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 Port Elgin Water Pollution Control Plant Annual Sewage Performance Report (ECA #0556-AKQN3Q) 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:

- Port Elgin Water Pollution Control Plant
- Town of Saugeen Shores Municipal Sewage Collection System

This report was completed in accordance with the requirements set out in ECA #0556-AKQN3Q *Condition 11(4)*, issued May 30, 2017 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 #0556-AKQN3Q that "The owner shall prepare performance reports on a calendar year basis and submit to the Water Supervisor by March 31 of the calendar year following the period 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

PORT ELGIN WATER POLLUTION CONTROL 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 Port Elgin Sewage Treatment Plant is designed for the treatment of municipal sanitary sewage and disposal of final effluent. The works is owned by the Corporation of the Town of Saugeen Shores and operated on behalf of the Owner by the Ontario Clean Water Agency (OCWA). Port Elgin WPCP began operating in its current configuration August 17, 2017. The plant is an extended aeration, activated sludge operation, with two secondary clarifiers, two aeration tanks and phosphorus removal (by continuous alum addition). Final effluent from the plant is disinfected by ultraviolet irradiation and flows through the constructed outfall (commissioned August 17, 2017) to Mill Creek.

Sludge is digested aerobically in a primary and secondary digester and stored in two aerated holding tanks. Digested sludge is land applied as farm fertilizer in accordance with the Guidelines. The plant has a six-month storage that is used when conditions are not favorable for land application.

The Inlet Works includes continuously cleaned mechanical filter screen, grit removal system and odour control system, while the Septage Receiving Station includes screening, septage pumping station and two (2) 24 m^3 below grade septage holding tanks.

An overview of Port Elgin Sewage Treatment Plant can be found in Table 1.

Table 1. Port Elgin Sewage Treatment Plant Overview

Facility Name	Port Elgin Sewage Treatment Plant
Facility Type	Modified Extended Aeration
Plant Classification	II WWT
Works Number	120001470
Design Capacity	6,455 m^3/day
Number of Households	3,933 Residential + 411 Commercial
Receiving Water	Mill Creek
Environmental Compliance	0556-AKQN3Q (Sewage Treatment Plant)
Approval / Certificate of Approval	0704-56VS78 (Air)

2. Monitoring Data

As per Section 11, 4(a), (b) and (g) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary and interpretation of all Influent and Imported Sewage monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works; a summary and interpretation of all Final Effluent monitoring data and a comparison to the compliance limits condition, including an overview of the success and adequacy of the Works;* and *a description of efforts made and results achieved in meeting the design objectives condition*; is required.

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 0556-AKQN3Q.

Table 2. Raw Sewage Monitoring - Sampling Frequencies as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
BOD_5[2a]	Grab	Monthly
Total Suspended Solids[2a]	Grab	Monthly
Total Phosphorus[2a]	Grab	Monthly
Total Kjeldahl Nitrogen[2a]	Grab	Monthly

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

Table 3. Effluent Monitoring - Sampling Frequencies as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
$CBOD_5$[3a]	Composite	Weekly
Total Suspended Solids[3a]	Composite	Weekly
Total Phosphorus[3a]	Composite	Weekly
Total Ammonia Nitrogen[3a]	Composite	Weekly
Nitrite and Nitrate[3a]	Composite	Weekly
Alkalinity	Composite	Weekly
pH	Composite/Grab	Weekly (Grab)
E. Coli[3a]	Grab	Weekly
Temperature	Grab	Weekly

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

2.2 Effluent Objectives and Effluent Limits

The effluent objectives for the Port Elgin Sewage Treatment Plant are:

Table 4. Effluent Objectives as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameter	Monthly Average Concentration (mg/L)
$CBOD_5$	15
Suspended Solids	15
Total Phosphorus	0.8
E. Coli	100 organisms per 100 mL geometric mean density
pH	Between 6.5 – 8.5 inclusive, at all times

The effluent limits that are to be met for the Port Elgin Sewage Treatment Plant are found in Table 5. Any exceedance with the limits found in Table 5 constitutes a non-compliance.

Table 5. Effluent Limits as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameter	Monthly Average Concentration (mg/L)	Monthly Average Loading (kg/day)
$CBOD_5$	25	161
Suspended Solids	25	161
Total Phosphorus	1.0	6.5
E. Coli	200 organisms per 100 mL geometric mean density	
pH	Between 6.0 and 9.5, inclusive, at all times	

2.3 Comparison of Data to Effluent Objectives and Effluent Limits

Analytical and monitoring data for the Port Elgin sewage treatment is stored in OCWA's data management system (PDM). Annual and monthly averages for flows, $CBOD_5$, 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 6. 2025 Effluent Annual Average Concentrations and Removal Efficiencies

Parameter	Annual Average Concentration (mg/L)	Annual Average Removal Efficiency (%)
Suspended Solids	8.27	91.1%
Total Phosphorus as P	0.54	79.5%

The Port Elgin Sewage Treatment Plant effectively provided effluent that was well within the effluent limits and effluent objectives set out in the ECA. Refer to Table 7 for a monthly summary of analytical samples with the effluent limits and objectives.

Table 7. Comparison of Effluent Limits and Objectives to Sampled Effluent for Port Elgin Sewage Treatment Plant (2025)

	$CBOD_5$					**Total Suspended Solids**					**Total Phosphorus**					**E.Coli**			**pH**			
	Average Monthly Concentration (mg/L)	Within Objectives (15 mg/L)	Within Limits (25 mg/L)	Average Monthly Loading (kg/d)	Within Limit (161 kg/d)	Monthly Average Concentration (mg/L)	Within Objectives (15 mg/L)	Within Limits (25 mg/L)	Average Monthly Loading (kg/d)	Within Limit (161kg/d)	Average Monthly Concentration (mg/L)	Within Objectives (0.8 mg/L)	Within Limits (1 mg/L)	Average Monthly Loading (kg/d)	Within Limit (6.5 kg/d)	Monthly Geometric Mean Density (CFU/100 mL)	Within Objectives (100 cfu/ 100 mL)	Within Limits (200 cfu/ 100 mL)	Monthly Minimum	Monthly Maximum	Within Objectives (6.5 – 8.5 inclusive)	Within Limits (6.0 – 9.5 inclusive)
January	3.75	Yes	Yes	11.47	Yes	12.50	Yes	Yes	38.24	Yes	0.57	Yes	Yes	1.75	Yes	1.19	Yes	Yes	6.97	7.24	Yes	Yes
February	3.75	Yes	Yes	11.00	Yes	12.75	Yes	Yes	37.41	Yes	0.49	Yes	Yes	1.44	Yes	2.45	Yes	Yes	6.92	7.07	Yes	Yes
March	3.50	Yes	Yes	14.71	Yes	10.25	Yes	Yes	43.08	Yes	0.49	Yes	Yes	2.05	Yes	1.63	Yes	Yes	7.10	7.37	Yes	Yes
April	2.40	Yes	Yes	12.81	Yes	5.20	Yes	Yes	27.75	Yes	0.38	Yes	Yes	2.05	Yes	4.70	Yes	Yes	7.20	7.58	Yes	Yes
May	3.50	Yes	Yes	14.03	Yes	8.75	Yes	Yes	35.07	Yes	0.67	Yes	Yes	2.68	Yes	1.90	Yes	Yes	7.22	7.49	Yes	Yes
June	4.50	Yes	Yes	15.68	Yes	7.50	Yes	Yes	26.14	Yes	0.32	Yes	Yes	1.11	Yes	1.19	Yes	Yes	6.87	7.15	Yes	Yes
July	2.00	Yes	Yes	6.56	Yes	7.80	Yes	Yes	25.59	Yes	0.36	Yes	Yes	1.19	Yes	1.58	Yes	Yes	7.08	7.45	Yes	Yes
August	3.25	Yes	Yes	10.44	Yes	5.75	Yes	Yes	18.47	Yes	0.38	Yes	Yes	1.20	Yes	1.32	Yes	Yes	6.79	7.18	Yes	Yes
September	2.25	Yes	Yes	6.64	Yes	9.75	Yes	Yes	28.76	Yes	0.91	No	Yes	2.68	Yes	1.19	Yes	Yes	6.50	7.03	Yes	Yes
October	2.80	Yes	Yes	8.38	Yes	7.20	Yes	Yes	21.54	Yes	0.81	No	Yes	2.42	Yes	1.38	Yes	Yes	6.57	6.90	Yes	Yes
November	2.75	Yes	Yes	7.52	Yes	6.75	Yes	Yes	18.47	Yes	0.61	Yes	Yes	1.67	Yes	2.26	Yes	Yes	6.29	6.74	No	Yes
December	3.40	Yes	Yes	9.65	Yes	6.60	Yes	Yes	18.74	Yes	0.55	Yes	Yes	1.57	Yes	5.67	Yes	Yes	6.62	6.93	Yes	Yes

2.4 Additional Monitoring Parameters

The following parameters do not have effluent limits or objectives but are monitored on a regular basis (see Section 3.1 for sampling frequency) as required by ECA 0556-AKQN3Q. Table 8, 9, and 10 summarizes the monitoring data for the reporting period. In addition to meeting the ECA requirement for monthly raw sampling, sampling frequency was proactively increased to weekly starting in October to further optimize operations.

