

# 2025 ANNUAL PERFORMANCE REPORT

VICTORIA HARBOUR  
WASTEWATER TREATMENT  
PLANT



For the period of  
January 1<sup>st</sup>, 2025 to December 31<sup>st</sup>, 2025

Prepared for the Corporation of the Township of Tay by the Ontario Clean Water Agency



## **REQUIREMENTS FOR ANNUAL PERFORMANCE REPORT**

This annual performance report was prepared in accordance with Amended Environmental Compliance Approval No. 3389-A5BKJJ, Section 10.(6) items a) through l) and Amended Environmental Compliance Approval No. 4066-CTPNQA, Section 42.(4) items a) through n) for the Victoria Harbour Wastewater Treatment Plant.

### ECA No. 3389-A5BKJJ- SECTION 10. REPORTING REQUIREMENTS

(6) The Owner shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon. The reports shall contain, but shall not be limited to, the following information:

- a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;
- b) a description of any operating problems encountered and corrective actions taken;
- c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment; and
- f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 5.
- g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- i) a summary of all By-pass, spill or abnormal discharge events;
- j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification;
- k) a report summarizing all modifications completed as a result of Schedule B, Section 3; and

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

#### ECA No. 4066-CTPNQA - SECTION 42(4). REPORTING REQUIREMENTS

(4). The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:

a) summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;

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

c) summary of all operating issues encountered and corrective actions taken;

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

e) summary of any effluent quality assurance or control measures undertaken;

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

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

i) when any of the design objectives is not achieved more than 50% of the time in a year, or there is an increasing trend in deterioration of Final Effluent quality;

ii) when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;

h) tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;

i) summary of any complaints received and any steps taken to address the complaints;

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

2025 Annual Performance Report: January 1, 2025 to December 31, 2025  
The Corporation of the Township of Tay: Victoria Harbour Wastewater Treatment Plant  
Amended ECA #3389-A5BKJ (Issue Date: February 1, 2016 to June 25, 2025)  
Amended ECA #4066-CTPNQA (Issue Date: June 26, 2025)

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

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

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

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

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- Appendix E – Sampling Schedules

The enclosed 2025 Annual Performance Report was prepared in accordance with Amended Environmental Compliance Approval (ECA) No. 3389-A5BKJJ (issued on February 1<sup>st</sup>, 2016) as per Section 10.(6) elements a) through l) from January 1, 2025 to June 26, 2025 when Amended ECA No. 4066-CTPNQA (issued on June 26, 2025) was issued. For the purposes of this report the requirements of Amended ECA No. 4066-CTPNQA, Section 42.(4) elements a) through n) will be followed as the reporting requirements are more comprehensive and include the requirements from ECA No. 3389-A5BKJJ.

## 1. System Description

The Victoria Harbour Wastewater Treatment Plant (WWTP) is a Class II Treatment and Class II Collection facility. The Victoria Harbour WWTP is an extended aeration process with tertiary treatment that serves the Township of Tay. The major process units consist of inlet works including an automated fine screen vortex grit separator, cloth media disk filtration, aeration tanks, clarifier, treated with chemical dosing for phosphorus removal and UV disinfection. Sludge management consists of aerobic digesters with a sludge holding tank. The WWTP discharges the treated effluent via its outfall into Sturgeon Bay. The facility is equipped with standby power in the event of a power failure.

An overview of the Victoria Harbour Wastewater Treatment Plant can be found in the following table:

**Table 1. Victoria Harbour Wastewater Treatment Plant System Overview**

<b>Facility Name:</b>	Victoria Harbour Wastewater Treatment Plant
<b>Facility Type:</b>	Extended Aeration with Clarification, Aerobic Digesters, Filtration and UV Disinfection
<b>Plant Classification:</b>	Class II WWT, Class II WWC
<b>Works Number:</b>	110004174
<b>Rated Capacity:</b>	2,364 m <sup>3</sup> /d
<b>Discharge Point:</b>	Sturgeon Bay
<b>Environmental Compliance Approval:</b>	3389-A5BKJJ (Issued: February 1, 2016) <ul style="list-style-type: none"> <li>• January 1<sup>st</sup> to June 25<sup>th</sup>, 2025</li> </ul> 4066-CTPNQA (Issued: June 26, 2025) <ul style="list-style-type: none"> <li>• June 26<sup>th</sup> to December 31<sup>st</sup>, 2025</li> </ul>

## **2. Monitoring Reports**

### **2.1 Discharge Data Report (MECP)**

The Ontario Clean Water Agency (OCWA) has an agreement with the Ministry of Environment, Conservation, and Parks (MECP) to submit quarterly discharge data for all OCWA operated municipal sewage treatment facilities 45 days at the end of each quarter. Monitoring data is submitted via the Ministry of Environment Wastewater System (MEWS). The MECP has these reports stored in a shared location where MECP Inspectors can obtain and review them. There are no limits/objectives for discharge for the quarterly Discharge Data Report.

### **2.2 Monitoring Report (WSER)**

A monitoring report required under the Wastewater Systems Effluent Regulation (WSER) is submitted on a quarterly basis to the Government of Canada via the Effluent Regulatory Reporting Information System (ERRIS). The quarterly monitoring report requires that the following information be reported for the Victoria Harbour WWTP:

- Number of days effluent was deposited
- Total volume of effluent deposited
- Average CBOD (limit of 25 mg/L)
- Average concentration of suspended solids (limit of 25 mg/L)

The monitoring reports can be found within the ERRIS. During the reporting period, all results for average CBOD<sub>5</sub> and concentration of suspended solids were below the limits set out in WSER. Testing is performed annually every April for Acute Lethality of the effluent to Rainbow Trout. The 2025 results showed 0% mortality.

## **3. Monitoring Data Influent**

Where ECA 4066-CTPNQA, section 42(4)(a) requires:

*“A summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates”*

### **3.1 Influent ECA Monitoring Program**

The following table (Table 2) outlines the influent water quality monitoring program required by the most current ECA for the reporting period. There are additional in-house samples collected and analyzed throughout the year in order to help with process performance monitoring, adjustment, and optimization. These parameters were analyzed by an accredited analytical laboratory (SGS Canada Inc., Lakefield, Ontario).

**Table 2. Influent Water Quality Monitoring Program and Sampling Points- as per ECA 4066-CTPNQA Schedule D- Monitoring Program Influent – Influent Sampling Point**

Influent Monitoring		
Parameter	Sample Type	Frequency
Biochemical Oxygen Demand (BOD <sub>5</sub> )	8-hour composite	Monthly
Total Suspended Solids	8-hour composite	Monthly
Total Phosphorus	8-hour composite	Monthly
Total Kjeldahl Nitrogen	8-hour composite	Monthly

### 3.2 Raw Sewage (Influent) Characteristics: Summary and Interpretation of Reporting Year

The following parameters in Table 3 are not reportable as they do not have limits or objectives but are monitored as required by the ECA and used to characterize the contents of incoming sewage flow.

A summary of the influent laboratory results can be found in the following table for samples taken and analyzed during the reporting period. Sample results are based on a monthly composite sample (updated to 8 hour monthly composite sample as of June 26, 2025) taken and analyzed by an accredited external laboratory (SGS Canada Inc., Lakefield, Ontario). Influent Laboratory analysis for the reporting year are based on samples taken at the inlet of the works. Twelve (12) influent samples were analyzed during the reporting period. Monthly Influent concentration averages are expressed in mg/L unless otherwise stated.

Laboratory analysis of the influent over the year showed that BOD<sub>5</sub>, Total Suspended Solids, Total Phosphorus, and Total Kjeldahl Nitrogen reached their highest concentrations in June 2025, with peak values of 439 mg/L, 740 mg/L, 16.10 mg/L, and 60.00 mg/L, respectively. The 2025 annual average concentrations were 133.42 mg/L for BOD<sub>5</sub>, 163.17 mg/L for Total Suspended Solids, 3.15 mg/L for Total Phosphorus, and 24.44 mg/L for Total Kjeldahl Nitrogen.

The cause of the elevated results recorded on June 2, 2025 remains uncertain; however, operational staff noted that the event occurred shortly after reconstruction of piping at the Industrial Pumping Station on May 20, 2025 and during a period when hydro-vac activities were discharging to the WWTP headworks. These activities may have contributed to a short-term hydraulic surge that disturbed and resuspended settled solids within the influent channel, resulting in the elevated concentrations observed.

**Table 3: Raw Sewage (Influent) Quality Analysis for 2025**

Month <sup>3A</sup>	Monthly Influent Concentrations (mg/L)			
	BOD <sub>5</sub>	Total Suspended Solids	Total Phosphorus	Total Kjeldahl Nitrogen
January	130.00	169.00	2.36	13.40
February	169.00	134.00	2.58	25.30
March	93.00	126.00	1.35	17.50
April	59.00	60.00	1.26	5.00
May	170.00	162.00	4.14	38.80
June	439.00	740.00	16.10	60.00
July	54.00	35.00	0.80	23.20
August	90.00	127.00	1.52	24.50
September	84.00	81.00	1.70	21.00
October	98.00	70.00	1.22	20.80
November	89.00	69.00	1.55	22.80
December	126.00	185.00	3.16	21.00
<b>2025 Annual Average</b>	<b>133.42</b>	<b>163.17</b>	<b>3.15</b>	<b>24.44</b>

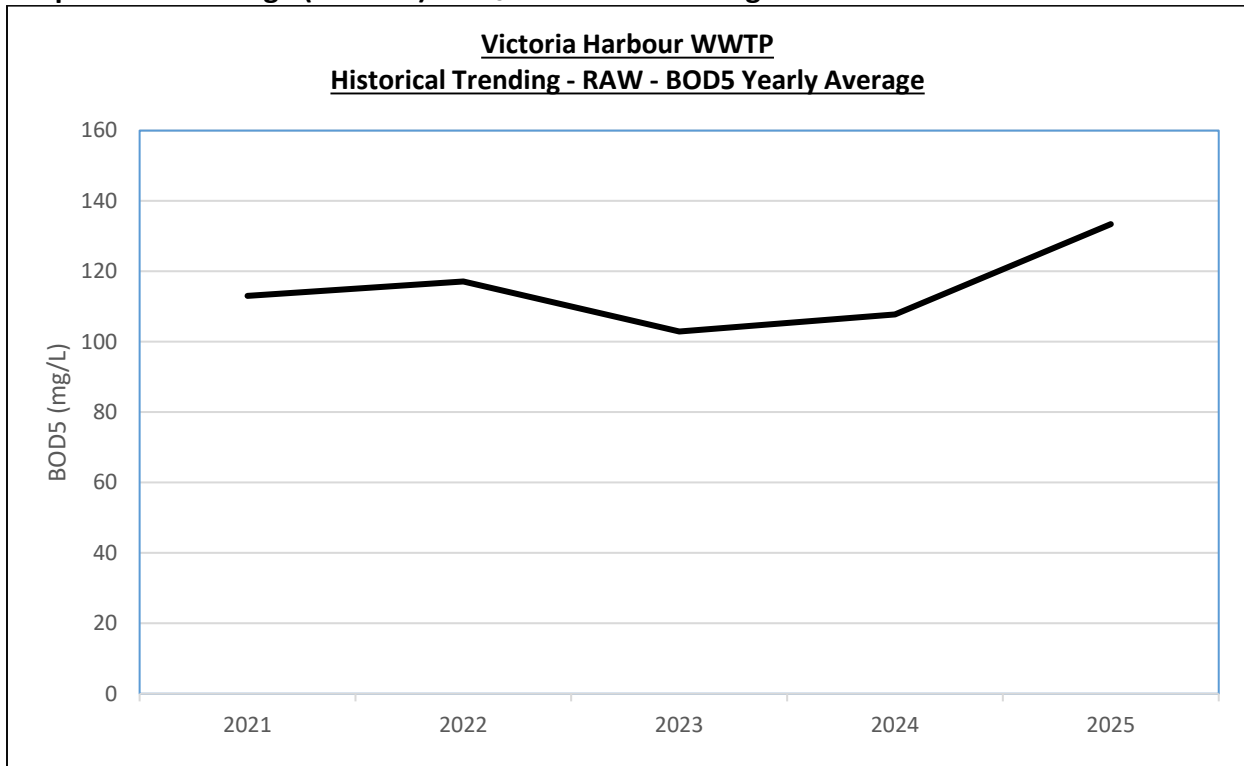
<sup>3A</sup>Refer to the 2025 Performance Assessment Report found in Appendix A

