.494	mA
MUT (Error)**	0.05	0.01	0.03	-0.04	0.03	%
Totalizer					**5700.000**	m3/d
Test Volume					8	m3
Time					120.57	Seconds
Calc. Flowrate					5732.77	m3/d
% Error					0.57	%

** All values are for "As Found" values. If the values are not within acceptable limits an "As Left" certificate will be issued unless otherwise noted.*

Comments

Errror represented as % of full scale

Grey Line K&n factor for Q calc is k=458.809 and n = 1 for Greyline OCF calibration

k=2.25038 n =1

Checked Weir Zero and found to be good.

Note: checked North Side @ head 0.0m unit reading: HEAD=0.0m

@ head 0.30m unit reading: HEAD=0.298m

Results

	Avg. % Error	PASS/FAIL
Display	**0.01**	**PASS**
mA Output	**0.01**	**PASS**
Totalizer	**0.57**	**PASS**

This record only validates the operational integrity and accuracy verification results of the Secondary flow converter ONLY!!! This is not a complete calibration of the entire flow meter whereby, this verification does not validate the integrity of the primary measurement device using a comparative technique or traceable standard.

FLOWMETRIX
TECHNICAL SERVICES

Krohne
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL	
CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk

Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

EQUIPMENT DETAIL		
[MUT] MANUFACTURER		Krohne
MODEL		IFC100W
SERIAL NUMBER		C10 1442
FUSE		in Panel ULF4
PLANT ID		Southampton PS#4
METER ID		Station Flow
FIT ID		FIT-01
CLIENT TAG		OCWA #??
OTHER		n/a
GPS COORDINATES	N44 30.969	W081 21.481
VERIFICATION DATE		May 15th 2025
CAL. FREQUENCY		Annual
CAL. DUE DATE		May 2026

PROGRAMMING PARAMETERS		
DIAMETER (DN)	mm	150
F.S. FLOW - MAG	LPS	163.0
F.S. RANGE - O/P	LPS	100.0
CAL. k-FACTOR	GKL	6.05280
Zero Offset Flow	LPS	0

FORWARD TOTALIZER INFORMATION		
AS FOUND	444032.65	M3
AS LEFT	444046.95	M3
DIFFERENCE	14.3	M3

TEST CRITERIA	
AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED	
CONVERTER DISPLAY	Yes
mA OUTPUT	Yes
TOTALIZER	Yes
ACCURACY BASED ON [% o.r.]	Yes

ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

FLOW TUBE SIMULATION

				0.0	0.5	1.0	2.0	5.0	m/s
				0.0	5.0	10.0	20.0	50.0	% F.S. Flow
				0.0	8.2	16.3	32.6	81.5	% F.S. Range
REF. FLOW RATE				**0.0**	**8.2**	**16.3**	**32.6**	**81.5**	LPS
MUT [Reading]				0.0	8.1	16.2	32.5	81.4	LPS
MUT [Difference]				0.0	-0.1	-0.1	-0.1	-0.1	LPS
MUT [% Error]				n/a	-0.62	-0.62	-0.31	-0.13	%
mA OUTPUT				**4.000**	**5.304**	**6.608**	**9.216**	**17.041**	mA
MUT [Reading]	min.	4.000	mA	4.000	5.290	6.596	9.200	17.023	mA
MUT [Difference]	max.	20.000	mA	0.000	-0.014	-0.012	-0.016	-0.018	mA
MUT [% Error]				0.00	-0.27	-0.18	-0.18	-0.10	%
TOTALIZER - REF. FLOW RATE								**81.505**	LPS
TOTALIZER [MUT]								8	M3
TEST TIME								98.51	SECONDS
CALC. TOTALIZER								8.029	M3
ERROR								-0.36	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	KRO	3
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	YES

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	-0.42	PASS
mA OUTPUT	-0.15	PASS
TOTALIZER	-0.36	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

FLOWMETRIX TECHNICAL SERVICES

Krohne
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL	
CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk

Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

EQUIPMENT DETAIL		
[MUT] MANUFACTURER		Krohne
MODEL		IFC100W
SERIAL NUMBER		C185000439
FUSE		in Panel ULF4
PLANT ID		Southampton PS#5
METER ID		Station Flow
FIT ID		FIT-02
CLIENT TAG		OCWA #??
OTHER		n/a
GPS COORDINATES	N44 30.347	W081 22.196
VERIFICATION DATE		May 15th 2025
CAL. FREQUENCY		Annual
CAL. DUE DATE		May 2026

PROGRAMMING PARAMETERS		
DIAMETER (DN)	mm	200
F.S. FLOW - MAG	LPS	406.9
F.S. RANGE - O/P	LPS	120.0
CAL. k-FACTOR	GKL	8.4993
Zero Offset Flow	LPS	0