Table 8. Raw Sewage Monitoring Parameters as required for Port Elgin Sewage Treatment Plant, 2025

Parameters	Average	Minimum	Maximum
BOD_5[8a] (mg/L)	177.25	63.00	297.00
Total Suspended Solids[8a] (mg/L)	120.75	55.00	218.00
Total Phosphorus[8a] (mg/L)	3.02	1.80	6.10
Total Kjeldahl Nitrogen[8a] (mg/L)	28.06	18.40	39.30

[8a]Refer to Appendix A for sample results.

The 2025 average results for BOD_5 is higher while TSS, TP and TKN were lower than the previous year. The 2025 minimum results for BOD_5, TP and TKN are all lower than the previous year. The 2025 maximum results were all higher than the previous year.

Table 9. Effluent Monitoring Parameters as required for Port Elgin Sewage Treatment Plant, 2025

Parameters	Average	Minimum	Maximum
Total Kjeldahl Nitrogen (mg/L)	0.79	0.50	3.20
Ammonia Nitrogen[9a] (mg/L)	0.15	0.10	1.70
Nitrite and Nitrate[9a] (mg/L)	23.44	13.30	33.50
Alkalinity (mg/L as $CaCO_3$)	63.31	27.00	140.00
Temperature (°C)	12.52	7.00	20.00

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

The 2025 averages for alkalinity was higher while TKN, TAN, and temperature were lower than the previous year. Nitrite + Nitrate was comparable to the previous year. The minimum results for TKN and TAN are the same, Nitrite + Nitrate and alkalinity are higher and temperature is lower than the previous year. The maximum results for TKN, TAN and temperature are lower and Nitrite + Nitrate and alkalinity are higher than the previous year.

Table 10. Influent flows and Septage Receiving, 2025

Pump Station	Average Daily Flow (m^3/day)	Total Annual Flow (m^3)	Percentage of Rated Capacity (6,455 m^3/d)
Influent	3,319	1,207,988	51.4%
Septage Receiving Station	0.21	77.6	n/a

The 2025 influent total annual flow and average daily flow are higher when compared to the previous year. The septage received in 2025 was also lower when compared to the previous year. A summary of septage received can be found in Appendix F.

3. Operating Challenges

As per Section 11,(4)(c) of Environmental Compliance Approval (ECA) 0556-AKQN3Q*, a description of any operating problems encountered and corrective actions taken* is required.

In 2025, the following operating problems were encountered:

Non-Compliance(s)	Duration	Response & Corrective Actions
n/a	n/a	n/a

4. Major Maintenance Activities

As per Section 11, (4)(d) of Environmental Compliance Approval (ECA) 0556-AKQN3Q*, a summary of all maintenance 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 belts on grit pump in headworks building
- Repaired booster pump in headworks building
- Installed a new step screen
- Installed new chains on the bypass channel
- Replaced UV lights and bulbs
- Installed a new blower
- Rebuilt and installed a sludge pump
- Installed gear and chain on Clarifier 1
- Installed new RAS tubes in Clarifier 2

As per Section 11, (4)(k) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a copy of all Notice of Modifications, submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification*, is required.

There were two (2) Notice of Modifications submitted during the reporting period:

- The travelling screen was replaced with a stainless steel step screen in March 2025.
- The old positive displacement 50 HP blower was replaced with a 100 Turbo HP blower in April 2025.

See Appendix H for the Notice of Modifications to Sewage Works forms submitted during the reporting period.

As per Section 11, (4)(l) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a report summarizing all modification completed as a result of Schedule B, Section 3*, is required.

See above for summary of modifications completed.

5. Effluent Quality Assurance and Control

As per Section 11,(4)(e) of Environmental Compliance Approval (ECA) 0556-AKQN3Q , *a summary of effluent quality assurance or control measures taken during the reporting period* is required.

All laboratory analyzed raw sewage and effluent samples were analyzed by SGS Canada Inc., which is an ISO 17025 accredited laboratory. 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 were 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 a 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) 0556-AKQN3Q, *an evaluation of the calibration and maintenance procedures conducted on all Influent, Imported Sewage and Final Effluent monitoring equipment;* 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 a 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, 2025, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge, waste activated sludge and pumping station flow meters. All flow meters passed the annual verification. On April 8 and October 8, 2025 SPD Sales Ltd. calibrated the gas detection equipment. On May 22, 2025, SPD Sales Ltd. verified the calibrations of the spectrophotometers and colourimeters, performed calibrations on the portable pH and DO meters used at the Port Elgin Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were performing to factory specifications.

7. Sludge Generation & Disposal

As per Section 11, (4)(h) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *the volume of sludge generated during the reporting period and an outline of anticipated volumes to be generated over the next reporting period and a summary of the locations where the sludge was disposed* is required.

A total volume of 6,688 m^3 of sludge was generated from the Port Elgin Sewage Treatment Plant and applied to agricultural land during the reporting period. Table 11 summarizes the sludge haulage volumes for 2025. The hauling and spreading of sludge from the Port Elgin sewage treatment plant was conducted by Bartels Environmental Services Inc. A chemical analysis of the sludge/biosolids quality can be found in Appendix C.

Table 11. Volume of Sludge Generated from Port Elgin Sewage Treatment Plant

Site	Volume of Sludge Generated (m^3)	Hauler	Haulage Dates
25069	3,036	Bartel's Environmental	May 5, 6, 7, 8 & 9, 2025
61280	3,652	Bartel's Environmental	October 10, 14, 15, 16, 17 & 20, 2025

Based on a linear regression with an R^2 value of 65%, the anticipated volume to be generated over the next reporting period is approximately 6,911 m^3.

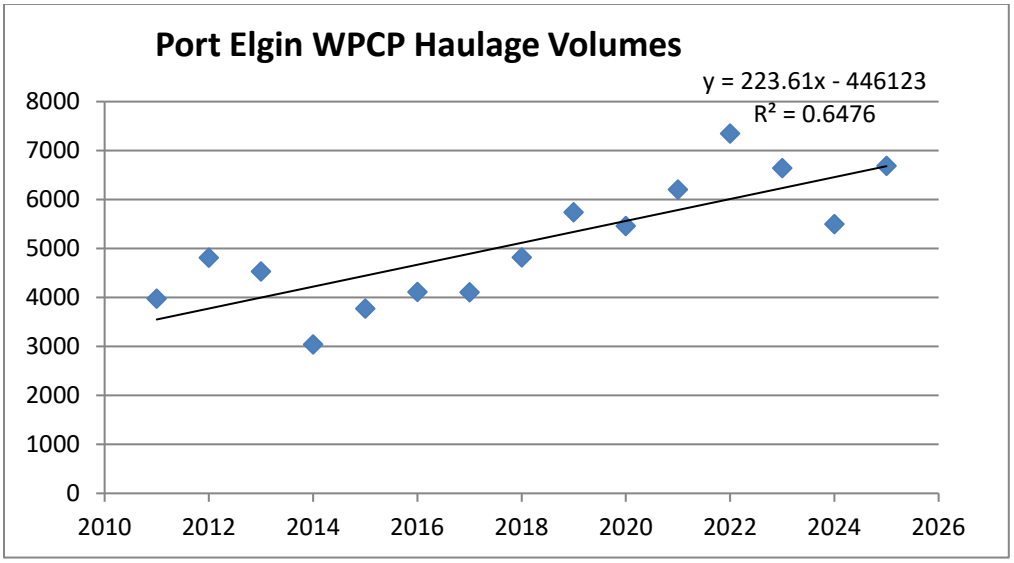

Figure 1. Port Elgin Sewage Treatment Plant Haulage Volumes (2011 to 2026)

In 2025, sludge was handled and hauled by Bartels Environmental 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 D for Sludge Haulage Records for Port Elgin 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 C 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 and sample and quality report results is attached in Appendix C.

8. Community Complaints

As per Section 11, (4)(i) of Environmental Compliance Approval (ECA) 0556-AKQN3Q , *a summary of complaints received during the reporting period and any steps taken to address the complaints* is required.

During the reporting period, OCWA staff received one (1) community complaint for 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. The sewers are flushed routinely and the operators of the plant ensure that an odour control atomizer is maintained and functional during any facility process adjustments. See Appendix E for a record of community complaints received by OCWA during the reporting period.

9. Bypasses, Spills & Discharge Events

As per Section 11, (4)(j) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary of all Bypasses, Overflows, reportable spills or abnormal discharge event;* 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 4.5 and 5.5. See Appendix G for quarterly summary reports submitted to the Ministry.