### 3.3 Raw Sewage (Influent) Characteristics: Review of Historical Trends

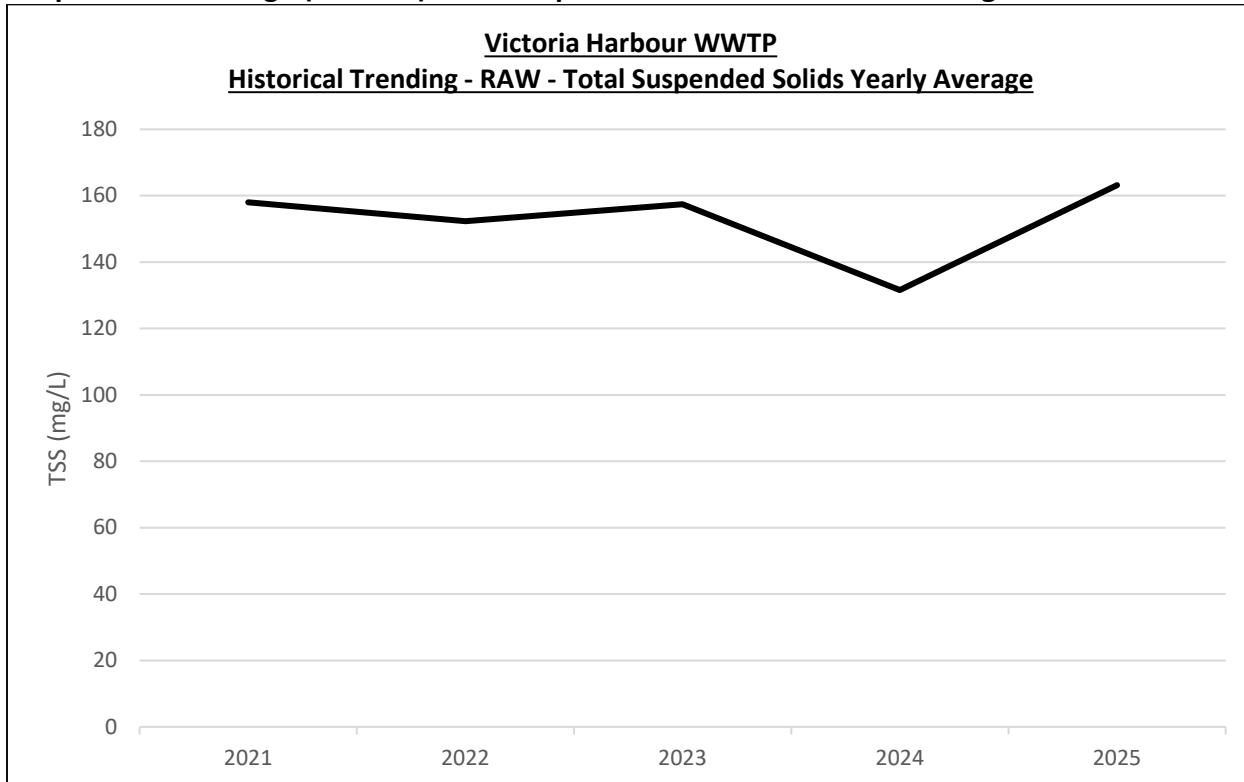
A review of the historical trends for influent sewage characteristics, shown in *Graphs 1 to Graphs 4*, indicate the following:

- BOD<sub>5</sub> – the average concentration in 2025 was 133.42 mg/L, which is higher compared to 2024 (107.75 mg/L), 2023 (102.92 mg/L), 2022 (117.09 mg/L), and 2021 (113.00 mg/L). The lowest year was 2023. Over the last 3 years, BOD<sub>5</sub> has been trending higher. Refer to *Graph 1*.
- Total Suspended Solids (TSS) – the average concentration in 2025 was 163.17 mg/L, which is higher compared to 2024 (131.58 mg/L), 2023 (157.42 mg/L), 2022 (152.36 mg/L), and 2021 (158 mg/L). The lowest year was 2024. Refer to *Graph 2*.
- Total Phosphorous (TP) – the average concentration in 2025 was 3.14 mg/L, which is higher compared to 2024 (1.95 mg/L), 2023 (1.84 mg/L), 2022 (2.05 mg/L), and 2021 (1.63 mg/L). The lowest year was in 2021. Over the last 3 years, TP has been trending higher. Refer to *Graph 3*.
- Total Kjeldahl Nitrogen (TKN) – the average concentration in 2025 was 24.44 mg/L, which is higher compared to 2024 (22.08 mg/L), 2023 (19.06 mg/L), 2022 (20.09 mg/L), and 2021 (19.30 mg/L). The lowest year was 2023. Over the last 3 years, TKN has been trending higher. Refer to *Graph 4*.

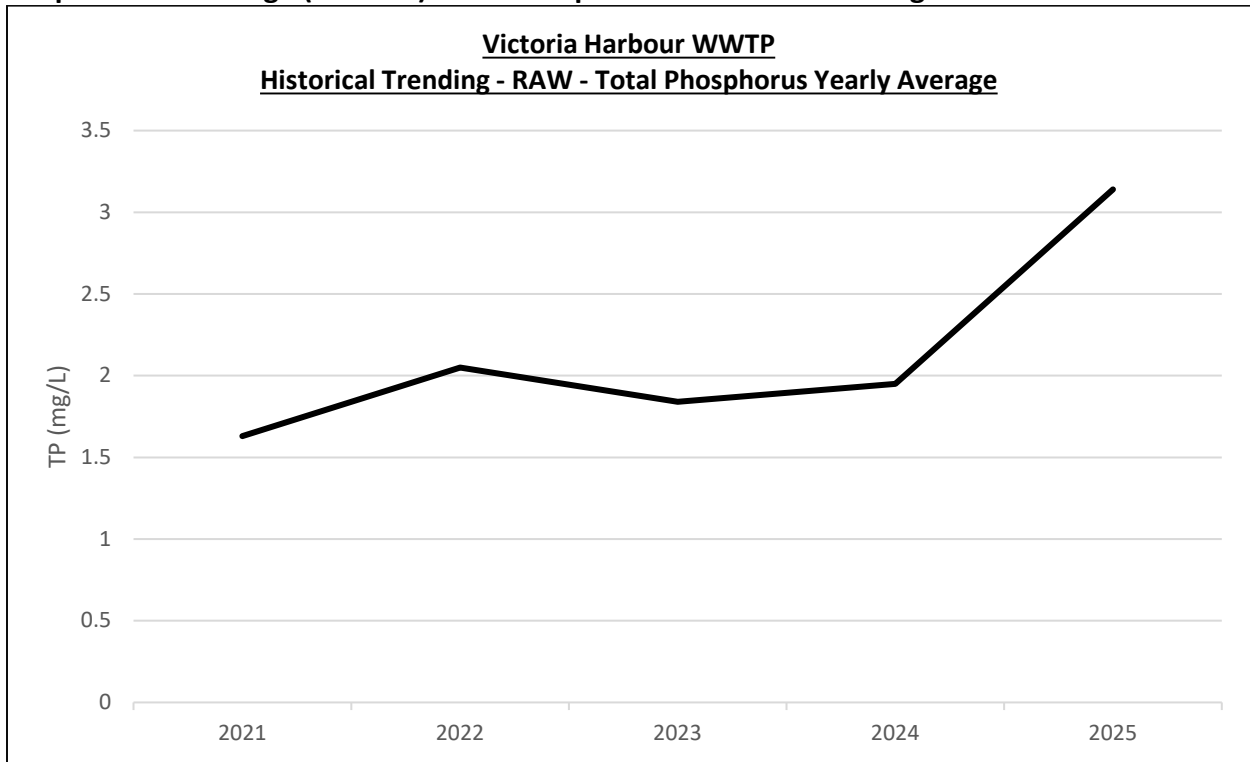
**Graph 1. Raw Sewage (Influent) BOD<sub>5</sub> Historical Trending for 2021-2025**



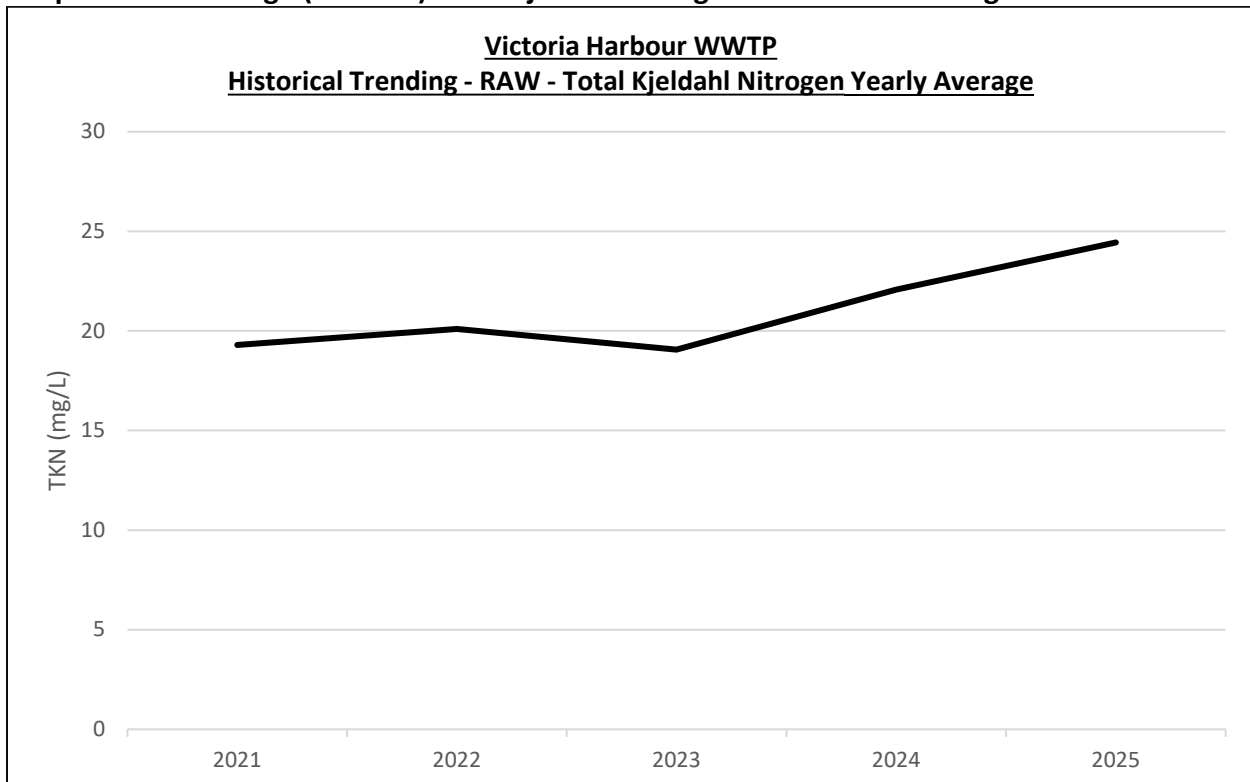
**Graph 2. Raw Sewage (Influent) Total Suspended Solids Historical Trending for 2021-2025**



**Graph 3. Raw Sewage (Influent) Total Phosphorus Historical Trending for 2021-2025**



**Graph 4. Raw Sewage (Influent) Total Kjeldahl Nitrogen Historical Trending for 2021-2025**



### 3.4 Raw Sewage (Influent) Flow: Summary and Interpretation of Reporting Year

The Rated Capacity listed in the most current ECA for Victoria Harbour WWTP is 2,364 cubic meters per day (m<sup>3</sup>/day) based on the design capacity with all existing treatment trains in operation and prior to the completion of construction of all proposed works. Upon completion of construction of all proposed works, the rated capacity will increase to 3,550 m<sup>3</sup>/day.

Typically, the Rated Capacity listed in an ECA is determined based on the highest average annual flow during which the sewage treatment plant can consistently meet site specific effluent quality criteria (as per the Ontario Design Guidelines for Sewage Works); this is usually dictated by the most limiting treatment/process unit in the system. ECA No. 4066-CTPNQA, Section 31(c) requires the Owner to use its best efforts to operate the works within the Rated Capacity of the works.

The Peak Flow Rate is the maximum rate of sewage flow for which the plant or process unit was designed. Each process in the treatment system will have its own Peak Flow Rate. The Peak Flow Rate a treatment system is determined by the process unit with the lowest Peak Flow Rate. For Victoria Harbour WWTP, the Plant Peak Flow Rate is limited by Effluent Filter, which has a Peak Flow Rate of 6,600 cubic meters per day.