FORWARD TOTALIZER INFORMATION		
AS FOUND	1967826.07	M3
AS LEFT	1967838.67	M3
DIFFERENCE	12.6	M3

TEST CRITERIA	
AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED	
CONVERTER DISPLAY	Yes
mA OUTPUT	Yes
TOTALIZER	yes
ACCURACY BASED ON [% o.r.]	Yes

ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

FLOW TUBE SIMULATION

				0.0		**0.5**	**1.0**	**2.0**	**m/s**
				0.0		**5.0**	**10.0**	**20.0**	**% F.S. Flow**
				0.0		**17.0**	**33.9**	**67.8**	**% F.S. Range**
REF. FLOW RATE				**0.0**		**20.3**	**40.7**	**81.4**	LPS
MUT [Reading]				0.4		20.6	41.0	81.6	LPS
MUT [Difference]				0.4		0.3	0.3	0.2	LPS
MUT [% Error]				n/a		1.25	0.75	0.26	%
mA OUTPUT				**4.000**		**6.713**	**9.426**	**14.851**	mA
MUT [Reading]	min.	4.000	mA	4.000		6.754	9.469	14.891	mA
MUT [Difference]	max.	20.000	mA	0.000		0.041	0.043	0.040	mA
MUT [% Error]				0.00		0.61	0.46	0.27	%
TOTALIZER - REF. FLOW RATE								**81.386**	LPS
TOTALIZER [MUT]								6.00	M3
TEST TIME								73.50	SECONDS
CALC. TOTALIZER								5.982	M3
ERROR								0.30	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	KRO	3
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	YES

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.75	PASS
mA OUTPUT	0.33	PASS
TOTALIZER	0.30	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	2100P				
As Left Status:	**Initial Condt**	**Serial #:**	030300030469				
Instrument Visual Inspection:		**Range:**	0-1000 NTU		**Output:**	NA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable Turbidity Analyzer				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:	
Unit of measurement:	NTU
Range of the meter:	1000
Verification Standard Value:	10
Calibration Standard Solution 1:	20
Calibration Standard Solution 2:	100
Calibration Standard Solution 3:	800
Verification as found & left value:	9.75/10
Verification result:	Pass

Turbidity Standard	**Output Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
20.00	**20.00**	19.00	-5.00%	20.00	0.00%
100.00	**100.00**	97.00	-3.00%	100.00	0.00%
800.00	**800.00**	785.00	-1.88%	800.00	0.00%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Calibrated Successfully	10 NTU	Lot #A4102	Jul-25
	20 NTU	Lot #A4101	Jul-25
	100 NTU	Lot #A4095	Jul-25
	800 NTU	Lot # A4099	Jul-25
	Technician Name	**Witness Name**	
	Vaibhav Patel	Justin	
Calibration Result: **Pass**	**Date:** 23-May-25	**Date:**	23-May-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	DR300 - LPV445.97.00110				
As Left Status:	**Initial Condt**	**Serial #:**	20030A001000				
Instrument Visual Inspection:		**Range:**	NA	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable Chlorine Meter				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:		
Unit of measurement:	mg/l	
Range of the meter:	NA	
Calibration Standard Solution 1:	0.23	+-0.09
Calibration Standard Solution 2:	0.89	+-0.10
Calibration Standard Solution 3:	1.60	+-0.14

Chlorine Standard	**Output Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
0.23	**0.23**	0.22	0.00%	0.23	0.00%
0.89	**0.89**	0.90	1.12%	0.89	0.00%
1.60	**1.60**	1.59	-0.63%	1.60	0.00%

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Calibrated Successfully		DPD Chlrine LR Standard Kit		Jul-26
		Technician Name	**Witness Name**	
		Vaibhav Patel	Justin	
Calibration Result:	**Pass**	**Date:** 23-May-25	**Date:**	23-May-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	HQ2200	**Sensor:**	PHC101	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	213282200038	**Sensor:**	220452561210	
Instrument Visual Inspection:		**Range:**	0-14 PH		**Output:**	NA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable PH Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:	
Range:	14
Slope:	89%
Offset:	-9.2 mV

Input	**Input %**	**Temp. °C**	**As Found**	**Deviation**	**As Left**	**Deviation**
4.01	**28.64%**	**20.80**	4.03	0.50%	4.01	0.00%
7.00	**50.00%**	**20.80**	7.05	0.71%	7.00	0.00%
10.00	**71.43%**	**20.80**	10.09	0.90%	10.00	0.00%

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Calibrated Successfully		pH 4.00		Feb-26
		pH 7.00		Sep-25
		pH 10.00		Sep-25
		Technician Name	**Witness Name**	
		Vaibhav Patel	Justin	
Calibration Result:	**Pass**	**Date:** 23-May-25	**Date:**	23-May-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	HQ2200	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	213282200038	**Sensor:**	90292592005	
Instrument Visual Inspection:		**Range:**	NA		**Output:**	NA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable DO Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:	
Range	Auto
Temperature:	20.0 Degree C
Offset	0
Slope	97.00%