The following events occurred in 2025:

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

10. 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.

10.1 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 Port Elgin Wastewater Collection Subsystem will be included. For further information on the Southampton Wastewater Collection System, please refer to the Southampton WWTP 2025 Annual Performance Report.

The Port Elgin 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 Port Elgin Water Pollution Control Plant.

The sewage pumping station in the Authorized system include:

- Westlink Pumping Station – located at 2089 Bruce County Rd 17. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer at the top of the hill on Green St.
- Harbour St. Pumping Station – located at 632 Harbour St. Consists of a drywell, a control building, three pumps, a stand-by diesel generator, and discharges to the WPCP headworks building.
- Tomlinson Dr. Pumping Station – located at 500 Tomlinson Dr. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer on Wellington St.
- Mill Creek Pumping Station – located at 525 Mill Creek Rd. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer that flows to Harbour St. Pumping Station.

- Shipley Pumping Station – located at 65 Shipley Ave. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer that flows into Harbour St. Pumping Station.
- 10th Concession Pumping Station – located at 345 10th Concession. Consists of a drywell, a control building, two pumps, a stand-by diesel generator and discharges to the WPCP headworks building.

The Town of Saugeen Shores Municipal Sewage Collection Systems contains no combined sewage pumping stations, no combined sewage storage structures or combined storage tanks. The authorized collection system also contains no authorized combined sewer collection system overflow points and no authorized sanitary sewer overflow points.

Prior to January 10, 2023, Shipley Ave. Pumping Station was captured under CofA 9916-5YPTLB. On January 10, 2023, Municipal Sewage Collection System ECA Number 093-W601, Issue 1, was issued to the Town of Saugeen Shores Municipal Sewage Collection Systems incorporating all Pumping Stations, sewers, separate sewers and forcemains into one Consolidated Linear Infrastructure ECA. As such, all prior ECAs pertaining to the collection system, issued by the Director for Sewage Works are considered revoked and replaced by ECA Number 093-W601.

10.2 Summary of Monitoring Data and Interpretation

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

10.3 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.

10.4 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, 2025, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge, waste activated sludge and pumping station flow meters. All flow meters passed the annual verification. On April 8 and October 8, 2025 SPD Sales Ltd. calibrated the gas detection equipment. On May 22, 2025, SPD Sales Ltd. verified the calibrations of the spectrophotometers and colourimeters, performed calibrations on the portable pH and DO meters used at the Port Elgin Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were performing to factory specifications.

Major maintenance activities for the authorized system can be found in section 10.6 of this report.

10.5 Community Complaints Received in Relation to the Sewage Works

During the reporting period, OCWA staff received one (1) community complaint for odour. See Appendix E for a record of community complaints received by OCWA during the reporting period.

10.6 Alterations to the Authorized System

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

- Installed drain line for wet well water line at 10th Concession PS
- Painting piping at Harbour St. PS
- Installed a new pump at Shipley PS
- Installed new flush lines on pumps 1 & 2 at Harbour St. PS
- Cleaned grit channels at Harbour St. PS and 10th Concession PS
- Installed a new radar transducer at Harbour St. PS
- Installed a new oxygen sensor at 10th Concession PS

10.7 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.

10.8 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
AGENCE ONTARIENNE DES EAUX

Appendix A

Performance Assessment Report

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Performance Assessment Report

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

5069 PORT ELGIN WASTEWATER TREATMENT FACILITY 120001470

	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	90,067.00	77,805.00	123,101.00	153,382.00	120,057.00	98,762.00	98,671.00	96,326.00	87,124.00	90,295.00	83,496.00	88,902.00	1,207,988.00			0.00
Raw Flow: Avg - Raw Sewage m³/d	2,905.39	2,778.75	3,971.00	5,112.73	3,872.81	3,405.59	3,182.94	3,107.29	2,904.13	2,912.74	2,783.20	2,867.81		3,318.65		6,455.00
Raw Flow: Max - Raw Sewage m³/d	3,155.00	3,071.00	6,838.00	8,385.00	4,243.00	3,724.00	3,457.00	4,525.00	3,285.00	3,486.00	3,018.00	3,749.00			8,385.00	0.00
Raw Flow: Count - Raw Sewage m³/d	31.00	28.00	31.00	30.00	31.00	29.00	31.00	31.00	30.00	31.00	30.00	31.00	364.00			0.00
Eff. Flow: Total - Effluent m³/d	94,835.00	82,152.00	130,285.00	160,120.00	124,245.00	101,082.00	101,701.00	99,574.00	88,477.00	92,752.00	82,092.00	88,024.00	1,245,339.00			0.00
Eff. Flow: Avg - Effluent m³/d	3,059.19	2,934.00	4,202.74	5,337.33	4,007.90	3,485.59	3,280.68	3,212.06	2,949.23	2,992.00	2,736.40	2,839.48		3,421.26		6,455.00
Eff. Flow: Max - Effluent m³/d	3,576.00	3,816.00	6,610.00	8,254.00	4,948.00	3,889.00	3,576.00	4,750.00	3,689.00	3,615.00	3,128.00	3,819.00			8,254.00	0.00
Eff Flow: Count - Effluent m³/d	31.00	28.00	31.00	30.00	31.00	29.00	31.00	31.00	30.00	31.00	30.00	31.00	364.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Effluent mg/L	3.75	3.75	3.50	< 2.40	3.50	< 4.50	< 2.00	< 3.25	2.25	2.80	< 2.75	3.40		3.12	4.50	25.00
Eff: # of samples of cBOD5 - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Loading: cBOD5 - Effluent kg/d	11.472	11.003	14.710	< 12.810	14.028	< 15.685	< 6.561	< 10.439	6.636	8.378	< 7.525	9.654		10.66	15.69	161.000
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw Sewage mg/L	162.00	150.00	66.00	73.00	127.00	285.00	133.00	63.00	297.00	139.00	186.25	233.20		177.25	297.00	0.00
Raw: # of samples of BOD5 - Raw Sewage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	20.00			0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw Sewage mg/L	149.00	65.00	64.00	79.00	55.00	182.00	115.00	70.00	218.00	105.00	126.75	140.20		120.75	218.00	0.00
Raw: # of samples of TSS - Raw Sewage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	20.00			0.00
Eff: Avg TSS - Effluent mg/L	12.50	12.75	10.25	5.20	8.75	7.50	7.80	5.75	9.75	7.20	6.75	6.60		8.27	12.75	25.00
Eff: # of samples of TSS - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Loading: TSS - Effluent kg/d	38.240	37.409	43.078	27.754	35.069	26.142	25.589	18.469	28.755	21.542	18.471	18.741		28.29	43.08	161.000
Percent Removal: TSS - Raw Sewage %	91.61	80.38	83.98	93.42	84.09	95.88	93.22	91.79	95.53	93.14	94.67	95.29		91.08	95.88	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw Sewage mg/L	3.18	3.89	2.02	1.86	1.80	6.10	2.39	1.94	3.51	2.71	2.96	3.31		3.02	6.10	0.00
Raw: # of samples of TP - Raw Sewage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	20.00			0.00
Eff: Avg TP - Effluent mg/L	0.57	0.49	0.49	0.38	0.67	0.32	0.36	0.38	0.91	0.81	0.61	0.55		0.54	0.91	1.00
Eff: # of samples of TP - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Loading: TP - Effluent kg/d	1.751	1.438	2.049	2.050	2.685	1.107	1.194	1.205	2.676	2.424	1.669	1.567		1.86	2.69	6.500
Percent Removal: TP - Raw Sewage %	82.00	87.40	75.87	79.35	62.78	94.80	84.77	80.67	74.15	70.06	79.39	83.31		79.55	94.80	0.00
Nitrogen Series																
Raw: Avg TKN - Raw Sewage mg/L	30.30	39.30	19.90	19.00	19.80	33.90	23.40	18.80	33.20	25.60	30.03	30.46		28.06	39.30	0.00

Raw: # of samples of TKN - Raw Sewage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	20.00			0.00
Eff: Avg TAN - Effluent mg/L	< 0.10	< 0.18	< 0.50	< 0.10	< 0.10	< 0.10	< 0.12	0.13	< 0.10	0.14	< 0.10	< 0.12		< 0.15	< 0.50	
Eff: # of samples of TAN - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Loading: TAN - Effluent kg/d	< 0.306	< 0.513	< 2.101	< 0.534	< 0.401	< 0.349	< 0.394	0.402	< 0.295	0.419	< 0.274	< 0.341		< 0.50	< 2.10	
Eff: Avg NO3-N - Effluent mg/L	24.60	24.20	19.78	15.60	20.10	20.15	22.18	22.95	28.50	25.90	29.60	26.94		23.37	29.60	0.00
Eff: # of samples of NO3-N - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Eff: Avg NO2-N - Effluent mg/L	< 0.05	< 0.11	< 0.09	0.08	0.06	0.05	0.05	< 0.06	< 0.04	0.68	0.06	0.08		< 0.12	< 0.68	0.00
Eff: # of samples of NO2-N - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00
Disinfection																
Eff: GMD E. Coli MPN - Effluent MPN	1.19	2.45	1.63	4.70	1.90	1.19	1.58	1.32	1.19	1.38	2.26	5.67				
Eff: # of samples of E. Coli MPN - Effluent	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			0.00