#### 3.4.1 Comparison of Influent Flow to Rated Capacity and Plant Peak Flow Rate

A summary of influent flow data and comparison to the Rated Capacity and Plant Peak Flow Rate during the reporting period can be found in the below table and graph. Based on the definition of the Rated Capacity, a single exceedance does not necessarily result in a non-compliance event, however, if a system continually exceeds its Rated Capacity, this could result in reduced treatment efficiency and lead to effluent objective exceedances.

**Table 4. 2025 Raw Sewage (Influent Flow) Average and Maximum Daily Flow Data with Comparison to the Rated Capacity**

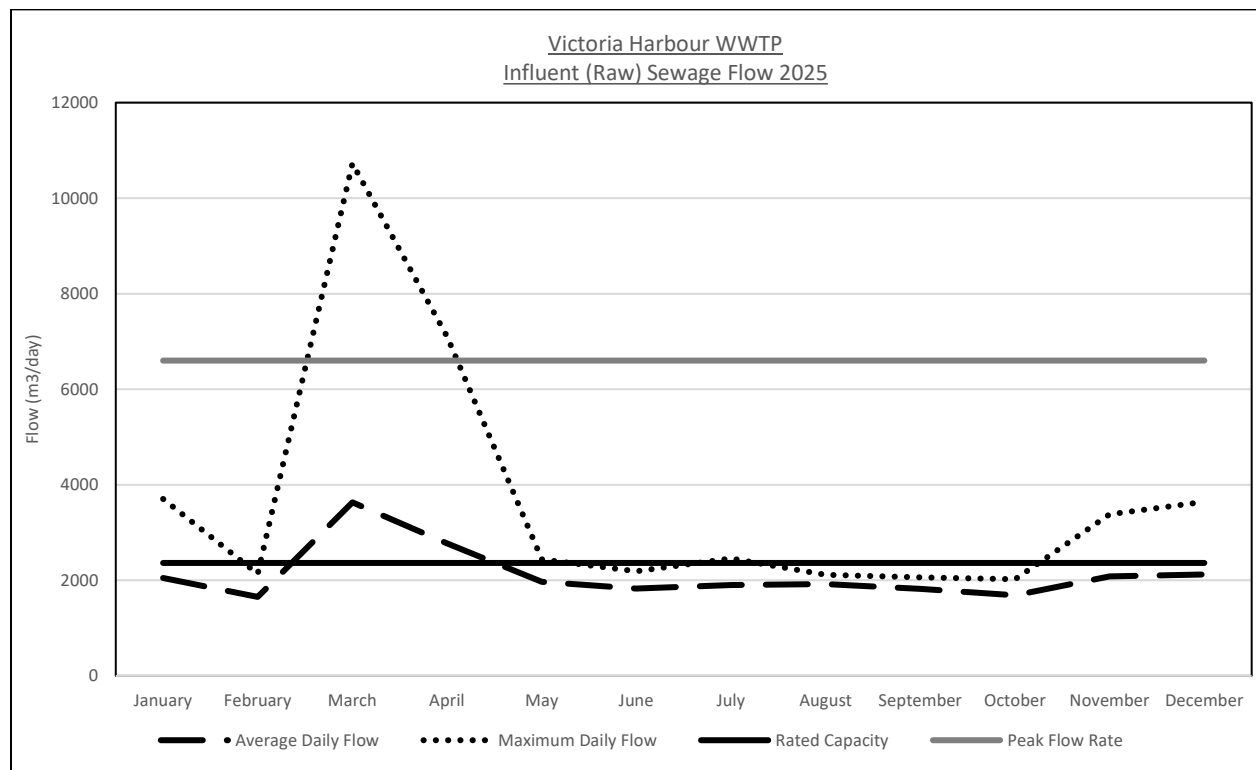
Month	Average Influent Flow (m <sup>3</sup> /day)	% of Rated Capacity (2,364 m <sup>3</sup> /day)	Maximum Influent Flow (m <sup>3</sup> /day)	% of Plant Peak Flow Rate (6,600 m <sup>3</sup> /day)	Total Volume (m <sup>3</sup> )
January	2,050.52	86.74%	3,706.00	56.15%	63,566.00
February	1,652.86	69.92%	2,136.00	32.36%	46,280.00
March	3,632.23	153.65%	10,727.00	162.53%	112,599.00
April	2,769.90	117.17%	7,100.00	107.58%	83,097.00
May	1,968.03	83.25%	2,437.00	36.92%	61,009.00
June	1,828.20	77.34%	2,189.00	33.17%	54,846.00
July	1,903.77	80.53%	2,460.00	37.27%	59,017.00

August	1,919.97	81.22%	2,113.00	32.02%	59,519.00
September	1,820.93	77.03%	2,059.00	31.20%	54,628.00
October	1,686.45	71.34%	2,023.00	30.65%	52,280.00
November	2,085.27	88.21%	3,385.00	51.29%	62,558.00
December	2,120.55	89.70%	3,642.00	55.18%	65,737.00
<b>2025</b>	<b>2,123.66</b>	<b>89.83%</b>	<b>10,727.00</b>	<b>162.53%</b>	<b>775,136.00</b>

Note: As per the ECA, 'Rated Capacity' is defined as "the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle".

Note: As per the ECA, 'Annual Average Daily Influent Flow' is defined as "the cumulative total sewage flow of Influent into the Sewage treatment Plant during a calendar year divided by the number of days during which sewage was flowing into the Sewage Treatment Plant that year".

**Graph 5. Daily Average Influent Flow, Rated Capacity and Maximum Peak Design Flow Rate**



The annual average flow of 2,123.66 m<sup>3</sup>/day is based on the total flow for the reporting period divided by the number of operational days (i.e., 365) as per the 'Annual Average Daily Influent Flow' definition in the ECA.

If the Annual Average Daily Flow reaches or exceeds 80% of the Rated Capacity, current best practice is to assess issues and provide recommendations for proactive actions. For 2025, the Annual Average Daily Influent Flow was above 80% of the 'Rated Capacity' at 89.83% of the 'Rated Capacity'. The highest recorded peak flow event of 10,727.00 m<sup>3</sup> occurred on March 16, 2025, it

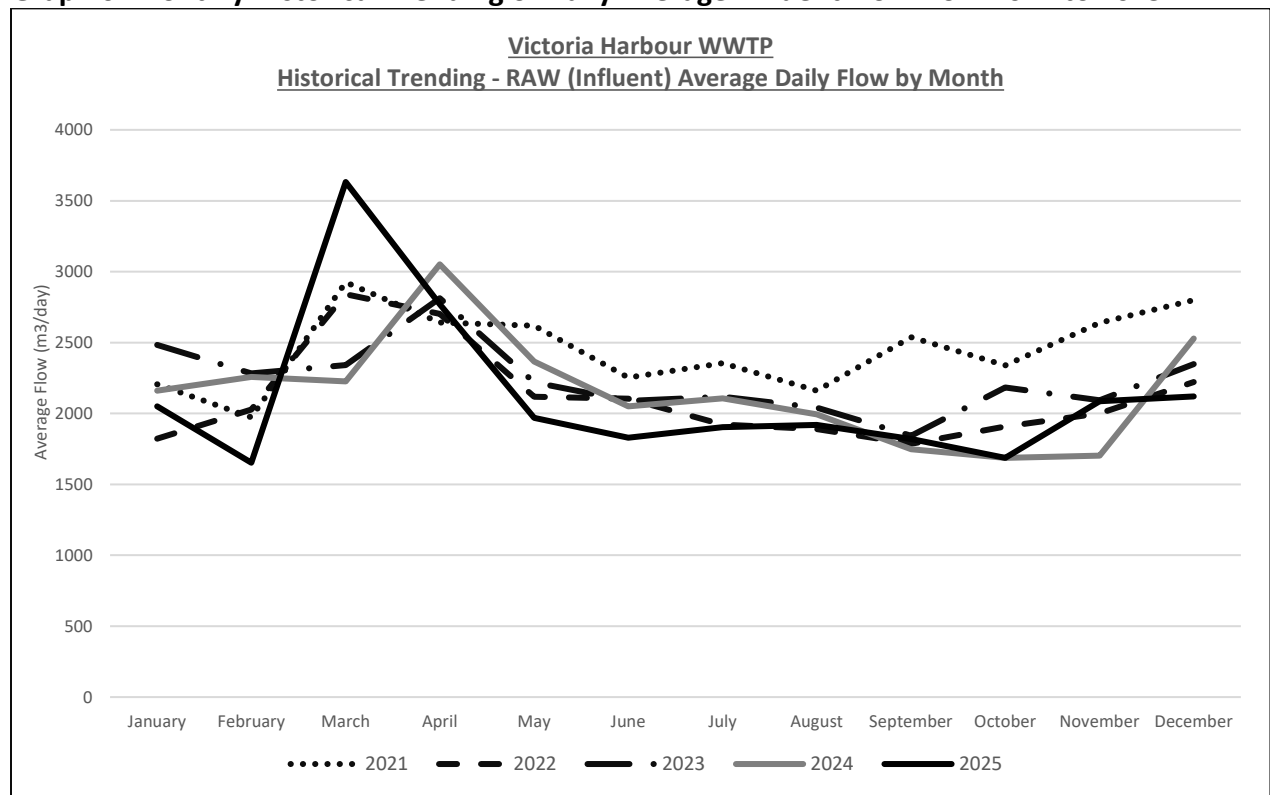
is suspected that unseasonably warmer weather and rapid snowmelt contributed to higher than usual flows. Victoria Harbour WWTP is currently in the design phase for its expansion upgrades, which are expected to break ground in 2027. Upon completion of all proposed works outlined in the amended ECA issued on June 26, 2025, the plant's rated capacity will increase to 3,550 m<sup>3</sup>/day.

Refer to *Appendix A* for detailed monthly raw sewage (influent) flows to the facility.

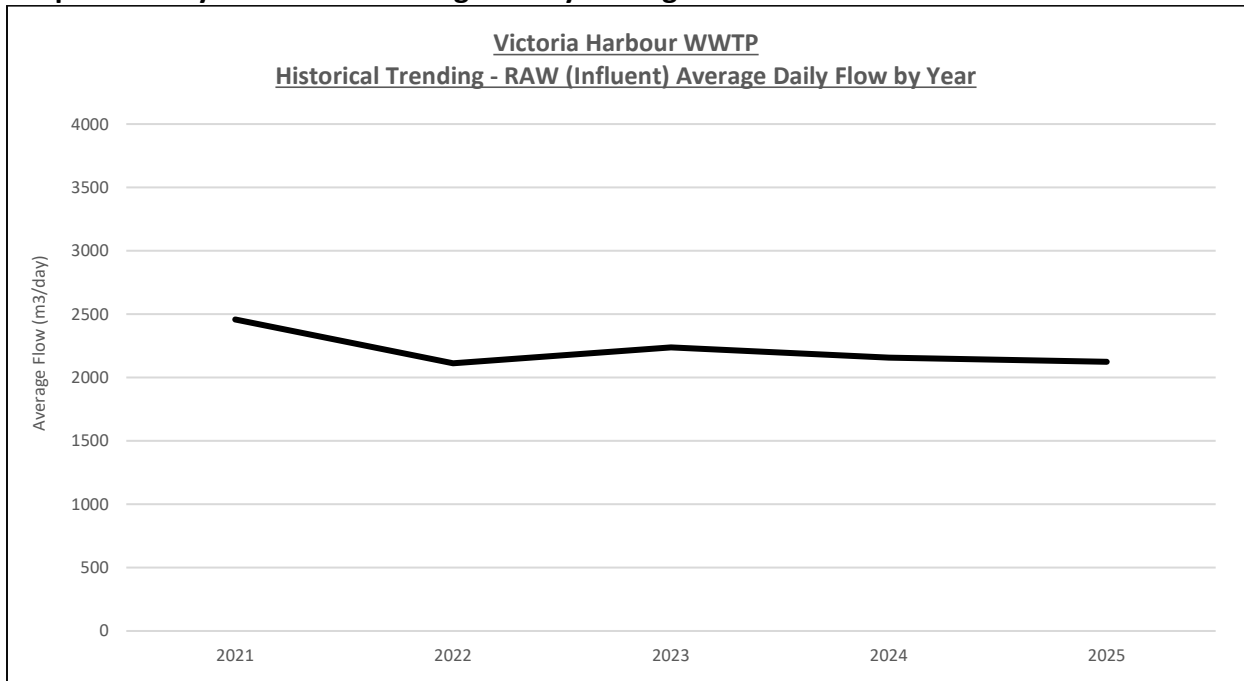
### 3.5 Influent Flow and Volume: Review of Historical Trends

The below graphs show historical raw (influent) daily average flow by month (Graph 6) and by year (Graph 7) from 2022 to 2025. The average flows have remained fairly consistent month to month and year over year. In spring (March and/or April), the annual peak flow events are due to seasonal precipitation and warmer temperatures resulting in snow melt and poor ground infiltration.