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		8.65	-4.21%	8.55	-5.32%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 8.55 mg/l in air.			
Disolved oxygen in Air depends on the various parameter such as temperature, pressure			
and weather conditins.			
	Technician Name	**Witness Name**	
	Vaibhav Patel	Justin	
Calibration Result: **Pass**	**Date:** 23-May-25	**Date:** 23-May-25	

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	SC200	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	1412CO0116822	**Sensor:**	150470000034	
Instrument Visual Inspection:		**Range:**	NA		**Output:**	4-20 mA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable DO Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.80

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		11.00	21.82%	9.50	5.20%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed. Sensor cap needs to be replaced.			
As left reading was 9.5 mg/l in air.			
Disolved oxygen in Air depends on the various parameter such as temperature, pressure			
and weather conditins.			

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not tested**	Vaibhav Patel		Justin	
Within Specification:	**Yes**	**Date:**	23-May-25	**Date:**	23-May-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Southampton WWTP - 18 Caroline St W, southampton, ON						
Service Date:	23-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	23-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	SC200	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	1412CO0116822	**Sensor:**	152160000061	
Instrument Visual Inspection:		**Range:**	NA		**Output:**	4-20 mA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Portable DO Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.80

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		11.70	29.57%	9.60	6.31%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed. Sensor cap needs to be replaced.			
As left reading was 9.6 mg/l in air.			
Disolved oxygen in Air depends on the various parameter such as temperature, pressure			
and weather conditins.			

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not tested**	Vaibhav Patel		Justin	
Within Specification:	**Yes**	**Date:**	23-May-25	**Date:**	23-May-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Apr-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250274-0001**	**Asset#:**	NA
Due Date:	7-Oct-25	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200117001B				
Instrument Visual Inspection:		**Range:**	0-100% LEL	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Methane Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	**Gas Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
Zero	**0**	0	0.00%	0	0.00%
Span	**50**	52	4.00%	50	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Methane 2.5% Vol (50%)	304-402205618-1, Aug-2025
	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Nicole	
Within Specification:	**Yes**	**Date:**	7-Apr-25	**Date:**	7-Apr-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Apr-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250274-0001**	**Asset#:**	NA
Due Date:	7-Oct-25	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200115001C				
Instrument Visual Inspection:		**Range:**	0-25 O2%, 0- 50 PPM H2S	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Oxygen Gas & H2S Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	O2	%	0	20.80	0-25	NA	19.50	18.00
2	H2S	PPM	0	40	0-50	NA	5.00	15.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**20.8**	20.80	0.00%	20.80	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**40**	39.00	2.50%	40	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
	CalGas H2S 40 PPM	304-402184551-1, Aug-2025

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Nicole	
Within Specification:	**Yes**	**Date:**	7-Apr-25	**Date:**	7-Apr-25

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	18 Caroline st, Southhampton						
Service Date:	7-Apr-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250274-0001**	**Asset#:**	NA
Due Date:	7-Oct-25	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ALTAIR 4X				
As Left Status:	**Initial Condt**	**Serial #:**	199193				
Instrument Visual Inspection:		**Range:**	0-100%,0-100PPM,0-50PPM,0-25%	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	MSA ALTAIR 4X Handheld gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator room				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	10.00	10.00	
2	CO	PPM	0	100	100	10.00	20.00	
3	H2S	PPM	0	25	50	5.00	15.00	
4	O2	%	0	18.0	25	19.50	18.00	

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**50**	50	0.00%	50	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	101	1.00%	100	0.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	25	0.00%	25	0.00%
Sensor 4	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**18.0**	18	0.00%	18	0.00%

Comments		**Test Equipment Used**	
		Name / Type	**Serial and Due Date**
Calibrated Successfully		MSA Quadgas	304-402541925-1 ; Sept-2026
		(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)	
Other Outputs Tested:	**Not tested**	**Technician Name**	**Witness Name**
Loop Check Performed:	**Not tested**	Vaibhav Patel	Nicole
Within Specification:	**Yes**	**Date:** 7-Apr-25	**Date:** 7-Apr-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	18 Caroline st, Southhampton						
Service Date:	7-Apr-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250274-0001**	**Asset#:**	NA
Due Date:	7-Oct-25	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ALTAIR 4X				
As Left Status:	**Initial Condt**	**Serial #:**	00356331				
Instrument Visual Inspection:		**Range:**	0-100%,0-100PPM,0-50PPM,0-25%	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	MSA ALTAIR 4X Handheld gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator room				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	NA	10.00	10.00
2	CO	PPM	0	100	100	NA	10.00	20.00
3	H2S	PPM	0	25	50	NA	5.00	15.00
4	O2	%	0	18.0	25	NA	19.50	18.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**50**	49	-2.00%	50	50.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	98	-2.00%	100	100.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	23	-8.00%	25	25.00%
Sensor 4	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**18.0**	18	0.00%	18	18.00%