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix B
Calibration Reports

FLOWMETRIX TECHNICAL SERVICES

ABB MAGMASTER
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	ABB
MODEL	MagMaster
CONVERTER SERIAL NUMBER	3K620000015307
FUSE	Control Panel CP-01 Fuse Holder ULF7
PLANT ID	Port Elgin - Concession # 10 P.S.
METER ID	Pumped Flow
FIT ID	FIT-01
CLIENT TAG	OCWA #227081
OTHER	ORG# 5069
GPS COORDINATES	N44 27.588 W081 23.464
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	350
F.S. FLOW - MAG	LPS	1331.5
F.S. RANGE - O/P	LPS	400.00
TUBE CAL. FACTOR	1	1.3839

FORWARD TOTALIZER INFORMATION

AS FOUND	6717956	M3
AS LEFT	6717996	M3
DIFFERENCE	40	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	**0.2**	**0.5**	**1.0**	**2.0**	**m/s**
			0	**2**	**5**	**10**	**20**	**% F.S. Flow**
			0.0	**6.7**	**16.6**	**33.3**	**66.6**	**% F.S. Range**
REF. FLOW RATE			**0.00**	**26.63**	**66.57**	**133.15**	**266.29**	LPS
MUT [Reading]			0.00	27.71	65.69	133.45	266.32	LPS
MUT [Difference]			0.00	1.08	-0.88	0.30	0.03	LPS
MUT [% Error]			n/a	4.06	-1.33	0.23	0.01	%
mA OUTPUT			**4.000**	**5.065**	**6.663**	**9.326**	**14.652**	mA
MUT [Reading]	min.	4.000 mA	3.994	5.065	6.666	9.325	14.631	mA
MUT [Difference]	max.	20.000 mA	-0.006	0.000	0.003	-0.001	-0.021	mA
MUT [% Error]			-0.15	0.00	0.05	-0.01	-0.14	%

TOTALIZER - REF. FLOW RATE	**Enter in Totalizer Test Velocity if Different (m/s)**	2.0	**266.293** LPS
TOTALIZER [MUT]			20 M3
TEST TIME			74.76 SECONDS
CALC. TOTALIZER			19.908 M3
ERROR			0.46 %

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	ABBMM	1
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	Yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.74	PASS
mA OUTPUT	-0.05	PASS
TOTALIZER	0.46	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

Endress Hauser ProMag Series
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	ENDRESS & HAUSER
MODEL	Prosinic 91W
CONVERTER S/N:	TC084B16000
FUSE	On board Pull Plug
PLANT ID	Port Elgin STP - Harbour St P/S
METER ID	Station Flow
FIT ID	n/a
CLIENT TAG	n/a
OTHER	n/a
GPS COORDINATES	N44 26.518 W081 24.137
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	300
F.S. FLOW - MAG	LPS	706.838
F.S. RANGE - O/P	LPS	350.00
TUBE k-FACTOR		1.0000
TUBE zero		0

FORWARD TOTALIZER INFORMATION

AS FOUND	565660	M3
AS LEFT	565853	M3
DIFFERENCE	193	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	87.5	175.0	262.5	350.0	LPS
				0.0	12.4	24.8	37.1	49.5	% F.S. Flow
				0.0	25.0	50.0	75.0	100.0	% F.S. Range
REF. FLOW RATE				**0.000**	**87.500**	**175.000**	**262.500**	**350.000**	LPS
MUT [Reading]				0.000	87.530	175.160	262.810	350.470	LPS
MUT [Difference]				0.000	0.030	0.160	0.310	0.470	LPS
MUT [% Error]				n/a	0.03	0.09	0.00	0.13	%
mA OUTPUT				**4.000**	**8.000**	**12.000**	**16.000**	**20.000**	mA
MUT [Reading]	min.	4	mA	3.992	7.986	11.985	15.986	19.985	mA
MUT [Difference]	max.	20	mA	-0.008	-0.014	-0.015	-0.014	-0.015	mA
MUT [% Error]				-0.20	-0.18	-0.13	-0.09	-0.08	%

TOTALIZER			
REF. FLOW RATE	**350.000**	LPS
TOTALIZER [MUT]	37.00	M3
TEST TIME	105.24	SECONDS
TOTALIZER [REF]	36.834	M3
ERROR	0.45	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	E&H-FC	3
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	Yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.07	PASS
mA OUTPUT	-0.13	PASS
TOTALIZER	0.45	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

Rectangular Weir
W/End Contractions
Verification/Calibration Report

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Bruce Hub
CONTACT Dan MacLeod
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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	Siemens
MODEL	Sitrans LT500 MultiRanger
CONVERTER SERIAL NUMBER	PBD-S6276014
PLANT ID	Port Elgin WWTP
METER ID	Final Effluent
FIT ID	1001
CLIENT TAG	OCWA# Not Assigned
OTHER	ORG# 5069
GPS COORDINATES	N44 26.324 W081 22.358
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

THROAT WIDTH, (exp 1.5)	m	1.500
EMPTY DISTANCE, TX to notch	m	1.263
TRANSDUCER (TX), to sump flc	m	n/a
SUMP LEVEL, zero flow	m	n/a
OFFSET FOR ZERO	m	0.008
MAX. HEAD	m	0.187
BLANKING DISTANCE	m	0.305
DEAD ZONE	m	1.076
MAX. FLOW	M3/D	18718.6
F.S. RANGE - O/P	M3/D	18718.6

Ultrasonic sensor installed to ensure full scale flow condition

TOTALIZER

AS FOUND	900166.09	M3
AS LEFT	900230.73	M3
DIFFERENCE	64.64	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
ALLOWABLE [%] ERROR	5

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

				0.0	14.1	39.7	72.5	94.8	% F.S. Range
				0.000	0.050	0.100	0.150	0.180	m
REF. FLOW RATE				**0.0**	**2645.5**	**7432.3**	**13561.7**	**17754.5**	M3/D
MUT [Reading]				0.0	2635.1	7482.8	13402.0	17753.2	M3/D
MUT [Difference]				0.0	-10.3	50.5	-159.7	-1.4	M3/D
MUT [% Error]				0.0	-0.1	0.3	-0.9	0.0	%
mA OUTPUT				**4.000**	**6.261**	**10.353**	**15.592**	**19.176**	mA
MUT [Reading]	min.	4.000	mA	4.005	6.232	10.373	15.449	19.051	mA
MUT [Difference]	max.	20.000	mA	0.005	-0.029	0.020	-0.143	-0.125	mA
MUT [% Error]				0.02	-0.15	0.10	-0.72	-0.62	%
TOTALIZER - REF. FLOW RATE								**17754.526**	M3/D
TOTALIZER [MUT]								33.03	M3
TEST TIME								160.35	SECONDS
CALC. TOTALIZER								32.951	M3
ERROR								0.24	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

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

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	-0.16	PASS
mA OUTPUT	-0.27	PASS
TOTALIZER	0.24	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

Parshall Flume
Verification/Calibration Report

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

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CONTACT Dan MacLeod
Senior Operations Manager
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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	Siemens
MODEL	Sitrans LT500 MultRanger
CONVERTER SERIAL NUMBER	PBD-SO286102
PLANT ID	Port Elgin WWTP
METER ID	Influent Raw Flow
FIT ID	N/A
CLIENT TAG	N/A
OTHER	N/A
GPS COORDINATES	N44 26.324 W081 22.358
ADDRESS	
VERIFICATION DATE	May 14th 2025
CAL. FREQUENCY	Annual
CAL. DUE DATE	May 2026

PROGRAMMING PARAMETERS

THROAT DIMENSION (DN)	inches	18
EMPTY DISTANCE	m	1.319
MAX. HEAD	m	0.357
DEAD ZONE	m	0.962
BLANKING DISTANCE	m	0.030
MAX. FLOW	M3/H	779.8
F.S. RANGE - O/P	M3/H	780.0

Ultrasonic sensor installed to ensure full scale flow condition

TOTALIZER

AS FOUND	599617.5	M3
AS LEFT	599761.52	M3
DIFFERENCE	144.02	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

				0.0	14.1	41.0	76.5	97.0	% F.S. Range
				0.000	0.100	0.200	0.300	0.350	m
REF. FLOW RATE				**0**	**110**	**320**	**597**	**756**	M3/H
MUT [Reading]				0.00	99.06	303.29	580.13	757.37	M3/H
MUT [Difference]				0.00	-11.09	-16.56	-16.60	0.98	M3/H
MUT [% Error]				n/a	-1.42	-2.12	-2.13	0.13	%
mA OUTPUT				**4.000**	**6.260**	**10.563**	**16.244**	**19.520**	mA
MUT [Reading]	min.	4.000	mA	4.004	6.055	10.180	15.904	19.579	mA
MUT [Difference]	max.	20.000	mA	0.004	-0.205	-0.383	-0.340	0.059	mA
MUT [% Error]				0.02	-1.03	-1.91	-1.70	0.29	%
TOTALIZER - REF. FLOW RATE								**756.385**	M3/H
TOTALIZER [MUT]								35.44	M3
TEST TIME								171.19	SECONDS
CALC. TOTALIZER								35.968	M3
ERROR								-1.49	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.