**Graph 6. Monthly Historical Trending of Daily Average Influent Flow from 2021 to 2025**



**Graph 7. Yearly Historical Trending of Daily Average Influent Flow from 2021 to 2025**



The total raw sewage volume of wastewater treated in 2025 was 775,136.00 m<sup>3</sup>, more than 2022 (771,013.00 m<sup>3</sup>), and less than 2023 (816,726.00 m<sup>3</sup>) and 2024 (789,263.00 m<sup>3</sup>). The annual average daily flow of raw sewage in 2025 was 2,123.66 m<sup>3</sup>/day, 89.8% of the rated capacity (2,364 m<sup>3</sup>/day). While the 2024 annual average daily flow of raw sewage was 2,156.46 m<sup>3</sup>/day or 91.22% of the rated capacity.

#### **4. Effluent Monitoring**

Where ECA No. 4066-CTPNQA, section 42(4)(b) requires:

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

Where: Condition 7 is *“imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.”*

#### 4.1 Effluent ECA Monitoring Program

The following table outlines the monitoring programs at the Victoria Harbour WWTP as required by the most current ECA for the reporting period. There are additional in-house samples taken and analyzed throughout the year in order to help with process performance monitoring, adjustment, and optimization.

**Table 5. Water Quality Monitoring Program and Effluent Sampling Points-** as per ECA 4066-CTPNQA, Schedule D

Effluent Monitoring		
Parameter	Sample Type	Frequency
Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	8-hour composite	Weekly
Total Suspended Solids	8-hour composite	Weekly
Total Phosphorus	8-hour composite	Weekly
Total Ammonia Nitrogen	8-hour composite	Weekly
Total Kjeldahl Nitrogen	8-hour composite	Weekly
Nitrate as Nitrogen	8-hour composite	Weekly
Nitrite as Nitrogen	8-hour composite	Weekly
<i>E. Coli</i>	Grab	Weekly
pH*	Grab/Probe/Analyzer	Weekly
Temperature	Grab/Probe/Analyzer	Weekly
Un-ionized Ammonia**	As Calculated	Weekly

*\*pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.*

*\*\*The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.*

The following tables outline the final effluent objectives, limits and loadings at the Victoria Harbour WWTP as per its most current ECA. ECA objectives and limits are presented based on prior to and completion of all Proposed Works. Currently the Proposed Works in the ECA have not been completed.

The applicable effluent parameters are either “concentrations” expressed as milligrams per liter or “loadings” expressed as kilograms per day. As per Section 7, concentration limits for CBOD<sub>5</sub>, TSS and TP are reportable based on a monthly average effluent concentration, *E.Coli* based on a monthly Geometric Mean Density, pH based on a Single Sample Result, and the Loading Limits of TP are reportable based on a Monthly Average Daily Effluent Loading.

**Table 6: Final Effluent Design Objectives-** as per ECA 4066-CTPNQA, Schedule B, prior to completion of construction of all Proposed Works.

Effluent Parameters	Averaging Calculator	Concentration Objectives
CBOD <sub>5</sub>	Monthly Average Effluent Concentration	10.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	10.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.3 mg/L
Total Ammonia Nitrogen (May 1 – October 31)	Monthly Average Effluent Concentration	8.0 mg/L
Total Ammonia Nitrogen (November 1 – April 30)	Monthly Average Effluent Concentration	10.0 mg/L
<i>E. Coli</i>	Monthly Geometric Mean Density	100 MPN/100 mL*
pH <sup>6A</sup>	Single Sample Result	7.0 to 9.0, inclusive
pH <sup>6A</sup>	Single Sample Result	6.5 to 8.5, inclusive

*\*If the MPN method is utilized for E. coli analysis the objective shall be 100 MPN/100 mL The MPN method is utilized for Victoria Harbour WWTP.*

*<sup>6A</sup>Under ECA #3389-A5BKJJ, the objective limit for pH was 7.0 to 9.0, inclusive at all times (single sample result) which was in effect from January 1 to June 25, 2025. Amended ECA #4066-CTPNQA was issued on June 26, 2025 and the objective limits were amended to 6.5 – 8.5 inclusive (single sample result).*

**Table 7: Final Effluent Design Objectives-** as per ECA 4066-CTPNQA, Schedule B, upon completion of construction of all Proposed Works.

Effluent Parameters	Averaging Calculator	Concentration Objectives
CBOD <sub>5</sub>	Monthly Average Effluent Concentration	10.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	10.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.1 mg/L
Total Ammonia Nitrogen (May 1 – November 30)	Monthly Average Effluent Concentration	2.0 mg/L
Total Ammonia Nitrogen (December 1 – April 30)	Monthly Average Effluent Concentration	5.0 mg/L
<i>E. Coli</i>	Monthly Geometric Mean Density	150 MPN/100 mL*
pH	Single Sample Result	6.5 to 8.5, inclusive

*\*If the MPN method is utilized for E. coli analysis the objective shall be 150 MPN/100mL. The MPN method is utilized for Victoria Harbour WWTP.*

**Table 8: Final Effluent Concentration Limits-** as per ECA 4066-CTPNQA, Schedule C, prior to completion of construction of all Proposed Works.

Effluent Parameters	Averaging Calculator	Concentration Limits
CBOD <sub>5</sub>	Monthly Average Effluent Concentration	15.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.5 mg/L
Total Phosphorus Loading	Monthly Average Daily Effluent Concentration	1.18 kg/day
<i>E. Coli</i>	Monthly Geometric Mean Density	200 MPN/100 mL*
pH	Single Sample Result	6.0 to 9.5, inclusive

*\*If the MPN method is utilized for E. coli analysis the objective shall be 200 MPN/100mL. The MPN method is utilized for Victoria Harbour WWTP.*

**Table 9: Final Effluent Concentration Limits-** as per ECA 4066-CTPNQA, Schedule C, upon completion of construction of all Proposed Works.

Effluent Parameters	Averaging Calculator	Concentration Limits
CBOD <sub>5</sub>	Monthly Average Effluent Concentration	15.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.15 mg/L
Total Phosphorus Loading	Annual Effluent Loading	129 kg/year
Total Ammonia Nitrogen (May 1 – November 30)	Monthly Average Effluent Concentration	3.2 mg/L
Total Ammonia Nitrogen (December 1 – April 30)	Monthly Average Effluent Concentration	7.0 mg/L
<i>E. Coli</i>	Monthly Geometric Mean Density	200 MPN/100 mL*
pH	Single Sample Result	6.0 to 9.5, inclusive

*\*If the MPN method is utilized for E. coli analysis the objective shall be 200 MPN/100mL. The MPN method is utilized for Victoria Harbour WWTP.*

#### 4.2 Effluent Monitoring Data: Summary and Interpretation of Reporting Year and Comparison to Objectives and Limits

The following tables summarizes the effluent water quality for the reporting period compared with the ECA compliance objectives and limits (prior to the construction of all proposed works).

A review of the effluent monitoring data shows that the following parameters were within the objectives (as applicable) and limits set out in the most current ECA for the duration of the 2025 reporting period:

- CBOD<sub>5</sub> monthly average effluent concentration

- Total Suspended Solids monthly average effluent concentration
- Total Phosphorus monthly average effluent concentration
- Total Phosphorus monthly average daily effluent loading
- Total Ammonia Nitrogen monthly average effluent concentration
- *E.Coli* monthly geometric mean density concentration
- All single-sample pH results while ECA #4066-CTPNQA was in effect

Under ECA #3389-A5BKJJ, which was in effect from January 1 to June 25, 2025, the pH compliance objective for final effluent was 7.0 to 9.0 inclusive, based on single-sample results. An amended ECA (#4066-CTPNQA) was issued on June 26, 2025, revising the pH objective to 6.5 to 8.5 inclusive, based on single-sample results. While the wastewater treatment plant was operating under ECA #3389-A5BKJJ, there were five instances in which the final effluent pH objective was not met, all of which were below the lower objective limit. These occurred on the following dates:

- January 30, 2025: pH 6.99
- March 3, 2025: pH 6.98
- May 8, 2025: pH 6.91
- May 22, 2025: pH 6.99
- June 16, 2025: pH 6.91

As stipulated in the ECA, compliance objectives are non-enforceable design targets intended to proactively trigger voluntary corrective action prior to the potential for environmental impairment. Exceedances of compliance objectives are not reportable.

**Table 10: Effluent Sampling Results: CBOD<sub>5</sub>**

Month	Monthly Average (mg/L)	Within Limits? (15.0 mg/L)	Within Objectives? (10.0 mg/L)
January	<4.00	Yes	Yes
February	<4.00	Yes	Yes
March	<3.60	Yes	Yes
April	<4.50	Yes	Yes
May	<5.25	Yes	Yes
June	<4.00	Yes	Yes
July	<4.00	Yes	Yes
August	<3.00	Yes	Yes
September	<2.80	Yes	Yes
October	<2.00	Yes	Yes
November	<2.50	Yes	Yes
December	2.60	Yes	Yes

*\*As per the ECA, CBOD<sub>5</sub> Concentration Averaging Calculator is a Monthly Average Effluent Concentration*

**Table 11: Effluent Sampling Results: TSS**

Month	Monthly Average (mg/L)	Within Limits? (15.0 mg/L)	Within Objectives? (10.0 mg/L)
January	4.50	Yes	Yes
February	7.00	Yes	Yes
March	<3.20	Yes	Yes
April	<2.50	Yes	Yes
May	3.00	Yes	Yes
June	<2.80	Yes	Yes
July	<2.75	Yes	Yes
August	<2.25	Yes	Yes
September	3.20	Yes	Yes
October	2.25	Yes	Yes
November	3.25	Yes	Yes
December	4.80	Yes	Yes

*\*As per the ECA, TSS Concentration Averaging Calculator is a Monthly Average Effluent Concentration*

**Table 12: Effluent Sampling Results: TP and TP Loading Concentrations**

Month	Total Phosphorus Concentration			Total Phosphorus Waste Loading		
	Monthly Average (mg/L)	Within Limits? (0.5 mg/L)	Within Objectives? (0.3 mg/L)	Monthly Average (kg/day)	Within Limits? (1.18 kg/day)	Within Objectives? (N/A)
January	0.07	Yes	Yes	0.142	Yes	--
February	0.09	Yes	Yes	0.138	Yes	--
March	<0.04	Yes	Yes	<0.146	Yes	--
April	<0.04	Yes	Yes	<0.091	Yes	--
May	<0.03	Yes	Yes	<0.057	Yes	--
June	<0.03	Yes	Yes	<0.047	Yes	--
July	<0.04	Yes	Yes	<0.057	Yes	--
August	<0.03	Yes	Yes	<0.049	Yes	--
September	<0.05	Yes	Yes	<0.071	Yes	--
October	<0.05	Yes	Yes	<0.068	Yes	--
November	<0.04	Yes	Yes	<0.073	Yes	--
December	0.05	Yes	Yes	0.093	Yes	--

*\*As per the ECA, TP Concentration Averaging Calculator is a Monthly Average Effluent Concentration*

*\*As per the ECA, TP Loading Limits Concentration Averaging Calculator is a Monthly Average Daily Effluent Loading.*

**Table 13: Effluent Sampling Results: Total Ammonia Nitrogen (TAN)**

Month	Monthly Average Concentration (mg/L)	Within Monthly Objective? (8.0 mg/L May 1 - Oct 31) (10.0 mg/L Nov 1 - Apr 30)	Within Monthly Compliance Limit? (N/A)
January	5.05	Yes	N/A
February	4.70	Yes	N/A
March	1.60	Yes	N/A
April	1.60	Yes	N/A
May	1.83	Yes	N/A
June	0.10	Yes	N/A
July	0.28	Yes	N/A
August	5.35	Yes	N/A
September	0.26	Yes	N/A
October	5.50	Yes	N/A
November	0.60	Yes	N/A
December	0.70	Yes	N/A