Comments		**Test Equipment Used**	
		Name / Type	**Serial and Due Date**
Oxygen Sensor was not workimg.		MSA Quadgas	304-402541925-1 ; Sept-2026
		(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)	
Other Outputs Tested:	**Not tested**	**Technician Name**	**Witness Name**
Loop Check Performed:	**Not tested**	Vaibhav Patel	Nicole
Within Specification:	**No**	**Date:** 7-Apr-25	**Date:** 7-Apr-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200117001B				
Instrument Visual Inspection:		**Range:**	0-100% LEL	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Methane Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	**Gas Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
Zero	**0**	2	0.00%	0	0.00%
Span	**50**	53	6.00%	50	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Methane 2.5% Vol (50%)	
	CalGas Oxygen 20.8% Vol	

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Jusin	
Within Specification:	**Yes**	**Date:**	07-Oct-25	**Date:**	7-Oct-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200115001C				
Instrument Visual Inspection:		**Range:**	0-25 O2%, 0- 50 PPM H2S	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Oxygen Gas & H2S Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	O2	%	0	20.80	0-25	NA	19.50	18.00
2	H2S	PPM	0	40	0-50	NA	5.00	15.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**20.8**	20.60	0.96%	20.80	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**40**	39.20	2.00%	40	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Oxygen 20.8% Vol	
	CalGas H2S 40 PPM	

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Jusin	
Within Specification:	**Yes**	**Date:**	07-Oct-25	**Date:**	7-Oct-25

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	18 Caroline st, Southhampton						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ALTAIR 4X				
As Left Status:	**Initial Condt**	**Serial #:**	199193				
Instrument Visual Inspection:		**Range:**	0-100%,0-100PPM,0-50PPM,0-25%	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	MSA ALTAIR 4X Handheld gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator room				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	10.00	10.00	
2	CO	PPM	0	100	100	10.00	20.00	
3	H2S	PPM	0	25	50	5.00	15.00	
4	O2	%	0	18.0	25	19.50	18.00	

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**50**	46	-8.00%	50	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	110	10.00%	100	0.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	29	16.00%	25	0.00%
Sensor 4	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**18.0**	18	0.00%	18	0.00%

Comments		**Test Equipment Used**			
		Name / Type		**Serial and Due Date**	
Calibrated Successfully		MSA Quadgas			
		(100 PPM CO, 25 PPM H2S, 50 %LEL,			
		18% O2)			
Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not tested**	Vaibhav Patel		Justin	
Within Specification:	**Yes**	**Date:**	07-Oct-25	**Date:**	7-Oct-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200117001B				
Instrument Visual Inspection:		**Range:**	0-100% LEL	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Methane Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	**Gas Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
Zero	**0**	2	0.00%	0	0.00%
Span	**50**	53	6.00%	50	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Methane 2.5% Vol (50%)	
	CalGas Oxygen 20.8% Vol	

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Jusin	
Within Specification:	**Yes**	**Date:**	07-Oct-25	**Date:**	7-Oct-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	86 Saugeen St ON						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**No**	**Model:**	ULTIMA - X 5000				
As Left Status:	**Initial Condt**	**Serial #:**	000100200115001C				
Instrument Visual Inspection:		**Range:**	0-25 O2%, 0- 50 PPM H2S	**Output:**	4-20 mA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Monitoring Oxygen Gas & H2S Gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Saugeen St pumping station				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	O2	%	0	20.80	0-25	NA	19.50	18.00
2	H2S	PPM	0	40	0-50	NA	5.00	15.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**20.8**	20.60	0.96%	20.80	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**40**	39.20	2.00%	40	0.00%

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Calibrated successfully	CalGas Oxygen 20.8% Vol	
	CalGas H2S 40 PPM	

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Jusin	
Within Specification:	**Yes**	**Date:**	07-Oct-25	**Date:**	7-Oct-25

CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	18 Caroline st, Southhampton						
Service Date:	7-Oct-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250962-0001**	**Asset#:**	NA
Due Date:	7-Apr-26	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**Model:**	ALTAIR 4X				
As Left Status:	**Initial Condt**	**Serial #:**	00356331				
Instrument Visual Inspection:		**Range:**	0-100%,0-100PPM,0-50PPM,0-25%	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	MSA ALTAIR 4X Handheld gas				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator room				

Instrument Information:

Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	NA	10.00	10.00
2	CO	PPM	0	100	100	NA	10.00	20.00
3	H2S	PPM	0	25	50	NA	5.00	15.00
4	O2	%	0	18.0	25	NA	19.50	18.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**50**	44	-12.00%	50	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	110	10.00%	100	0.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	29	16.00%	25	0.00%
Sensor 4	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**18.0**	18	0.00%	100	0.00%

Comments		**Test Equipment Used**	
		Name / Type	**Serial and Due Date**
Oxygen Sensor was not workimg.		MSA Quadgas	
		(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)	
Other Outputs Tested:	**Not tested**	**Technician Name**	**Witness Name**
Loop Check Performed:	**Not tested**	Vaibhav Patel	Justin Porter
Within Specification:	**No**	**Date:** 07-Oct-25	**Date:** 7-Oct-25

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix E

Community Complaints

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Georgian Highlands Logbook Report

Start: 2025-Jan-30 00:00:00
End: 2025-Jan-31 00:00:00
Run Time: 2026-Mar-25 09:17:41

SOUTHAMPTON WWTF Logbook

Entry Time	Label	Attachments	Entry Text	Operator	Created Time
2025-01-30 00:00:00			07:00-15:30 Duty OIC: Justyn Becker (jbecker) 00:00-23:59 ORO: Justin Porter (jporter) 07:00-15:30 OIT: Taylor Carnahan (tcarnahan)	Taylor Carnahan	2025-01-30 18:49:50
2025-01-30 15:15:00			Plowed away snow at facilities. Completed rounds at pump stations. Investigated strong sewage smell complaint in area of Tyendinaga/Mississauga intersection by mailboxes with Justin P and SOM. We were unable to detect a sewage smell and the sewer manholes were covered in snow and ice. Wasted sludge to primary digester. Shut off air to primary digester to decant tomorrow.	Justyn Becker	2025-01-30 15:16:02
2025-01-30 18:51:00			Completed daily WWTP checks, cleaned bar screens and clarifiers. Completed emergency equipment monthly check. Changed safety bulletin board material, labeled emergency safety equipment with corresponding information on new emergency check list. OIT under the direction of the ORO/OIC	Taylor Carnahan	2025-01-30 18:54:53

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Georgian Highlands Logbook Report

Start: 2025-Jun-23 00:00:00
End: 2025-Jun-24 00:00:00
Run Time: 2026-Mar-25 09:23:23

SOUTHAMPTON WWTF Logbook

Entry Time	Label	Attachments	Entry Text	Operator	Created Time
2025-06-23 00:00:00			00:00-23:59 ORO: Joshua Marx (jmarx) 07:00-15:30 Duty OIC: Justin Porter (jporter) 07:00-15:30 OIT: James McCormack (jmccormack)	James McCormack	2025-06-23 23:09:06
2025-06-23 13:28:00	Community Complaint		Switched ditch #2 control back to auto from hand when on site this morning. Investigated an odour complaint at Oak and Blanchfield. Faint odour present. Could not say with confidence it was coming from the manholes. Lifted covers and noted good movement through the sewer. Poured deodorizer on benching and in stream. Left site.	Justin Porter	2025-06-23 13:31:33
2025-06-23 23:09:00	PS2, PS3, PS4, PS5, Southampton WWTP		OIT under the direction of the ORO/OIC PS Rounds, Daily Lab and Checks, Barscreens at WPCP and PS1, De ragged RAS Pumps 1 and 2	James McCormack	2025-06-23 23:11:47

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Georgian Highlands Logbook Report

Start: 2025-Jul-14 00:00:00
End: 2025-Jul-15 00:00:00
Run Time: 2026-Mar-25 09:24:43

SOUTHAMPTON WWTF Logbook

Entry Time	Label	Attachments	Entry Text	Operator	Created Time
2025-07-14 00:00:00			00:00-23:59 ORO: Justin Porter (jporter) 07:00-15:30 OIT: James McCormack (jmccormack) 07:00-15:30 Duty OIC: Justin Porter (jporter)	James McCormack	2025-07-14 15:11:17
2025-07-14 15:15:00	Community Complaint, PS1, PS2, PS3, PS4, PS5, Southampton WWTP		OIT under the direction of the ORO/OIC PS Rounds, Daily Lab and Checks, Barscreens at WPCP and PS1, Transferred Sludge from Primary to Secondary and HT2, Wasted 66.9m3 to Primary, Shut Air off Secondary for Decant tomorrow, Assisted JP with Community complaint on smell from sewer, Daily WPCP Ops	James McCormack	2025-07-14 15:15:21
2025-07-14 17:47:00	Community Complaint, Southampton WWTP		Assisted with ops. Worked with SOM reviewing capital projects and ordering wpcp equipment to move projects forward. Worked with JMc investigating odour complaint at 31 Deer Run Crt. Spoke with home owner. SOM requested rain catchers put in manholes up Deer Run, and along shore road towards Turner st. To address odour issues for the season	Justin Porter	2025-07-14 17:51:07