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

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	-1.39	PASS
mA OUTPUT	-0.87	PASS
TOTALIZER	-1.49	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

VeriMaster - Flow Meter Verification Report

Customer Information	
Customer	OCWA-Southampton
Verification Download	May-14-25

Meter Information	
Meter Owner	RAS Flow
Meter Type	WaterMaster
Sensor Size	DN300
Pipe Status	Fluid Present
Sensor Type	Fullbore
Sensor Serial No	3K672023120806
Transmitter Serial No	3K672023120806
Tag	RAS Flow
Location	Port Elgin STP

Overall Status: Pass

The flowmeter has passed its internal continuous verification and automatic self calibration. It is working within +/ -1% of its original factory calibration

Summary of Results	
Coil Group	Passed
Electrode Group	Passed
Sensor Group	Passed
Transmitter Signal	Passed
Transmitter Driver	Passed
Output Group	Passed
Configuration	Passed

Verification History	
OIML Accuracy Alarms	0

Totaliser Information	
Forward	1797588.21 m3
Reverse	4.07 m3
Net	1797584.19 m3

Sensor Information	
Q3	694.44 l/s
Calibration Accuracy	OIML Class 2
Sensor Calibration Factors	150.1%; -2.92 mm/s; 11
Date of Manufacture	01 Feb 2023
Run Hours	230days 14hrs 4900mins

Sensor Data	
Coil Current	179.9 mA
Coil Inductance	303.2 mH
Coil Inductance Shift	0.2%
Coil / Loop Resistance	34.8 ohm

Transmitter Information	
Application Version	V01.07.00 03/02/17
MSP Version	00.00.04
Date of Manufacture	01 Feb 2023
Run Hours	461days 13hrs 18688mins

Transmitter Data	
Tx Gain - Adjustment	0.1%

VeriMaster Information	
Version	01.00.03
Limit Version	01.00.01

Current Output	
4mA Value	Pass : 3.999 mA ; 0.02%
12mA Value	Pass : 11.982 mA ; 0.15%
20mA Value	Pass : 19.992 mA ; 0.04%

Pulse Output	
Output 1: 100.0Hz	Not tested
Output 1: 50.0Hz	Not tested
Output 2: 250Hz	Not available for testing
Output 2: 125Hz	Not available for testing

Installation Comments / Equipment used:

DMM-20 used for Output checks

Configuration Settings	
Mains Frequency	60 Hz
Qmax	149.00 l/s
Pulses/Unit	1.000000
Pulses Limit Frequency	100.0 Hz
Sensor User Span/Zero	100.0%; 0.00 mm/s
User Flow Cutoff/Hysterisis	0.00%; 20%
Meter Mode	Normal operation

Date May-14-25 Operator Signature Print

ABB Instrumentation World Flow Technology

ABB Limited
Oldends Lane, Stonehouse
Gloucestershire, GL10 3TA UK
Tel: +44(0) 1453 826661
Fax: +44(0) 1453 821121
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125 East County Line Road
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FLOWMETRIX
TECHNICAL SERVICES

VeriMaster - Flow Meter Verification Report

Customer Information	
Customer	OCWA-Southampton
Verification Download	May-14-25

Meter Information	
Meter Owner	WAS/Scum Flow
Meter Type	WaterMaster
Sensor Size	DN150
Pipe Status	Fluid Present
Sensor Type	Fullbore
Sensor Serial No	3K672023081436
Transmitter Serial No	3K672023081436
Tag	WAS/Scum Flow
Location	Port Elgin STP

Overall Status: Pass

The flowmeter has passed its internal continuous verification and automatic self calibration. It is working within +/ -1% of its original factory calibration

Summary of Results	
Coil Group	Passed
Electrode Group	Passed
Sensor Group	Passed
Transmitter Signal	Passed
Transmitter Driver	Passed
Output Group	Passed
Configuration	Passed

Verification History	
OIML Accuracy Alarms	0

Totaliser Information	
Forward	22435.97 m3
Reverse	5566.23 m3
Net	16869.74 m3

Sensor Information	
Q3	175.00 l/s
Calibration Accuracy	OIML Class 2
Sensor Calibration Factors	138.9%; -2.16 mm/s; 11
Date of Manufacture	30 Jan 2023
Run Hours	0days 0hrs

Sensor Data	
Coil Current	179.9 mA
Coil Inductance	162.5 mH
Coil Inductance Shift	-0.2%
Coil / Loop Resistance	33.0 ohm

Transmitter Information	
Application Version	→||
MSP Version	00.00.04
Date of Manufacture	30 Jan 2023
Run Hours	462days 17hrs 29184mins

Transmitter Data	
Tx Gain - Adjustment	0.1%

VeriMaster Information	
Version	01.00.03
Limit Version	01.00.01

Current Output	
4mA Value	Pass : 4.000 mA ; 0.00%
12mA Value	Pass : 11.985 mA ; 0.13%
20mA Value	Pass : 19.997 mA ; 0.02%

Pulse Output	
Output 1: 100.0Hz	Not tested
Output 1: 50.0Hz	Not tested
Output 2: 250Hz	Not available for testing
Output 2: 125Hz	Not available for testing

Installation Comments / Equipment used:

DMM-20 use for Output checks

Configuration Settings	
Mains Frequency	60 Hz
Qmax	20.00 l/s
Pulses/Unit	1.000000
Pulses Limit Frequency	100.0 Hz
Sensor User Span/Zero	100.0%; 0.00 mm/s
User Flow Cutoff/Hysterisis	0.00%; 20%
Meter Mode	Normal operation

Date May-14-25 Operator Signature Print

ABB Instrumentation World Flow Technology

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Dransfelder Str.2
37079 Gottingen, GERMANY
Tel: +49 (0) 551 905212
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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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	HQ11d	**Sensor:**	PHC101	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	080200017705	**Sensor:**	NA	
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:	-57.93 mV/PH
Offset:	-21.9 mV

Input	**Input %**	**Temp. °C**	**As Found**	**Deviation**	**As Left**	**Deviation**
4.01	**28.64%**	**20.80**	4.07	1.50%	4.00	-0.25%
7.00	**50.00%**	**20.80**	7.14	2.00%	7.01	0.14%
10.00	**71.43%**	**20.80**	10.10	1.00%	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:** 22-May-25	**Date:** 22-May-25	

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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	Pocket Colorimeter				
As Left Status:	**Initial Condt**	**Serial #:**	030500035442				
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:	0.19	+-0.09
Calibration Standard Solution 2:	0.84	+-.10
Calibration Standard Solution 3:	1.47	+-.14

Chlorine Standard	**Output Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
0.19	**0.19**	0.18	-5.26%	0.18	-5.26%
0.84	**0.84**	0.82	-2.38%	0.82	-2.38%
1.47	**1.47**	1.47	0.00%	1.47	0.00%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Verified Successfully	DPD Chlrine LR Standard Kit		Jul-26
As the instrument being obsolete, Calibration can not be performed.			
	Technician Name	**Witness Name**	
	Vaibhav Patel	Justin	
Verification Result: **Pass**	**Date:** 22-May-25	**Date:** 22-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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	HQ1130D	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	230191130055	**Sensor:**	222302599464	
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:	18 Degree C
Offset	0
Slope	98.00%

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.00**		10.38	15.33%	8.79	-2.33%

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.				
As left reading was 8.79 mg/l in air.				
Disolved oxygen in Air depends on the various parameter such as temperature, pressure				
and weather conditins.				
Transmitter was showing Change cap warning.		**Technician Name**		**Witness Name**
		Vaibhav Patel		Justin
Calibration Result:	**Pass**	**Date:**	22-May-25	**Date:** 22-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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	SC200	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	1806C0162137	**Sensor:**	001101410029	
Instrument Visual Inspection:		**Range:**	NA		**Output:**	4-20 mA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	East Tank DO Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.86