*\*As per the ECA, TAN Concentration Averaging Calculator is a Monthly Average Effluent Concentration*

*\*As per the ECA, there are no limits for TAN Concentration (prior to completion of construction of all Proposed Works), only objective limits*

**Table 14: Effluent Sampling Results: E.Coli Concentrations**

Month	Monthly Geometric Mean Density (MPN/100mL)	Within Monthly Objective? (100 MPN/100 mL)	Within Monthly Compliance Limit? (200 MPN/100 mL)
January	1.32	Yes	Yes
February	2.45	Yes	Yes
March	2.00	Yes	Yes
April	1.00	Yes	Yes
May	1.00	Yes	Yes
June	1.00	Yes	Yes
July	1.00	Yes	Yes
August	1.19	Yes	Yes
September	1.97	Yes	Yes
October	1.00	Yes	Yes
November	1.00	Yes	Yes
December	1.00	Yes	Yes

*\*As per the ECA, E.Coli Concentration Averaging Calculator is a Monthly Geometric Mean Density*

**Table 15. Effluent Quality Data during Reporting Period: pH**

Month	pH				
	Min.	Max.	Number of Samples Taken	Within Objective? <sup>15A</sup> (7.0 – 9.0 inclusive, at all times) – Jan 1 to June 25 (6.5 – 8.5 inclusive) – June 26 to Dec 31	Within Limits? (6.0 – 9.5) Inclusive
January	6.99	7.63	9	No	Yes
February	7.01	7.80	7	Yes	Yes
March	6.98	7.32	10	No	Yes
April	7.04	7.28	8	Yes	Yes
May	6.91	7.24	9	No	Yes
June	6.91	7.41	7	No	Yes
July	6.83	7.19	9	Yes	Yes
August	6.84	7.39	8	Yes	Yes
September	7.02	7.25	9	Yes	Yes
October	6.99	7.46	8	Yes	Yes
November	7.02	7.20	6	Yes	Yes
December	6.93	7.30	7	Yes	Yes

\*As per the ECA, pH Calculator is a Single Sample Result, inclusive, at all times

<sup>15A</sup>Under ECA #3389-A5BKJJ, the objective limit for pH was 7.0 to 9.0, inclusive at all times (single sample result) which was in effect from January 1 to June 25, 2025. Amended ECA #4066-CTPNQA was issued on June 26, 2025 and the objective limits were amended to 6.5 – 8.5 inclusive (single sample result).

**Table 16: Effluent Sampling Results: Total Kjeldahl Nitrogen, Nitrate as Nitrogen, Nitrite as Nitrogen**

Month	Monthly Average Concentration - TKN (mg/L as N)	Monthly Average Concentration – Nitrate as Nitrogen (mg/L as N)	Monthly Average Concentration – Nitrite as Nitrogen (mg/L as N)
January	N/A <sup>16A</sup>	2.14 <sup>16A</sup>	1.97 <sup>16A</sup>
February	N/A <sup>16A</sup>	8.27 <sup>16A</sup>	0.28 <sup>16A</sup>
March	N/A <sup>16A</sup>	6.17 <sup>16A</sup>	0.22 <sup>16A</sup>
April	N/A <sup>16A</sup>	6.68 <sup>16A</sup>	0.38 <sup>16A</sup>
May	N/A <sup>16A</sup>	4.59 <sup>16A</sup>	0.22 <sup>16A</sup>
June	N/A <sup>16A</sup>	11.76 <sup>16A</sup>	0.07 <sup>16A</sup>
July	1.20	11.95	0.17
August	1.43	8.56	0.11
September	0.94	13.54	0.49
October	1.58	14.95	0.29
November	1.80	10.47	1.31

Month	Monthly Average Concentration - TKN (mg/L as N)	Monthly Average Concentration – Nitrate as Nitrogen (mg/L as N)	Monthly Average Concentration – Nitrite as Nitrogen (mg/L as N)
December	3.36	8.82	1.82

*\*As per ECA 4066-CTPNQA, TKN, Nitrate as N and Nitrite as N do not have compliance objectives and limits, but are required to be monitored and sampled on a weekly basis.*

*<sup>16A</sup>Under ECA #3389-A5BKJ, sampling for TKN, Nitrate as N, and Nitrite as N was not required (January 1 to June 25, 2025). Amended ECA #4066-CTPNQA was issued on June 26, 2025 and monitoring these parameters is now a requirement under the most current ECA.*

**Table 17: Effluent Sampling Results: Temperature and Un-Ionized Ammonia**

Month	Monthly Temperature Range (Minimum – Maximum °C)	Monthly Average Un-Ionized Ammonia (mg/L as N)
January	8.40 – 10.60 <sup>17A</sup>	N/A <sup>17A</sup>
February	6.20 – 9.20 <sup>17A</sup>	N/A <sup>17A</sup>
March	7.70 – 9.30 <sup>17A</sup>	N/A <sup>17A</sup>
April	8.10 – 11.50 <sup>17A</sup>	N/A <sup>17A</sup>
May	10.40 – 14.20 <sup>17A</sup>	N/A <sup>17A</sup>
June	13.90 – 18.20 <sup>17A</sup>	N/A <sup>17A</sup>
July	19.10 – 23.20	0.00
August	20.20 – 22.00	0.00
September	18.90 – 20.30	0.00
October	15.40 – 20.30	0.00
November	12.10 – 15.60	0.00
December	9.80 – 11.80	0.01

*\*As per ECA 4066-CTPNQA, Temperature and Un-Ionized Ammonia do not have compliance objectives and limits, but are required to be monitored and sampled on a weekly basis.*

*<sup>17A</sup>Under ECA #3389-A5BKJ, sampling for Temperature and Un-Ionized Ammonia was not required (January 1 to June 25, 2025). Amended ECA #4066-CTPNQA was issued on June 26, 2025 and monitoring these parameters is now a requirement under the most current ECA.*

Refer to the below section (Section 2.10) for a comparison of effluent discharge data compared to the ECA objectives, limits and loadings with relation to the success and adequacy of the system.

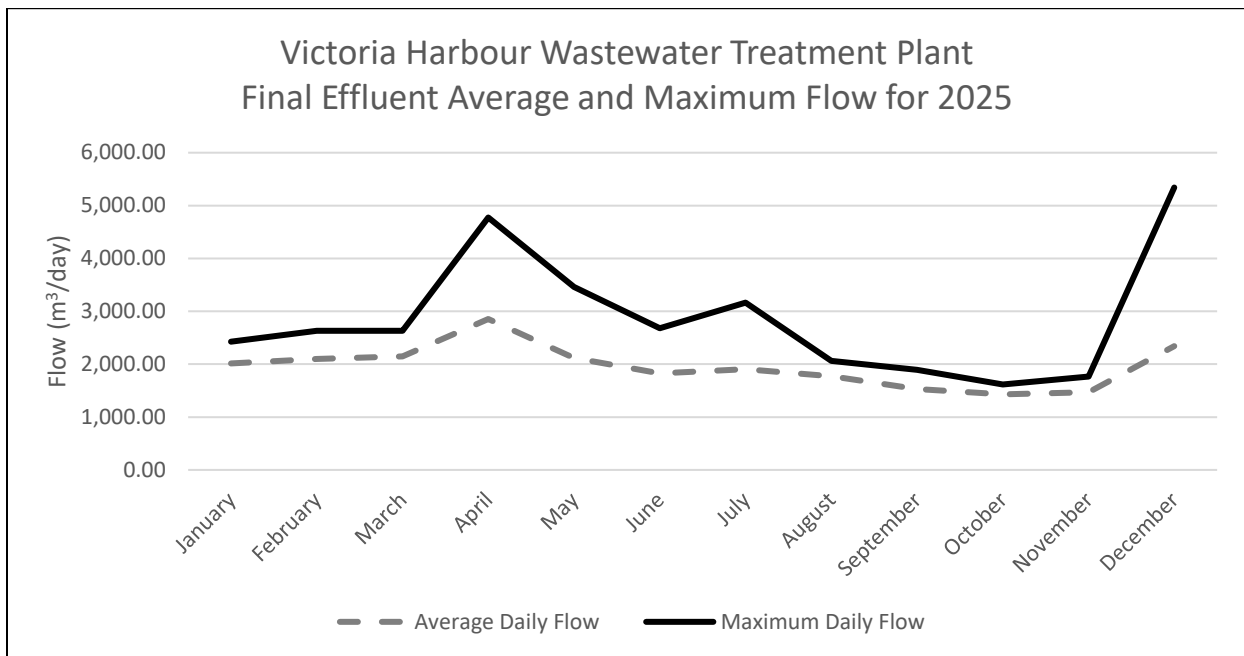
### 4.3 Effluent Flow: Summary and Interpretation of Reporting Year

The following table outlines the final effluent average daily flow data in 2025 and the graph shows the final effluent daily and peak final effluent flow by month for the reporting period.

**Table 18: Final Effluent Average Daily Flow and Peak Flow Data by Month for 2025**

Month	Average Daily Effluent (m <sup>3</sup> /day)	Peak Daily Effluent (m <sup>3</sup> /day)	Total (m <sup>3</sup> /day)
January	1,955.84	3,505.00	60,631.00
February	1,581.61	2,009.00	44,285.00
March	3,310.65	7,422.00	102,630.00
April	2,593.67	6,236.00	77,810.00
May	1,762.39	2,186.00	54,634.00
June	1,557.33	1,701.00	46,720.00
July	1,628.81	2,138.00	50,493.00
August	1,628.32	1,806.00	50,478.00
September	1,545.33	1,738.00	46,360.00
October	1,423.48	1,748.00	44,128.00
November	1,829.73	3,086.00	54,892.00
December	1,934.42	3,345.00	59,967.00
<b>2025 Annual Average</b>	<b>1,898.71</b>	<b>7,422.00</b>	<b>693,028.00</b>

**Graph 8: Average Daily and Peak Daily Final Effluent Flow by Month for 2025**



During the reporting period, the average annual daily flow for final effluent to outfall (Sturgeon Bay) was 1,898.71 m<sup>3</sup>/day. The maximum peak final effluent daily flow was 7,422 m<sup>3</sup>/day, which occurred on March 16, 2025, corresponding with the maximum peak daily influent flows.

#### **4.4 Success & Adequacy of the System**

During the reporting period, Victoria Harbour WWTP provided effective wastewater treatment.

The bacteriological quality of the effluent complied with the ECA monthly geometric mean density of less than 200 *E.Coli* organisms per 100 mL sample of effluent discharged from the plant. The range of monthly geometric mean density of organisms for 2025 was between 1.00 and 2.45 MPN/100mL under normal operating conditions, which indicates effective effluent disinfection. pH was also maintained between 6.0 and 9.5 for the reporting period, however there were five (5) instances that it fell outside of the objective (7.0 – 9.0) in a total of 98 single samples taken. These instances occurred between the months of January to June under ECA #3389-A5BKJ when the objective limit for pH was 7.0 to 9.0, inclusive at all times (single sample result). When amended ECA #4066-CTPNQA was issued on June 26, 2025 the objective limits were amended to 6.5 – 8.5 inclusive (single sample result) and no further pH objective exceedances occurred for the remainder of the reporting period.

This WWTP was in compliance with all of the final effluent objective and limit concentrations for the reporting year, under normal operating conditions, for all parameters. Based on the monitoring program and effluent quality data, the Victoria Harbour WWTP provided effective treatment for the 2025 reporting year.

For 2025 best efforts were used to operate the works within the rated capacity of the system. For the reporting period, the annual average daily influent flow was 2,123.66 m<sup>3</sup>, which was below the Rated Capacity at 89.83%. The highest recorded peak flow event of 10,727.00 m<sup>3</sup> occurred on March 16, 2025, it is suspected that unseasonably warmer weather and rapid snowmelt contributed to higher than usual flows. Victoria Harbour WWTP is currently in the design phase for its expansion upgrades, which are expected to break ground in 2027. Upon completion of all proposed works outlined in the amended ECA issued on June 26, 2025, the plant's rated capacity will increase to 3,550 m<sup>3</sup>/day. . Best efforts were also made to ensure that the effluent from the works was free of floating and settleable solids and did not contain oil or any other substances in amounts sufficient to create a visible film or sheen or foam or discoloration on the receiving waters.