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Georgian Highlands Logbook Report

Start: 2025-Sep-24 00:00:00
End: 2025-Sep-25 00:00:00
Run Time: 2026-Mar-25 09:28:45

SOUTHAMPTON WWTF Logbook

Entry Time	Label	Attachments	Entry Text	Operator	Created Time
2025-09-24 00:00:00			00:00-23:59 ORO: Justin Porter (jporter) 07:00-15:30 OIC: Nicole Moore (nmoore) 07:00-15:30 Duty OIC: Justin Porter (jporter) 07:00-15:30 OIT: James McCormack (jmccormack)	Nicole Moore	2025-09-24 15:11:54
2025-09-24 14:50:00	Community Complaint, Southampton WWTP		Assisted with plant operations. Investigated odour complaint at 241 Island Street. Flushed water through the gravity sewer and poured deodourizer down near by manholes.	Justin Porter	2025-09-24 14:51:49
2025-09-24 15:12:00			Pump station rounds completed, cleaned bar screen at ps 1. Started biweekly lab and took the biweekly samples (auto sampler had to be cleaned out and reset yesterday). Also took the sludge hauling samples and finish the solids lab. Assisted with odour complaint and flushing manhole. Transferred secondary to HT4.	Nicole Moore	2025-09-24 15:15:19
2025-09-24 15:15:00	Southampton WWTP, Training		OIT under the direction of the ORO/OIC Daily Lab, Barscreens at WPCP, Skimmed Clarifiers, Started Distracting Driving training, Assisted JP and NM with odour complaint at 241 Island St (See JP notes)	James McCormack	2025-09-24 15:15:32
2025-09-24 18:57:00	Maintenance, PS1		Replaced broken H2S sensor at pump station 1.	Justin Porter	2025-09-24 18:58:15

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix F
Monitoring Schedule

2026 Laboratory Sampling Requirements: **SOUTHAMPTON SEWAGE TREATMENT PLANT**

Org #: 5613, Works #: 110001453, Revised: 2025-08-05

	Timeframe	Source	Parameters
BIWEEKLY[a]	Every other Wednesday	Raw (Composite[b])	BOD_5; TSS; TKN; Alkalinity; Total Phosphorus
		Effluent (Composite[b])	BOD^5; TSS; TKN; Total Phosphorus[c]; Total Ammonia Nitrogen; Nitrate+Nitrite; Nitrate; Nitrite; Alkalinity, pH; pH (at 15˚C); $CBOD^5$; Un-ionized Ammonia
		Effluent (Grab)	E. Coli
MONTHLY	First Biweekly sample of Month	Primary Digester Contents (Grab)[d]	TS; TS Ash; TS LOI; TKN; Nitrite; Nitrate; Nitrite + Nitrate; Total Phosphorus; Total Ammonia; E. Coli; pH; Metals
ANNUAL	August	Effluent (Grab)	Acute Lethality RBT
PER LOAD OF HAULED SLUDGE[e]	As required	Sludge Quality Hauled Sludge (Grab)[d]	TS; TS Ash; TS LOI; TKN; Nitrite; Nitrate; Nitrite + Nitrate; Total Phosphorus; Total Ammonia; E. Coli; pH; Metals
WEEKLY (IN-HOUSE)	Every Tuesday	Raw	Ammonia; Alkalinity; Total Phosphorus; pH; TSS; VSS
		Effluent (Composite)	Ammonia; Alkalinity; Total Phosphorus; TSS; VSS
		Effluent (Grab)	pH; Dissolved Oxygen
		RAS	TSS; VSS
		Mixed Liquor	TSS; VSS; SVI
		Digested Sludge	TSS; VSS; %VS; VSR
	Every Thursday	Effluent (Grab)	Ammonia; Alkalinity; Total Phosphorus; pH; Dissolved Oxygen
	As needed	When Decanting	Ammonia; Alkalinity; Total Phosphorus; pH

Unless specified, samples listed are required by ECA 7640-D6FQP3.

Specific sample dates for this calendar year are included in the Sampling Calendar and take into consideration stat holidays etc.

[a]Samples are required once a month by ECA 7640-D6FQP3 or WSER (CBOD5; pH (at 15˚C); Un-ionized Ammonia.

[b]24 Hour Composite is a requirement of ECA 7640-D6FQP3

[c]Effluent Total Phosphorus samples are to be taken twice per month as a requirement of ECA 7640-DFQP3

[d]Samples required by O. Reg 267/03 for land application.