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		10.20	12.96%	9.35	3.54%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 9.35 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:**	22-May-25	**Date:**	22-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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	**Transmitter:**	SC200	**Sensor:**	LDO	
As Left Status:	**Initial Condt**	**Serial #:**	**Transmitter:**	1806C0162137	**Sensor:**	181990000028	
Instrument Visual Inspection:		**Range:**	NA		**Output:**	4-20 mA	
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	West Tank DO Probe				
As found Display information:	**OK**	**Process/Location Descrpition:**	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.90

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		10.80	19.60%	9.40	4.10%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 9.40 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:**	22-May-25	**Date:**	22-May-25

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:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	Pocket Colorimeter				
As Left Status:	**Initial Condt**	**Serial #:**	xxxx455				
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:	0.19	+-0.09
Calibration Standard Solution 2:	0.84	+-.10
Calibration Standard Solution 3:	1.47	+-.14

Chlorine Standard	**Output Value**	**As Found**	**Deviation**	**As Left**	**Deviation**
0.19	**0.19**	0.20	5.26%	0.20	5.26%
0.84	**0.84**	0.85	1.19%	0.85	1.19%
1.47	**1.47**	1.49	1.36%	1.47	0.00%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Verified Successfully	DPD Chlrine LR Standard Kit		Jul-26
As the instrument being obsolete, Calibration can not be performed.			
	Technician Name	**Witness Name**	
	Vaibhav Patel	Justin	
Verification Result: **Pass**	**Date:** 22-May-25	**Date:** 22-May-25	

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:	Port Elgin Reservoir- 841 Mill St, Port Elgin						
Service Date:	22-May-25	**Instrument Type:**	**AIT**	**W.O. Number:**	**250480-0001**	**Asset#:**	NA
Due Date:	22-May-26	**Manufacturer:**	Hach				
Follow-Up Required:	**No**	**Model:**	DR3900				
As Left Status:	**Initial Condt**	**Serial #:**	1463134				
Instrument Visual Inspection:		**Range:**	NA	**Output:**	NA		
Mechanical Inspection:	**OK**	**Tag Infomration:**	NA				
Electrical Inspection:	**OK**	**Description:**	Sprectrometer				
As found Display information:	**OK**	**Process/Location Descrpition:**	Operator Room				

Verification Type	Standard	Nominal Value	Actual Value	Result
Straylight Check	KV450/3	>2.8 Abs	4.730Abs	Pass
Photometrical Accuracy	NG9/1	1.453 Abs	1.453 Abs	Pass
Photometrical Accuracy	NG5/2	0.613 Abs	0.613 Abs	Pass
Photometrical Accuracy	NG11/2	0.315 Abs	0.315 Abs	Pass
Wavelength Accuracy	Ho	360.9 nm	360.1 nm	Pass
Wavelength Accuracy	BG20/2	807.0 nm	807.0 nm	Pass

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Verified using Hach Verification kit	Hach Verification kit		Jul-28
	Technician Name	**Witness Name**	
	Vaibhav Patel	Justin	
Calibration Result: **Pass**	**Date:** 22-May-25	**Date:** 22-May-25	

Steve

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix C

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 #: 120001470
Project : PO#017018

14-May-2025

OCWA-Bruce (Port Elgin WPCP)
Attn : Karla Young

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

Phone: 519-797-2561
Fax:pdf

Date Rec. : 07 May 2025
LR Report: **CA13384-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	6: Bslq Bslq-Sludge Quality Hauled Sludge (Bacti)
Sample Date & Time					05-May-25 13:30	05-May-25 13:45
Temperature Upon Receipt [°C]	---	---	---	---	9.0	9.0
Total Solids [mg/L]	07-May-25	21:22	14-May-25	08:55	26400	27700
Total Solids (ASH) [mg/L]	07-May-25	21:22	09-May-25	13:10	5730	---
Total Solids (LOI) [mg/L]	45784	0.89	09-May-25	13:10	20700	---
pH [pH Units]	09-May-25	11:35	09-May-25	15:49	6.86	---
Total Kjeldahl Nitrogen [as N mg/L]	09-May-25	13:48	13-May-25	13:30	1740	---
Ammonia+Ammonium (N) [as N mg/L]	09-May-25	16:44	12-May-25	11:40	141	---
Nitrite (as N) [mg/L]	09-May-25	15:42	12-May-25	17:09	< 3	---
Nitrate (as N) [mg/L]	09-May-25	15:42	12-May-25	17:09	< 3	---
Nitrate + Nitrite (as N) [mg/L]	09-May-25	15:42	12-May-25	17:09	< 3	---
Arsenic [mg/L]	09-May-25	14:38	12-May-25	13:56	< 0.1	---
Cadmium [mg/L]	09-May-25	14:38	12-May-25	13:56	0.014	---
Cobalt [mg/L]	09-May-25	14:38	12-May-25	13:56	0.03	---
Chromium [mg/L]	09-May-25	14:38	12-May-25	13:56	0.34	---
Copper [mg/L]	09-May-25	14:38	12-May-25	13:56	14	---
Mercury [mg/L]	09-May-25	14:38	12-May-25	13:56	0.012	---
Potassium [mg/L]	09-May-25	14:38	12-May-25	13:56	106	---
Molybdenum [mg/L]	09-May-25	14:38	12-May-25	13:56	0.14	---
Nickel [mg/L]	09-May-25	14:38	12-May-25	13:56	0.21	---
Phosphorus (Total) [mg/L]	09-May-25	14:38	12-May-25	13:56	894	---
Lead [mg/L]	09-May-25	14:38	12-May-25	13:56	0.2	---
Selenium [mg/L]	09-May-25	14:38	12-May-25	13:56	0.1	---
Zinc [mg/L]	09-May-25	14:38	12-May-25	13:56	9	---
E. Coli [MPN/1g dried wgt]	07-May-25	13:04	09-May-25	08:21	---	86881
E. Coli [MPN/100mL]	07-May-25	13:04	09-May-25	08:21	---	240660

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.

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

Works #: 120001470

Project : PO#017018
LR Report : **CA13384-MAY25**

Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

OnLine LIMS

0004111450

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

Works #: 120001470
Project : PO#017018

23-October-2025

OCWA-Bruce (Port Elgin WPCP)
Attn : Karla Young

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

Phone: 519-797-2561
Fax:pdf

Date Rec. : 15 October 2025
LR Report: **CA12482-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: Bslq Bslq-Sludge Quality Hauled Sludge	6: Bslq Bslq-Sludge Quality Hauled Sludge (E.Coli)
Sample Date & Time					14-Oct-25 09:45	14-Oct-25 09:50
Temperature Upon Receipt [°C]	---	---	---	---	15.0	15.0
Total Solids [mg/L]	15-Oct-25	21:45	17-Oct-25	09:30	18800	---
Total Solids [mg/L]	17-Oct-25	18:13	21-Oct-25	09:36	---	19100
Total Solids (ASH) [mg/L]	15-Oct-25	21:45	17-Oct-25	09:30	5110	---
Total Solids (LOI) [mg/L]	15-Oct-25	21:45	17-Oct-25	09:30	13600	---
pH [pH Units]	17-Oct-25	10:19	17-Oct-25	15:29	7.15	---
Total Kjeldahl Nitrogen [as N mg/L]	16-Oct-25	15:13	20-Oct-25	15:02	1060	---
Ammonia+Ammonium (N) [as N mg/L]	16-Oct-25	16:25	17-Oct-25	13:17	175	---
Nitrite (as N) [mg/L]	20-Oct-25	11:07	22-Oct-25	15:11	< 3	---
Nitrate (as N) [mg/L]	20-Oct-25	11:07	22-Oct-25	15:11	< 3	---
Nitrate + Nitrite (as N) [mg/L]	20-Oct-25	11:07	22-Oct-25	15:11	< 3	---
Arsenic [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	< 0.1	---
Cadmium [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.014	---
Cobalt [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.03	---
Chromium [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.29	---
Copper [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	12	---
Mercury [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.011	---
Potassium [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	114	---
Molybdenum [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.12	---
Nickel [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.19	---
Phosphorus (Total) [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	819	---
Lead [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.2	---
Selenium [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	0.1	---
Zinc [mg/L]	17-Oct-25	14:46	20-Oct-25	15:27	10	---
E. Coli [MPN/1g dried wgt]	15-Oct-25	16:04	16-Oct-25	16:22	---	18063
E. Coli [MPN/100mL]	15-Oct-25	16:04	16-Oct-25	16:22	---	34500

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.