## **5. Operational Issues and Corrective Actions**

ECA 4066-CTPNQA, section 42(4), element (c) requires:

*“A description of any operating problems encountered and corrective actions taken;”*

There were no operating problems encountered during the reporting period.

## **6. Maintenance Activities**

ECA 4066-CTPNQA, section 42(4), element (d) requires:

*“a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works”.*

### **6.1 Work Management System**

Planned maintenance, including scheduled and non-scheduled maintenance activities are scheduled using a computerized Work Management System (WMS) that allows user to:

- Enter detailed asset information
- Generate and process work orders
- Access maintenance and inspection procedures
- Plan, schedule, and document all asset related tasks and activities
- Access maintenance records and asset histories

Work Orders are automatically generated by the WMS program and are assigned to the applicable Operations staff accordingly.

### **6.2 Preventative Maintenance Activities**

There were a number of preventative maintenance tasks completed throughout the reporting period. They are as follows:

- Monthly Generator Testing
- Monthly Analyzer/pH/DO Probe Calibrations
- Monthly Headworks Maintenance
- Monthly Inspection/Maintenance of Aeration Blowers
- Monthly Alarm Testing
- Monthly UV Inspections/Maintenance
- Monthly Clarifier Maintenance/Cleaning
- Monthly Filter Inspections
- Quarterly Floc Tank Mixer Inspection/Maintenance
- Annual Pump Maintenance

- Annual Air Scrubber Maintenance
- Annual Clarifier Drive Unit Maintenance
- Annual Generator Maintenance
- Annual Transfer Pumps Maintenance
- Annual Backflow Prevention Testing

### **6.3 Emergency Repairs and Improvements**

There were a number of repairs and/or improvements completed throughout the reporting period. They are as follows:

- Pump Rebuilds
- Blower Repairs
- O2 Sensor Replacement Headworks Building
- Clarifier Arm Repair
- Digester Cleanouts
- WWTP Yard Hydrant Repairs

## **7. Effluent Quality and Control Assurance**

ECA 4066-CTPNQA, section 42(4), element (e) requires:

*“a summary of any effluent quality assurance or control measures undertaken;”*

Quality assurance and control measures undertaken during the reporting period include adherence to provincial regulations, use of accredited laboratories, operation of the system by licensed Operators, scheduled sampling and analysis, in-house laboratory analysis and calibration of equipment. The sections below provide further details of these measures.

### **7.1 Adherence to Provincial Regulations**

The Ontario Clean Water Agency operates the Victoria Harbour WWTP in accordance with provincial regulations and the Environmental Compliance Approval.

### **7.2 Use of Accredited Laboratories**

Analytical tests to monitor the effluent quality are conducted by a laboratory audited by the Canadian Association for Laboratory Accreditation Inc. (CALA) and accredited by the Standards Council of Canada (SCC). Accreditation ensures that the laboratory has acceptable laboratory protocols and test methods in place. It also requires the laboratory to provide evidence and assurances of the proficiency of the analysts performing the test methods. During the reporting period, all chemical sample analyses were conducted by SGS (Lakefield) Canada Inc.

### **7.3 Operation by Licensed Operators**

Victoria Harbour WWTP was operated and maintained by licensed Operators. The mandatory licensing program for operators of sewage treatment facilities in Ontario is regulated under the Ontario Water Resources Act (OWRA) Regulation 435/93 and Ontario Regulation 129/04. A Licensed individual has successfully passed the licensing exam and meets the education and experience requirements set out in the regulation.

### **7.4 Sampling and Analysis**

The Ontario Clean Water Agency followed a sampling and analysis schedule that meets the requirements of the ECA.

### **7.5 In-house Analysis**

In-house analysis was conducted by Licensed Operators for monitoring purposes using Standard Methods. The data generated from these tests is used to determine the treatment efficiency while maintaining process control. All in-house monitoring equipment is calibrated based on the manufacturer's recommendations. The Operators of the facility continue to use their expertise in order to meet our objective of no exceedances of the ECA Effluent Compliance Limits and OCWA will continue to make best efforts to meet the ECA Effluent Objectives.

### **7.6 Calibrations**

Third-party and in-house calibrations are completed on various equipment and monitoring and analysis items as required based on manufacturer's recommendations. Refer to Section 8 for more information regarding calibration of monitoring equipment.

## **8. Calibration of Monitoring Equipment**

ECA 4066-CTPNQA, section 42(4), element (f) requires:

*"a summary of the calibration and maintenance carried out on all Influent, Imported Sewage and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;"*

The portable hand held units used for monitoring and flow meters used to measure raw sewage (influent) and final effluent at Victoria Harbour WWTP were calibrated on July 30, 2025 by Indus Control. All program parameters received a passing inspection. Refer to *Appendix B* for detailed calibration records/reports.

## 9. Effluent Objective Results and Efforts

ECA 4066-CTPNQA, section 42(4), element (g) requires:

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

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

Where: Condition 6 is *“imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occur and before the compliance limits of Condition 7 are exceeded.”*

### 9.1 Effluent Quality Design Objectives and Annual Average Daily Influent Flow

The following table summarizes the percentage of time in the reporting period the design objectives were achieved:

**Table 19: Percentage of Time Design Objectives were Achieved in 2025**

Parameter	% of Time Objectives were Achieved
CBOD <sub>5</sub>	100
Total Suspended Solids	100
Total Phosphorus	100
Total Ammonia Nitrogen ((November 1 – April 30)	100
Total Ammonia Nitrogen (May 1 to October 31)	100
<i>E. coli</i>	100
pH	94.90%

*\*Percentage calculated based on number of samples collected during the reporting period*

*\*As per Schedule B of ECA 4066-CTPNQA, there are no listed loading objectives. Schedule C of the ECA only provides loading limits for Total Phosphorus.*

During the reporting period, operational staff used best efforts to ensure Victoria Harbour WWTP was operated within the design objectives of the facility. Design Objectives were achieved 100% of the time in 2025 for all of the above listed parameters, with the exception of 5 out of 98 pH single samples, during the reporting period. There were not instances where the design objectives were not achieved more than 50% of the time in the 2025 year; there were no trends of deteriorating final effluent quality. Proactive actions are not required at this time. The specific

results of the parameters are summarized in Tables 10 to 15 and detailed results can be found in *Appendix A – Annual Flow & Effluent Quality Summary*.

As per Table 4, the Annual Average Daily Influent Flow for 2025 was 2,123.66 m<sup>3</sup>/day, 89.83% of the Rated Capacity (2,364 m<sup>3</sup>/day). Proactive actions are currently in place to address the capacity issues at the WWTP. Victoria Harbour WWTP is currently in the design phase for its expansion upgrades, which are expected to break ground in 2027. Upon completion of all proposed works outlined in the amended ECA issued on June 26, 2025, the plant’s rated capacity will increase to 3,550 m<sup>3</sup>/day.

Best efforts were also made to ensure that the effluent from the works was free of floating and settleable solids and did not contain oil or any other substances in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters. No issues were observed by staff during the reporting period.

## 10. Sludge Production & Disposal

ECA 4066-CTPNQA, section 42(4), element (f) requires:

*“A tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;”*

During the reporting period, a total volume of 5,675.60 m<sup>3</sup> of sludge produced at the Victoria Harbour WWTP was hauled by Region of Huronia Environmental Services (ROHES). The sludge was either delivered to lagoons for storage or applied as soil conditioner to agricultural land to Non-Agricultural Source Material Plan (NASM Plan) sites/locations which were approved by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) under Ontario Regulation 338/09. 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.

Refer to Table 20 for a tabulation of the hauled sludge and the locations of where the sludge was disposed and Appendix C a detailed record of specific sludge haulage dates and volumes.

**Table 20. Sludge Hauling during the Reporting Period**

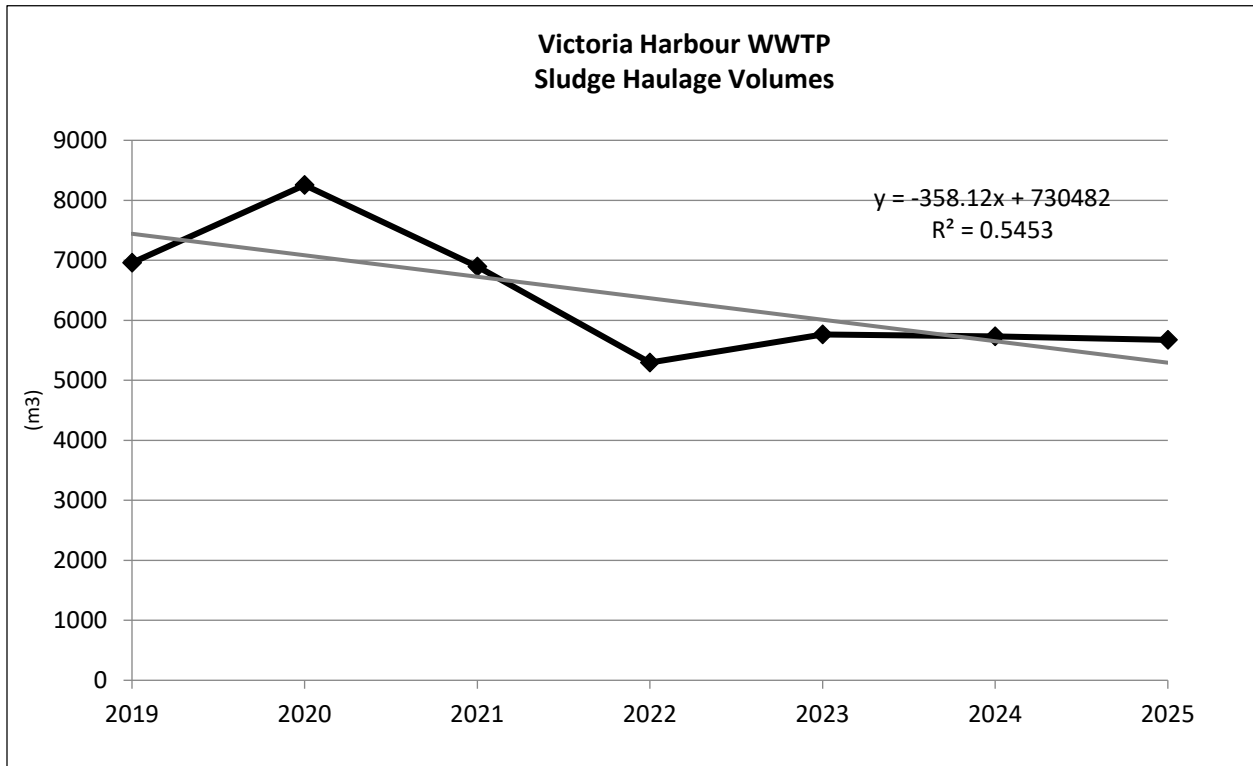
Month	Hauled to Location	NASM #	Volume of Sludge (m <sup>3</sup> )
January	ROHES Lagoon 7	N/A	420.00
February	ROHES Lagoon 9	N/A	571.20
March	ROHES Lagoon 4 and 9	N/A	666.40

Month	Hauled to Location	NASM #	Volume of Sludge (m <sup>3</sup> )
April	ROHES Lagoon 4 and 9	N/A	332.00
May	ROHES Lagoon 4	N/A	122.00
	Dubeau - Field 1	24877	366.00
June	ROHES Lagoon 4	N/A	1,042.00
July	Newcombe – Field: 1	62642	294.00
	Woodheads – Field: 1	62636	36.40
August	Home/Far Side-Field: FAR SIDE	24872	336.00
September	ROHES Lagoon 9	N/A	294.00
	Home/Far Side-Field: FAR SIDE	24872	336.00
October	ROHES Lagoon 9	N/A	198.80
	Rowe-Field:1	62622	294.00
December	ROHES Lagoon 7	N/A	366.80
<b>Total Sludge Haulage to ROHES Lagoon (4,7,9)</b>			<b>4,013.20</b>
<b>Total Sludge Haulage NASM #24872, Farm 'Home/Far Side', Field 'FAR SIDE':</b>			<b>672.00</b>
<b>Total Sludge Haulage NASM #24877, Farm 'Dubeau', Field '1':</b>			<b>366.00</b>
<b>Total Sludge Haulage to NASM #62622, Farm 'Rowe', Field '1':</b>			<b>294.00</b>
<b>Total Sludge Haulage NASM #62636, Farm 'Woodheads', Field '1':</b>			<b>36.40</b>
<b>Total Sludge Haulage NASM #62642, Farm 'Newcombe', Field '1':</b>			<b>294.00</b>
<b>Total Sludge Haulage in 2025</b>			<b>5,675.60</b>

During the reporting period, a total volume of 5,675.60 m<sup>3</sup> of sludge was hauled from Victoria Harbour WWTP to ROHES storage lagoon or to field. Compared to 2024, this was a decrease of approximately 1% (5,733 m<sup>3</sup>). Process adjustments are continuously made by staff, including the optimization of the decanting/dewatering process.