[e]Hauled Sludge samples are to be taken on the first load applied to each land application for each application period.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix G

Notice of Modification or Alteration

Ontario

Ministry of the Environment, Conservation and Parks

Director Notification
Alterations to a Municipal Sewage Collection System

Marks filled with an asterisk (*) are mandatory.

This form can be submitted electronically by email to ECA.Submission@ontario.ca or to: Director, Part II.1 of the *Environmental Protection Act*; 135. St. Clair Ave W., Floor 1; Toronto, ON M4V 1P5

Statement of the Owner

I, the undersigned, am authorized to represent the owner of the municipal sewage collection system and hereby declare that to the best of my knowledge, the information contained herein and the information submitted in this notification is complete and accurate and that the Technical Information Contact identified in this application is authorized to act on the owner's behalf for the purpose of processing this notification.

Last Name *	First Name *	Title *
DePoorter	Derek	Project Manager, Capital Projects

Signature *	Date (YYYY/MM/DD) *
Digitally signed by Derek DePoorter Date: 2025.12.05 13:55:42 -05'00'	2025/12/05

Municipal Sewage Collection System

This form should be used **IF** Director Notification is required by a condition of the Environmental Compliance Approval:

- Within thirty (30) calendar days of the placing into service or completion of any addition, modification, replacement or extension of the municipal sewage collection system, or
- Within ninety (90) calendar days of the discovery of existing works not documented in Schedule B of the Environmental Compliance Approval, or if changes in the description are made of existing works in Schedule B the Environmental Compliance Approval

Sewage Collection System Owner's Name (Full Legal Name): As identified in the Environmental Compliance Approval *

The Corporation of the Town of Saugeen Shores

Sewage Collection System Name: As identified in the Environmental Compliance Approval *

Town of Saugeen Shores Municipal Sewage Collection Systems

Environmental Compliance Approval Number *	Environmental Compliance Approval Issue Number *
093-W601	1

Technical Information Contact

Last Name *	First Name *	Middle Initial
Macleod	Daniel	

Position/Title *

Senior Operations Manager

Telephone Number *	Email Address *
519-379-0431 ext.	dmacleod@ocwa.com

Municipal Sewage Collection System Alteration Authorization:

(Check the appropriate box that provided the authorization for the alteration and enter the required information within the same row)

☒ A. Pre-authorized alterations further to Schedule D of the Environmental Compliance Approval (ECA) which would require an alteration of the description of a sewage collection system described in Schedule B of the ECA.

☐ Form A1 has been completed and signed by the owner.

☒ Form SS2 has been completed and signed by the owner.

☐ B. A Schedule C Notice to the ECA

Schedule C Issue Number	Schedule C Issue Date (YYYY/MM/DD)

☐ C. An ECA issued prior to the date of issue of the first consolidated ECA respecting works which were not in service at the time of issuance of the consolidated ECA

ECA Number	ECA Issue Date (YYYY/MM/DD)

☐ D. Other works assumed by the owner as a result of another agreement

☐ E. Discovery of existing works not previously documented in Schedule B of the ECA

☐ F. Changes made to the description of existing works in Schedule B of the ECA

Description of Alteration: (If additional information is attached, please reference it in this section) *

Pilot project involving the installation of a Bioxide odour and hydrogen sulfide control system made by Evoqua Water Technologies at Pump Station #4 in Southampton.

This project is to help reduce the odour being detected at Pump Station #4 in Southampton.

See attached documents for details on equipment, chemicals used and the project.

Date of Placing into Service or Completion of Alteration (YYYY/MM/DD) *

November 5, 2025

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix H

Spills & Bypass Reports
Notifications to Ministry

From:	Karla Young
To:	"MECP-WATER-OSSAR@ontario.ca"
Cc:	"Graham, Robert G. (MECP)"; "Shannon, Rhonda (MECP)"; Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject:	2025 Q1 - Bypass/Overflow Event Summary - Southampton STP (110001453) - Town of Saugeen Shores
Date:	May-06-25 3:59:00 PM

Good Afternoon,

Under ECA 7640-D6FQP3, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Southampton Sewage Treatment Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration	Volume	Process Bypassed and Reason	Impact of Event	Mitigation
	HH:MM	(m^3)			
n/a	n/a	n/a	n/a	n/a	n/a

Overflow Events

The ECA requires the submission of a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
	HH:MM	(m^3)			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

Karla Young
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(519) 374 - 5782

From:	Karla Young
To:	"MECP-WATER-OSSAR@ontario.ca"
Cc:	"Shannon, Rhonda (MECP)"; Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject:	2025 Q2 - Bypass/Overflow Event Summary - Southampton STP (110001453) - Town of Saugeen Shores
Date:	August-11-25 1:57:00 PM

Good Afternoon,

Under ECA 7640-D6FQP3, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Southampton Sewage Treatment Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration HH:MM	Volume (m^3)	Process Bypassed and Reason	Impact of Event	Mitigation
n/a	n/a	n/a	n/a	n/a	n/a