OnLine LIMS

0004300965

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

Works #: 120001470

Project : PO#017018
LR Report : **CA12482-OCT25**

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

OnLine LIMS

0004300965

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix D

Sludge Haulage Records

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	May. 05, 2025

Carrier/ Hauler	Site #
Bartels	25069

NOTE: ONLY ONE SHEET PER SITE

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

Daily Total 528 m^3

REMARKS

Date May 05, 2025

OCWA Rep. Signature S. Elliott

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

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	May 6-25

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	6:30	6:50	44	158	T-20	B.B
2	6:50	7:10	44	157	T-26	DH
3	7:25	7:45	44	158	T20	BB
4	7:45	8:05	44	157	T-26	DH
5	8:25	8:45	44	158	T20	BB
6	8:50	9:10	44	157	T-26	DH
7	9:30	9:50	44	158	T20	BB
8	9:50	10:10	44	157	T-26	DH
9	10:30	10:50	44	158	T20	BB
10	10:50	11:15	44	157	T-26	DH
11	11:30	11:50	44	158	T20	BB
12	12:00	12:20	44	157	T-26	DH
13	12:30	12:50	44	158	T20	BB
14	1:00	1:20	44	157	T-26	DH
15	1:40	2:00	44	158	T20	BB
16	2:00	2:20	44	157	T-26	DH
17	2:55	3:15	44	158	T20	BB
18	3:20	3:40	44	157	T-26	DH
19	4:00	4:20	44	158	T20	BB
20						
		Daily Total	836 m^3			

REMARKS

Date May 06, 2025

OCWA Rep. Signature Steve Elliott

X Carrier/ Hauler Signature

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

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	May 7-25

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	6:30	6:50	44	157	T-26	DH
2	6:50	7:15	44	158	T20	BB
3	7:25	7:45	44	157	T-26	DH
4	7:50	8:15	44	158	T20	BB
5	8:20	8:40	44	157	T-26	DH
6	8:50	9:15	44	158	T20	BB
7	9:30	9:50	44	157	T-26	DH
8	9:55	10:15	44	158	T20	BB
9	10:20	10:40	44	157	T-26	DH
10	11:00	11:20	44	158	T20	BB
11	11:25	11:45	44	157	T-26	DH
12	12:00	12:20	44	158	T20	BB
13	12:30	12:50	44	157	T-26	DH
14	1:00	1:20	44	158	T20	BB
15	1:30	1:50	44	157	T-26	DH
16	2:10	2:30	44	158	T20	BB
17	2:35	2:55	44	157	T-26	DH
18	3:10	3:30	44	158	T20	BB
19	4:00	4:20	44	157	T-26	DH
20						

Daily Total 836 m^3

REMARKS

Date May 07, 2025

OCWA Rep. Signature

Carrier/ Hauler Signature

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
Port Elgin	Saugeen Shores	May 8-25

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	6:40	7:00	44	158	T-20	BB
2	7:00	7:20	44	157	T-26	DH
3	7:40	8:00	44	158	T20	BB
4	8:00	8:20	44	157	T-26	DH
5	8:40	9:00	44	158	T20	BB
6	9:00	9:20	44	157	T-26	DH
7	10:00	10:20	44	158	T20	BB
8	10:35	10:55	44	157	T-26	DH
9	11:00	11:25	44	158	T20	BB
10	11:30	11:50	44	157	T-26	DH
11	12:00	12:20	44	158	T20	BB
12	12:30	12:50	44	157	T-26	DH
13	1:00	1:20	44	158	T20	BB
14	1:30	1:50	44	157	T-26	DH
15	2:10	2:30	44	158	T20	BB
16	2:40	3:00	44	157	T-26	DH
17						
18						
19						
20						
		Daily Total				

REMARKS
Construction on River Rd, slowdowns

Date May 08, 2025

OCWA Rep. Signature

Carrier/ Hauler Signature

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
Port Elgin	Saugeen Shores	May 9/25

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	6:45	7:05	44	158	T20	BB
2	7:05	7:25	44	157	T-26	DN
3	9:15	9:35	44	158	T20	BB
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
		Daily Total				

REMARKS

Date May 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

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Port Elgin WPCP	Saugeen Shores	Oct 10/25

Carrier/ Hauler	Site #
Bartels	61280 NOTE: ONLY ONE SHEET PER SITE

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

Daily Total 352 m^3

REMARKS

Date Oct 10/25

OCWA Rep. Signature Darren Martin

Carrier/ Hauler Signature B Bartels

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

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	Oct/4-25

Carrier/ Hauler	Site #
Bartels Eau	61280

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time In	Time Out	Load Volume (m^3)	Carrier Information: Vehicle License #	Carrier Information: Trailer #	Driver Initials
1	9:30	9:50	44	157	26	DH
2	10:00	10:20	44	158	20	BB
3	10 50	11 10	44	157	26	DH
4	11:20	11:45	44	158	20	BB
5	12:00	12:20	44	157	26	DH
6	12 20	12 40	44	136	17	DB
7	12:40	1:15	44	158	20	BB
8	1:15	1:35	44	157	26	DH
9	1 35	1:55	44	136	17	DB
10	2:00	2:25	44	158	20	BB
11	2:30	2:50	44	157	26	DH
12	245	305	44	136	17	DB
13	3:10	3:30	44	158	20	BB
14	3:30	3:50	44	157	26	DH
15	355	415	44	136	17	DB
16	4:20	4:45	44	158	20	BB
17						
18						
19						
20						

Daily Total 704 m^3

REMARKS

Date Oct. 05, 2025

OCWA Rep. Signature Steve Elliott

X Carrier/ Hauler Signature Brad Bartels

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

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	Oct 15 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	7:00	7:20	44	157	26	DH
2	730	750	44	136	17	DB
3	7:50	8:15	44	158	20	BB
4	8:20	8:40	44	157	26	DH
5	840	900	44	136	17	DB
6	9:00	9:25	44	158	20	BB
7	9:30	9:50	44	157	26	DH
8	950	1010	44	136	17	DB
9	10:15	10:40	44	158	20	BB
10	10:40	11:00	44	157	26	DH
11	11:00	11:20	44	136	17	DB
12	11:25	11:50	44	158	20	BB
13	11:50	12:10	44	157	26	DH
14	1215	1235	44	136	17	DB
15	3:05	3:30	44	158	20	BB
16	3:30	3:55	44	157	26	DH
17	355	415	44	136	17	DB
18	4:15	4:40	44	158	20	BB
19	4:40	5:10	44	157	26	DH
20	505	525	44	136	17	DB
		Daily Total	880 m^3			

REMARKS

Date: Oct 15/25

OCWA Rep. Signature: Steve Elliott

Carrier/ Hauler Signature: B Bartels

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
Port Elgin	Saugeen Shores	Oct 16/25

Carrier/ Hauler	Site #
Bartels Env.	61280 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time In	Time Out	Load Volume (m^3)	Carrier Information: Vehicle License #	Carrier Information: Trailer #	Driver Initials
1	7:00	7:15	44	158	T20	BB
2	7:20	7:40	44	157	T-26	DA
3	740	800	44	136	T17	DB
4	8:05	8:25	44	158	T20	BB
5	830	8.50	44	157	T-26	DA
6	850	915	44	136	T17	DB
7	9:20	9:45	44	158	T20	BB
8	9:45	10 05	44	157	T-26	DA
9	1005	1025	44	136	T17	DB
10	10:25	10:45	44	156	20	BB
11	10:50	11:10	44	157	26	DA
12	1115	1135	44	136	17	DB
13	11:45	12:10	44	158	20	BB
14	12:10	12:30	44	157	26	DA
15	1230	1250	44	136	17	DB
16	12:55	1:15	44	158	20	BB
17	120	1:40	44	157	26	DA
18	145	205	44	136	17	DB
19	245	3:05	44	157	26	DA
20	305	325	44	136	17	DB

Daily Total 880m^3

1 of 2 pages

REMARKS

Date Oct 16/25

OCWA Rep. Signature Darren MacArthur

Carrier/ Hauler Signature B Bartels

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

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	Oct 16/25

Carrier/ Hauler	Site #
Barbels Envr	61280

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	2:10 pm	2:40 pm	44	158	T20	BB
2	3:30	3:50	44	158	T20	BB
3	350	4:15	44	157	T-26	DH
4	415	4:35	44	136	T-7	DB
5	4:40	5:00	44	158	T20	BB
6						
7						
8						
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12						
13						
14						
15						
16						
17						
18						
19						
20						
	Daily Total		220 m^3	2 of 2 Pages		

REMARKS

Date Oct 16/25

OCWA Rep. Signature Darren Mc[illegible]

Carrier/ Hauler Signature BBarbels

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
Port Elgin WPCP	Saugeen Shores	Oct 17 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	~~7:00~~	~~7:20~~	~~44~~	~~158~~	~~T-20~~	~~BB~~
2	7:20	7:40	44	157	T-26	DH
3	8:00	8:20	44	158	T-20	BB
4	8:20	8:40	44	157	T-26	DH
5	9:00	9:20	44	158	T-20	BB
6	9:20	9:40	44	157	T-26	DH
7	10:00	10:20	44	158	T-20	BB
8	10:25	10:45	44	157	T-26	DH
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total