To estimate the volume of sludge generated in the next reporting period, a linear regression using data from previous years was used. The regression model, assuming the trendline and negative slope, suggests on average a decrease of approximately 358.12 in sludge hauled per year. Assuming this method, the sludge volume for 2026 is predicted to be 4,931 m<sup>3</sup>. The accuracy of this estimate is affected by the R<sup>2</sup> value, the closer the R<sup>2</sup> value is to 100%, the better the regression model fits to the data. The accuracy of the regression model is 54.5%. Operations staff will continue to optimize the dewatering process to reduce the relative volume of sludge.

**Graph 9: Victoria Harbour Wastewater Treatment Plant Sludge Haulage Volumes**



Biosolids produced at the Victoria Harbour WWTP met all the quality criteria specified in the Regulation for the reporting period. A summary of the Victoria Harbour WWTP sludge quality with a comparison to quality criteria can be referenced in Appendix C.

## 11. Community Complaints

ECA 4066-CTPNQA, section 42(4), element (h) requires:

*“A summary of any complaints received during the reporting period and any steps taken to address the complaints;”*

There is a standard operating procedure (SOP) in place that outlines the required steps for receiving and addressing community complaints. All complaints are to be discussed and/or investigated, and resolved as necessary. Each complaint is documented in detail in the facility logbook and key information is then entered into the Work Management System (WMS). The WMS maintains the full history of complaints with the relevant supporting details.

For the reporting period, no community complaints were received for the WWTP.

## 12. Bypasses, Overflows, Spills or Other Abnormal Discharge Events

ECA 4066-CTPNQA, section 42(4), element (j) requires:

*“a summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;”*

During the reporting period, quarterly bypass and overflow reports were submitted to the Ministry as required in the ECA for the reporting period on April 28, 2025 (Q1), July 28, 2025 (Q2), October 10, 2025 (Q3), and January 14, 2026 (Q4).

### 12.1 Bypass Events

There were three (3) reportable bypass event that occurred at the WWTP during the reporting year. For further details see *Appendix D - Bypass, Spill or Abnormal Discharge*

**Table 21: Victoria Harbour WWTP Bypass Events**

Date	Details
March 15, 2025	<p>Emergency Bypass - SAC Incident #: 1-J1FE3Z                      Treatment Skipped: Cloth Filters (partially treated secondary effluent)                      Treatment Provided: Headworks, Clarifier, UV, Partial filtration                      Date &amp; Time of Start: March 15, 2025 at 1415 hrs                      Date &amp; Time of End: March 15, 2025 at 1455 hrs                      Duration: 40 minutes                      Estimated Volume: 333.4 m<sup>3</sup>                      Effluent Discharge: Sturgeon Bay</p> <p><u>Incident Description</u></p> <ul style="list-style-type: none"> <li>Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant and the cloth filters were unable to maintain the flow, resulting in a bypass.</li> </ul> <p><u>Actions Taken to Control Incident</u></p> <ul style="list-style-type: none"> <li>Operations staff responded to a filter alarm and responded by throttling back clarifier valve to reduce flow to filters and allow clarifier to settle until heavy flows subsided.</li> <li>Samples were collected and analyzed for CBOD<sub>5</sub>, TSS, TP, TAN, and <i>E.Coli</i>, as required by the ECA.</li> </ul> <p><u>Reporting and Notification to SAC, Health Unit, MECP and Owner</u></p> <ul style="list-style-type: none"> <li>Verbal notifications were made to the Spills Action Centre, Ministry of Environment, Conservation and Parks (Barrie District Office) and Ministry of Health (Simcoe Muskoka District Health Unit) on March 15, 2025.</li> <li>Written notification provided March 18, 2025. No further actions required.</li> </ul>

Date	Details
<p>March 15 to March 16, 2025</p>	<p>Emergency Bypass: SAC Incident #: 1-J1VFM0                      Treatment Skipped: Cloth Filters (partially treated secondary effluent)                      Treatment Provided: Headworks, Clarifier, UV, Partial filtration                      Date &amp; Time of Start: March 15, 2025 at 2324 hrs                      Date &amp; Time of End: March 16, 2025 at 0244 hrs                      Duration: 200 minutes                      Estimated Volume: 1,575.9 m<sup>3</sup>                      Effluent Discharge: Sturgeon Bay</p> <p><u>Incident Description</u></p> <ul style="list-style-type: none"> <li>• Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant and the cloth filters were unable to maintain the flow, resulting in a bypass.</li> </ul> <p><u>Actions Taken to Control Incident</u></p> <ul style="list-style-type: none"> <li>• Operations staff manually operated the wastewater treatment plant to divert flows from the filter to waste holding tanks.</li> <li>• Since all process/waste tanks/connecting channels were at max capacity, the operator was unable to throttle the clarifier to slow the flow to avoid bypass at beginning of bypass.</li> <li>• As flows trended downward, flow was reduced to the clarifier.</li> <li>• Shut off air to cell 2 and cell 3 to settle decant to allow for a few feet of water to be removed from each tank to create more room</li> <li>• Samples were collected and analyzed for CBOD<sub>5</sub>, TSS, TP, TAN, and <i>E.Coli</i>, as required by the ECA.</li> </ul> <p><u>Reporting and Notification to SAC, Health Unit, MECP and Owner</u></p> <ul style="list-style-type: none"> <li>• Verbal notifications were made to the Spills Action Centre, Ministry of Environment, Conservation and Parks (Barrie District Office) and Ministry of Health (Simcoe Muskoka District Health Unit) on March 16, 2025.</li> <li>• Written notification provided March 18, 2025. No further actions required.</li> </ul>
<p>March 16, 2025</p>	<p>Emergency Bypass: SAC Incident #: 1-J2D9SW                      Treatment Skipped: Cloth Filters (partially treated secondary effluent)                      Treatment Provided: Headworks, Clarifier, UV, Partial filtration                      Date &amp; Time of Start: March 16, 2025 at 0626 hrs                      Date &amp; Time of End: March 16, 2025 at 2130 hrs                      Duration: 904 minutes                      Volume: 7,000 m<sup>3</sup>                      Effluent Discharge: Sturgeon Bay</p> <p><u>Incident Description</u></p> <ul style="list-style-type: none"> <li>• Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant and the cloth filters were unable to maintain the flow, resulting in a bypass.</li> </ul> <p><u>Actions Taken to Control Incident</u></p>

Date	Details
	<ul style="list-style-type: none"> <li>• Operations staff noticed flows beginning to increase in the system, opened clarifier gate to ensure process tanks don't overflow.</li> <li>• Since all process/waste tanks/connecting channels were at max capacity, the operator was unable to throttle the clarifier to slow the flow to avoid bypass at beginning of bypass.</li> <li>• Operations staff continued to monitor tank levels</li> <li>• External assistance was provided by a local hauling company (ROHES) to haul loads of sewage from outside the holding tank. After hauling from the holding tank, waste pump was turned on in manual to slow flows to the cloth filters. Used Grindex to waste from the bottom of cell 3 into holding tank to make room for flows.</li> <li>• Samples were collected and analyzed for CBOD<sub>5</sub>, TSS, TP, TAN, and <i>E.Coli</i>, as required by the ECA.</li> </ul> <p><u>Reporting and Notification to SAC, Health Unit, MECP and Owner</u></p> <ul style="list-style-type: none"> <li>• Verbal notifications were made to the Spills Action Centre, Ministry of Environment, Conservation and Parks (Barrie District Office) and Ministry of Health (Simcoe Muskoka District Health Unit) on March 16, 2025.</li> <li>• Written notification provided March 18, 2025. No further actions required.</li> </ul>

As described in the above table, all bypass events were proactively reported by OCWA as separate incidents at the time of occurrence. However, in accordance with ECA #3389-A5BKJJ—which was in effect during the reportable bypass incidents noted above—an *Event* is defined as: *an action or occurrence, at a given location within the Sewage Treatment Plant that causes a Plant Bypass or Plant Overflow. An Event ends when there is no recurrence of a Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Bypass or Overflow.*” Based on this definition, SAC Incident #1-J1FE3Z, SAC Incident #1-J2D9SW, and SAC Incident #1-J2D9SW occurred within a 12-hour period without an intervening 12-hour non-recurrence window and, as such, should have been reported as a single event rather than as separate incidents.

## 12.2 Overflow Events

During the reporting period, no (0) overflow events occurred at the WWTP.

## 12.3 Spills or Abnormal Discharge Events

During the reporting period, no (0) spill or other abnormal discharge events occurred at the WWTP.

### 13. Notice of Modifications (Limited Operational Flexibility)

ECA 4066-CTPNQA, section 42(4), element (k) requires:

*“a summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.”*

Where: Schedule E, is the “Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works.” And where condition 10 states “Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works”.

During the reporting period, there were no Notices of Modification submitted to the Ministry.

### 14. Conformance with Procedure F-5-1

ECA 4066-CTPNQA, Section 42(4), element (l) requires:

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

Victoria Harbour WWTP operated at an adequate level during the reporting period to ensure the requirements outlined in the ECA were met on a reliable basis. As required, the Township of Tay and OCWA continue to promptly resolve operational issues related to bypasses and overflows with emergency/preventive repairs and upgrade implementation and recommendations. The below table outlines the major upgrades and replacement projects to support mitigation of bypass and overflow events are outlined in the multi-year capital plan for the WPCP:

**Table 22: Summary of Proposed Works to Eliminate Bypass/Overflow Events**

Proposed Works	Estimated Budget Allocation	Proposed Year
VH WWTP Upgrades	\$43,000,000	2027

### 15. Changes to Scheduled Works in the Proposed Works

Where ECA 4066-CTPNQA, section 42(4), element (n) requires:

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

The Proposed Works outlined in ECA 4066-CTPNQA includes new Proposed Works to the Secondary Treatment System, Post-Secondary Treatment System and the Sludge Management System. Those Proposed Works and status updates are outlined as follows:

**Table 23: Summary of Proposed Works Completion and Upgrades**

<p>Secondary Treatment System- Biological Treatment</p> <ul style="list-style-type: none"> <li>• one (1) 29.17 m x 4.76 m x 4.0 m side water depth (SWD) extended aeration tank, converted from the existing aerobic digester, equipped with fine bubble diffuser;</li> <li>• one (1) 29.17 m x 4.76 m x 4.0 m SWD extended aeration tank, converted from the existing sludge holding tank, equipped with fine bubble diffuser;</li> <li>• three (3) centrifugal turbo blowers (two duty, one standby), to replace the existing three (3) blowers, each equipped with variable frequency drive (VFD) and with air flow capacity of 2,058 Nm<sup>3</sup>/h at discharge pressure of 49 kPa;</li> </ul> <p>Status: proposed start 2027</p>
<p>Secondary Treatment System -Secondary Sedimentation</p> <ul style="list-style-type: none"> <li>• one (1) 16 m diameter x 4 m SWD secondary clarifier with sludge and scum removal mechanisms;</li> <li>• one (1) waste activated sludge (WAS) pump, to replace the existing WAS pump, equipped with VFD and with a capacity of 22.5 L/s at a total dynamic head (TDH) of 2.51 m;</li> <li>• three (3) return activated sludge (RAS) pumps (two pumps dedicated to the proposed and the existing secondary clarifiers and the third pump functioning as a standby pump for either RAS or WAS pump), to replace the existing two (2) RAS pumps, each equipped with VFD and with a capacity of 41 L/s at a TDH of 4.5 m;</li> </ul> <p>Status: proposed start 2027</p>
<p>Post-Secondary Treatment System – Disk Filters</p> <ul style="list-style-type: none"> <li>• four (4) submersible pumps (three duty, one standby), to replace the existing four (4) filter feed pumps, each equipped with VFD and with a capacity of 56 L/s at a TDH of 11 m;</li> <li>• modify the existing 200 mm diameter flocculation tank overflow pipe;</li> </ul> <p>Status: proposed start 2027</p>
<p>Sludge Management System – Sludge Digestion</p> <ul style="list-style-type: none"> <li>• two (2) 30 m x 6.5 m x 4.2 m SWD aerobic digesters, each divided into two (2) cells with dimension of 11 m x 6.5 m x 4.2 m SWD for Cell #1 providing effective volume of 300.3 m<sup>3</sup> and 4 m x 6.5 m x 4.2 m SWD for Cell #2 providing effective volume of 109.2 m<sup>3</sup>, equipped with reversible type wide band coarse bubble aeration system;</li> <li>• four (4) mixing pumps (two duty, two standby) in each digester cell (eight in total for both digesters), each with rated capacity of 9.0 L/s at a TDH of 3.9 m;</li> </ul>