Overflow Events

The ECA requires the submission of a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
	HH:MM	(m^3)			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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From:	Karla Young
To:	"MECP-WATER-OSSAR@ontario.ca"
Cc:	"Shannon, Rhonda (MECP)"; Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject:	2025 Q3 - Bypass/Overflow Event Summary - Southampton STP (110001453) - Town of Saugeen Shores
Date:	November-04-25 2:40:00 PM

Good Afternoon,

Under ECA 7640-D6FQP3, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Southampton Sewage Treatment Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration HH:MM	Volume (m^3)	Process Bypassed and Reason	Impact of Event	Mitigation
n/a	n/a	n/a	n/a	n/a	n/a

Overflow Events

The ECA requires the submission of a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
	HH:MM	(m^3)			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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From:	Karla Young
To:	"MECP-WATER-OSSAR@ontario.ca"
Cc:	"Shannon, Rhonda (MECP)"; Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject:	2025 Q4 - Bypass/Overflow Event Summary - Southampton STP (110001453) - Town of Saugeen Shores
Date:	February-02-26 11:19:00 AM

Good Afternoon,

Under ECA 7640-D6FQP3, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Southampton Sewage Treatment Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration HH:MM	Volume (m^3)	Process Bypassed and Reason	Impact of Event	Mitigation
n/a	n/a	n/a	n/a	n/a	n/a

Overflow Events

The ECA requires the submission of a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
	HH:MM	(m^3)			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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From:	Karla Young
To:	"Shannon, Rhonda (MECP)"
Cc:	"Graham, Robert G. (MECP)"; Daniel Macleod; Kristen Tilotta; Camille Leung; Caralynn McRae; Larry Gill; "Matt Prentice"; Melissa Cortes; Darren MacArthur; James McCormack; Joshua Marx; Justin Porter; Justyn Becker; Nicole Moore; Steve Elliott; Taylor Carnahan; Tyler Wilkinson
Subject:	Notification of Total Phosphorus Monthly Limit Exceedance - Southampton Sewage Treatment Plant
Date:	March-06-25 9:27:00 AM
Attachments:	Report CA13523-FEB25.pdf CofC CA13778-FEB25.pdf Report CA13778-FEB25.pdf CofC CA13523-FEB25.pdf Pages from 02.2025 5613 Rounds.pdf

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Good Morning

This is a notification that the Southampton Sewage Treatment Plant (STP) has exceeded the monthly average compliance limit for **Total Phosphorus** for the month of **February 2025** .

Facility: Southampton STP
ECA # 7640-D6FQP3
ECA Issued: November 5, 2024

February 2025

Southampton STP			Feb 12	Feb 25	Monthly Average	Reportable
Parameter	Limit	Objective				
CBOD5	25.0	20.0	7	13	10	Annual Average
TSS	25.0	20.0	57	165	111	Annual Average
TP	1.0	0.5	0.94	2.20	1.57	Monthly Average
E.Coli	200 MPN/100mL	150 MPN/100mL	0	3	1.73	Monthly Geometric Mean
pH	6.0-9.5	6.5-8.5	7.47	7.83	**n/a**	n/a
Alkalinity	n/a	n/a	99	97	**n/a**	n/a
Ammonia	n/a	n/a	<0.001	<0.001	**n/a**	n/a

-

Results Summary

- · **Total Phosphorus** – the monthly average effluent concentration of 1.57 mg/L was above the ECA Compliance Limit. As the TSS compliance limit is to be calculated as an Annual Average Concentration it is still within compliance limits.

-

Reporting Actions

Rhonda Shannon, Water Inspector/Provincial Officer with the MECP Owen Sound District Office was given a verbal notice on March 4, 2025 of the exceedance of Total Phosphorus. This email can be considered formal written notification of the exceedance.

-

Process Observations

The phosphorus had started to rise at the beginning of February as the operators were not able to access effluent channel for cleaning due to snow load. This was further exacerbated when clarifier #3 had to be taken offline due to maintenance.

-

Corrective Actions taken / Ongoing

After warmer temperatures caused a snow melt, the effluent channel was able to be accessed for

cleaning and maintenance is being done to get clarifier #3 back online.
The proposed headworks project is currently out to tender for the construction contract and is set to break ground for Spring 2025. This project should improve effluent quality and diminish these types of issues going forward.

Attached are the sample results for the month of February, as well as the February in-house lab work. The in-house lab work for Total Phosphorus completed on March 5, 2025 showed raw as 4.55 mg/L and the effluent as 0.04 mg/L. A composite sample will be taken and sent to the lab on March 11 and when those results are received they will be forwarded.

If there are any questions or comments concerning this matter, please let us know.

Thank you,

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