REMARKS

Date Oct 17/25

OCWA Rep. Signature Steve Elliott

Carrier/ Hauler Signature BBartels

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: Port Elgin

Area: Saugeen Shores

Date: Oct 20/25

Carrier/ Hauler: Bartels Enviv

Site #: 61280

NOTE: ONLY ONE SHEET PER SITE

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

Daily Total: 264 m^3

REMARKS

Date: Steve Hiltt

OCWA Rep. Signature: Oct 20/25

Carrier/ Hauler Signature: B Bartels

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

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-Sep-18 00:00:00
End: 2025-Sep-19 00:00:00
Run Time: 2026-Mar-08 09:49:52

PORT ELGIN WWTF Logbook

Entry Time	Label	Attachments	Entry Text	Operator	Created Time
2025-09-18 00:00:00			00:00-23:59 ORO: Steven Elliott (selliott) 07:00-15:30 OIC: Justyn Becker (jbecker) 07:00-15:30 Duty OIC: Darren MacArthur (dmacarthur)	Justyn Becker	2025-09-18 15:13:04
2025-09-18 14:20:00	Port Elgin WPCP, PS millcreek, PS shipley, PS westlinks		Daily checks and oper of plant and ps lab work samples meet with Mark/Bartels look at sludge, aer. ras tanks for clean out work and sludge dates complete work and test clarifier 1 rotate 180 ok will recheck Fri and replace covers and remove loto if full test is good	Steven Elliott	2025-09-18 14:22:07
2025-09-18 15:13:00	Community Complaint		Investigated bad odour complaint at 459 Devenshire. Opened manhole in front of address. Flow in gravity sewer appears normal. Unable to detect any particularly offensive odours. Notified SOM.	Justyn Becker	2025-09-18 15:15:44
2025-09-18 16:05:00	Port Elgin WPCP, PS 10th concession, PS harbour st, PS tomlinson		Daily checks at Harbour, Tomlinson and 10th concession. Daily plant operations, Lab work. Waste sludge from clarifier #2. Take weekly sewage plant samples and send out. Increase RAS flow to 34HZ-RAS settling was low today. Worked with SE on clarifier #1. Adjust motor positioning for chain drive, Test run arm, seems to be running ok. Adjust height on scraper arm on clarifier #2.	Darren MacArthur	2025-09-18 16:25:14

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix F

Septage Receiving

QEMS Ontario Clean Water Agency	5069 Port Elgin WWTP Sludge Receiving Station	Issued: 2025-02-11 Rev.#: 2 Pages: 1 of 1
Reviewed by: Process & Compliance Technician	Approved by: Senior Operations Manager	

Month	Date	Time	Oper	Hauler	Source Location	Residential	Industrial	Commercial	Volume (m^3)
* July	31/25	0900	SE	Nicksons (TSS)	Gobles Grove washroom	✓			2,500 gals =
July	24/25	1000	SE	Nicksons (TSS)	Gobles Grove washroom	✓			2,500 gals
August	7/25	0900	DM	Nicksons (TSS)	Gobles Grove washroom	✓			2,500 gals
Aug	14/25	0900	SE	Nicksons (TSS)	Gobles Grove washroom	✓			2,500 gals
Aug	21/25	9:00	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			2500 gal
Aug 28		10:00	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			2500gal
Sept 4		9:15am	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			1500gal
Sept 8		10:00 am	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			1000gal
Sept 24		11:00am	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			1000gal
Oct 2		9:25 am	JZ	Nicksons (TSS)	Gobles Grove washrooms	✓			1000 gal
* Oct 9		10:50 am	JZ	Nicksons (TSS)	Gobles Grove washroom	✓			1000gal

(*note: all locations for TSS only)

1 USG = 0.00378541 m^3 *Ex.600 gal x 0.00378541 = 2.27125 m^3*

Revision History

Date	Revision #	Reason for Revision	Revision By
	0	Created	
2020-02-13	1	Update format	Dan MacLeod
2025-02-11	2	Update to create a yearly format from monthly	Karla Young

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix G

Spills & Bypass Reports

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 - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date:	May-06-25 3:59:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor 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 Water Supervisor 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
Process & Compliance Technician
Grey-Bruce/Bruce Hubs
Georgian Highlands Region
Ontario Clean Water Agency
kyoung@ocwa.com
(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 - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date:	August-11-25 1:57:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor 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 Water Supervisor 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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kyoung@ocwa.com
(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 Q3 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: November-04-25 2:40:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor 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 Water Supervisor 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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Georgian Highlands Region
Ontario Clean Water Agency
kyoung@ocwa.com
(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 Q4 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date:	February-02-26 11:19:00 AM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

Bypass Events

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor 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 Water Supervisor 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
Process & Compliance Technician
Grey-Bruce/Bruce Hubs
Georgian Highlands Region
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kyoung@ocwa.com
(519) 374 - 5782

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix H

Notice of Modification to Sewage Works

Ontario

Ministry of the Environment, Conservation and Parks

Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE.

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
0556-AKQN3Q	May 30, 2017	

ECA Owner	Municipality
Town of Saugeen Shores	Town of Saugeen Shores

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Existing Screening:

- a 1,016 mm wide x 1,900 mm deep channel equipped with one (1) mechanically-cleaned fine screen with 3 mm screen size, with a Peak Instantaneous Flow Rate of 443 L/s, discharging to grit removal tank;
- one (1) screw washer compactor;

Proposed Modifications:

One (1) Claro Fine Step Screen – Model 2400-800-3 mm

Peak Flow: 37,476 m3/d (434 L/s)

One (1) 3 mm aperture unit – upstream/downstream levels: 1212/1000 mm @ 35% screen blockage; head loss: 212 mm; freeboard: 630 mm. Note: downstream levels/hydraulics to be verified with Port Elgin. A Sutro weir plate downstream of the fine screen may be suggested for proportional downstream level control and augmented separation performance due to the reduction of pressure on the screenings

Fine step screen built under ISO 9001 & ISO 14001 certification.

One (1) Claro Wash Press – Model TP200-800

Capacity for optimal washing, compaction, & dewatering: input of wet screenings: 1.0 m3/h.

Wash press built under ISO 9001 & ISO 14001 certification

Equipment is being replaced within the same foot print as the existing screen; environmental effects are negligible.

Equipment Manuals including drawings and technical specs will be provided and replaced within the Facility Operations Manual.

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print)	PEO License Number
Signature	**Date (mm/dd/yy)**
Name of Employer	

Part 4 – Declaration by Owner

I hereby declare that:
1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print)	Owner representative's title (Print)
Larry Gill	**Manager, Operations**
Owner Representative's Signature	Date (mm/dd/yy)
	01/23/25

Ontario

Ministry of the Environment, Conservation and Parks

Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE.

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
0556-AKQN3Q	May 30, 2017	

ECA Owner	Municipality
Town of Saugeen Shores	Town of Saugeen Shores

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Existing Blowers for Biological Treatment:

- four (4) blowers (two standby), one (1) NX75 Turbo Blower rated at 900 – 1,903 SCFM @ 6.8psig (472 - 850 L/s at 45 kPa) equipped with variable frequency drive (VFD) is the duty blower for the aeration tanks, one (1) NX50 Turbo Blower rated at 428 – 1,275 SCFM @ 6.5 psig (236 - 614 L/s at 45 kPa) equipped with VFD is the duty for the digester aeration system, and two (2) Positive Displacement (PD) backup rated at 1,165 SCFM @ 6.5 psig (550 L/s at 45 kPa)

Proposed Modifications:

- four (4) blowers (two standby), **one (1) NX100S-C060 High Speed Turbo Blower rated at 1,163 – 2,439 SCFM @ 8.00psig will be duty for the aeration tanks**, one (1) NX50 Turbo Blower rated at 428 – 1,275 SCFM @ 6.5 psig (236 - 614 L/s at 45 kPa) equipped with variable frequency drive (VFD) will be duty for biosolids aeration, one (1) NX50 Turbo Blower rated at 428 – 1,275 SCFM @ 6.5 psig (236 - 614 L/s at 45 kPa) equipped with VFD and one (1) Positive Displacement (PD) blower rated at 1,165 SCFM @ 6.5 psig (550 L/s at 45 kPa) will be available as backups.
- To summarize the above, removal of one of the existing back 50hp PD blowers, and installation of a new 100hp high speed turbo blower to provide aeration to the biological treatment process. The installation will allow for the existing 75hp and 50hp Turbo blowers to be utilized either in their current configuration, or to allow the 75hp blower to provide biosolids aeration, while the 50hp turbo becomes another back up.

No additional changes being made would have any environmental effects.

Technical specs and Equipment Manuals will be provided and added to the facility Operations Manual.

Description shall include:
1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:
1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print)	PEO License Number
Signature	**Date (mm/dd/yy)**

Name of Employer

Part 4 – Declaration by Owner

I hereby declare that:
1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print)	Owner representative's title (Print)
Larry Gill	**Manager, Operations**
Owner Representative's Signature	Date (mm/dd/yy)
	01/23/25