- two (2) centrifugal turbo blowers (one duty, one standby), each equipped with VFD and with air flow capacity of 1,540 Nm<sup>3</sup>/h at discharge pressure of 48 kPa;
- one (1) 8 m x 2 m x 5 m supernatant tank with effective volume of 16 m<sup>3</sup>, equipped with three (3) submersible pumps (two duty, one standby), each with rated capacity of 8.33 L/s at a TDH of 8 m;

Status: proposed start 2027

#### Sludge Management System – Digested Sludge Thickening and Dewatering

- one (1) 8 m x 3 m x 3.2 m digested sludge tank with effective volume of 76.8 m<sup>3</sup>;
- two (2) rotary lobe pumps (one duty, one standby) feeding rotary drum thickener (RDT), each equipped with VFD and with rated capacity of 2.5 L/s at a TDH of 11 m;
- one (1) RDT to produce approximately 6% dry solids sludge;
- one (1) 2 m x 1 m x 1 m thickened sludge sump, two (2) thickened sludge transfer pumps (one duty, one standby), each with rated capacity of 2.5 L/s at a TDH of 12 m;
- one (1) 11.926 m internal diameter x 5 m SWD thickened sludge storage tank with working volume of 550 m<sup>3</sup> with two (2) mixing pumps (one duty, one standby) equipped with VFD and with capacity of 157 L/s;
- two (2) thickened sludge transfer pumps (one duty, one standby), each equipped with VFD and with rated capacity of 49 L/s at a TDH of 4 m;
- one (1) dewatering centrifuge to produce approximately 18% dry solids sludge and discharged to closed dewatered cake screw conveyor system;
- one (1) 3,100 L polymer storage tank for storing the 30% neat polymer solution, one (1) pre-packaged emulsion polymer make-down system to produce 0.2% polymer solution for the RDT system;
- one (1) 3,100 L polymer storage tank for storing the 30% neat polymer solution, one (1) pre-packaged emulsion polymer make-down system to produce 0.2% polymer solution for the dewatering centrifuge system;
- one (1) 680 L aging tank with two (2) polymer feeding pumps (one duty, one standby), to supply 0.2% polymer solution to the RDT;
- one (1) 680 L aging tank with two (2) polymer feeding pumps (one duty, one standby) to supply 0.2% polymer to the dewatering centrifuge;

Status: proposed start 2027

#### Sludge Management System – Biosolids Storage and Disposal

- three (3) biosolids storage hoppers;
- a twin live bottom conveyor provided for each hopper to allow the transfer of the biosolids to the hauling trucks;

Status: proposed start 2027

## 16. Monitoring Schedule

ECA 4066-CTPNQA, section 42(4), element (n) requires:

*“a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;”*

As per the ECA, section 35 to 38, “the Owner shall, upon commencement of operations of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in Schedule D and record all results, as follows:

- a) all samples and measured are to taken at a time and in a location character characteristic of the quality and quantity of sewage stream over the period of time being monitored and follow the methods and protocols specified in the following documents: Ministry's Procedure F-10-1, Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), and the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016). All analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager.
- b) at a frequency where (i) Weekly means once every week; (ii) Monthly means once every month; (iii) Quarterly means once every three months; and (iv) Annually means once every year”.
- c) a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week/month for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.

During the reporting period, Victoria Harbour WWTP sampling requirement were scheduled to be taken on Mondays in 2025, unless a statutory holiday prevented sampling to occur, in which case the samples were taken the next day on Tuesday. During the reporting year, the Victoria Harbour WWTP had no deviations from the monitoring schedule.

The monitoring schedule (sampling calendar) for the next reporting year (2026) can be found in *Appendix E – Sampling Schedules*. The sampling calendar was issued December 19, 2025 and developed to meet the monitoring program, frequency and schedule rotation requirements in the ECA as described above.

2025 Annual Performance Report

# Appendix A

Annual Flow and Quality Summary

**1675 VICTORIA HARBOUR WASTEWATER TREATMENT FACILITY 120003227**

	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-->
<b>Flows</b>																
Raw Flow: Total - Raw Sewage m³/d	63,566.00	46,280.00	112,599.00	83,097.00	61,009.00	54,846.00	59,017.00	59,519.00	54,628.00	52,280.00	62,558.00	65,737.00	775,136.00			0.00
Raw Flow: Avg - Raw Sewage m³/d	2,050.52	1,652.86	3,632.23	2,769.90	1,968.03	1,828.20	1,903.77	1,919.97	1,820.93	1,686.45	2,085.27	2,120.55		2,123.66		2,364.00
Raw Flow: Max - Raw Sewage m³/d	3,706.00	2,136.00	10,727.00	7,100.00	2,437.00	2,189.00	2,460.00	2,113.00	2,059.00	2,023.00	3,385.00	3,642.00			10,727.00	0.00
Raw Flow: Count - Raw Sewage m³/d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
Eff. Flow: Total - Final Effluent m³/d	60,631.00	44,285.00	102,630.00	77,810.00	54,634.00	46,720.00	50,493.00	50,478.00	46,360.00	44,128.00	54,892.00	59,967.00	693,028.00			0.00
Eff. Flow: Avg - Final Effluent m³/d	1,955.84	1,581.61	3,310.65	2,593.67	1,762.39	1,557.33	1,628.81	1,628.32	1,545.33	1,423.48	1,829.73	1,934.42		1,898.71		
Eff. Flow: Max - Final Effluent m³/d	3,505.00	2,009.00	7,422.00	6,236.00	2,186.00	1,701.00	2,138.00	1,806.00	1,738.00	1,748.00	3,086.00	3,345.00			7,422.00	0.00
Eff Flow: Count - Final Effluent m³/d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
<b>Biochemical Oxygen Demand: BOD5</b>																
Raw: Avg BOD5 - Raw Sewage mg/L	130.00	169.00	93.00	59.00	170.00	439.00	54.00	90.00	84.00	98.00	89.00	126.00		133.42	439.00	0.00
Raw: # of samples of BOD5 - Raw Sewage mg/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
<b>Carbonaceous Biochemical Oxygen Demand: CBOD</b>																
Eff: Avg cBOD5 - Final Effluent including Bypass mg/L	< 4.00	< 4.00	< 3.60	< 4.50	< 5.25	< 4.00	< 4.00	< 3.00	< 2.80	< 2.00	< 2.50	2.60		< 3.50	< 5.25	
Eff: # of samples of cBOD5 - Final Effluent including Bypass mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00
Loading: cBOD5 - Final Effluent including Bypass kg/d	< 7.823	< 6.326	< 11.918	< 11.672	< 9.253	< 6.229	< 6.515	< 4.885	< 4.327	< 2.847	< 4.574	5.029		< 6.65	< 11.92	
<b>Total Suspended Solids: TSS</b>																
Raw: Avg TSS - Raw Sewage mg/L	169.00	134.00	126.00	60.00	162.00	740.00	35.00	127.00	81.00	70.00	69.00	185.00		163.17	740.00	0.00
Raw: # of samples of TSS - Raw Sewage mg/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TSS - Final Effluent including Bypass mg/L	4.50	7.00	< 3.20	< 2.50	3.00	< 2.80	< 2.75	< 2.25	3.20	2.25	3.25	4.80		3.46	7.00	
Eff: # of samples of TSS - Final Effluent including Bypass mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00
Loading: TSS - Final Effluent including Bypass kg/d	8.801	11.071	< 10.594	< 6.484	5.287	< 4.361	< 4.479	< 3.664	4.945	3.203	5.947	9.285		6.57	11.07	
<b>Total Phosphorus: TP</b>																
Raw: Avg TP - Raw Sewage mg/L	2.36	2.58	1.35	1.26	4.14	16.10	0.80	1.52	1.70	1.22	1.55	3.16		3.15	16.10	0.00
Raw: # of samples of TP - Raw Sewage mg/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TP - Final Effluent including Bypass mg/L	0.07	0.09	< 0.04	< 0.04	< 0.03	< 0.03	< 0.04	< 0.03	< 0.05	< 0.05	< 0.04	0.05		0.05	0.09	
Eff: # of samples of TP - Final Effluent including Bypass mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00
Loading: TP - Final Effluent including Bypass kg/d	0.142	0.138	< 0.146	< 0.091	< 0.057	< 0.047	< 0.057	< 0.049	< 0.071	< 0.068	< 0.073	0.093		0.09	0.15	

**Nitrogen Series**

Raw: Avg TKN - Raw Sewage mg/L	13.40	25.30	17.50	5.00	38.80	60.00	23.20	24.50	21.00	20.80	22.80	21.00		24.44	60.00	0.00
Raw: # of samples of TKN - Raw Sewage mg/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TAN - Final Effluent including Bypass mg/L	5.05	4.70	1.60	1.60	1.83	0.10	0.28	5.35	0.26	5.50	0.60	0.70		2.03	5.50	
Eff: # of samples of TAN - Final Effluent including Bypass mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00
Loading: TAN - Final Effluent including Bypass kg/d	9.877	7.434	5.297	4.150	3.216	0.156	0.448	8.712	0.402	7.829	1.098	1.354		3.85	9.88	
Eff: Avg NO3-N - Final Effluent mg/L	2.14	8.28	6.17	6.68	4.59	11.76	11.95	8.56	13.54	14.95	10.47	8.82		9.08	14.95	0.00
Eff: # of samples of NO3-N - Final Effluent mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00
Eff: Avg NO2-N - Final Effluent mg/L	1.98	0.28	0.22	0.38	0.22	0.07	0.17	0.12	0.49	0.29	1.31	1.82		0.61	1.98	0.00
Eff: # of samples of NO2-N - Final Effluent mg/L	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00

**pH**

Eff: Min pH - Final Effluent ---	6.99	7.01	6.98	7.04	6.91	6.91	6.83	6.84	7.02	6.99	7.02	6.93				9.50
Eff: Max pH - Final Effluent ---	7.63	7.80	7.32	7.28	7.24	7.41	7.19	7.39	7.25	7.46	7.20	7.30		7.80		9.50
Eff: Min pH Field: Lab Upload - Final Effluent ---	7.10	7.04	6.98	7.04	7.00	6.81	6.85	6.98	7.02	6.99	7.02	6.93				9.50
Eff: Max pH Field: Lab Upload - Final Effluent ---	7.29	7.19	7.18	7.36	7.24	7.41	7.03	7.31	7.25	7.07	7.11	7.26		7.41		9.50

**Disinfection**

Eff: GMD E. Coli MPN - Final Effluent MPN	1.32	2.45	2.00	1.00	1.00	1.00	1.00	1.19	1.97	1.00	1.00	1.00				
Eff: # of samples of E. Coli MPN - Final Effluent	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			0.00

2025 Annual Performance Report

# Appendix B

Calibration Reports



IndusControl Inc.  
151 Superior Blvd, Unit #13  
Mississauga, ON, L5T 2L1.

VERIFICATION REPORT- **SINTRANS LUT 400**  
OPEN CHANNEL FLOW MEASUREMENT

Customer Name: Township of Tay  
Plant Name: Victoria Harbour WWTP

Site/Plant Address: 150 INDUSTRIAL ROAD  
VICTORIA HARBOUR, ON L0K2A0

**Device Information**  
Make: Siemens  
Model: SINTRANS LUT440  
Order Code: 7ML50/500CA111DA0-7  
Serial No.: PBD/H9130253  
Tag : LIT/FIT-201  
Asset Id : 0000350319

**Service Information**  
Date: July 30, 2025  
Report No: CO1644-2507-35  
Job No: CO1644-2507

Inst. Reading	AS FOUND	AS LEFT
TOTALIZER (L)	1318.37	1328.51
FLOW (L/S)	35.56	19.32

**Flow Details**  
Unit: L/S  
Flow Range: 0-225 L/S  
Current Output: 4-20 mA  
4 mA Set Point 0  
20 mA Set Point 225

Maintenance Checklist			Remarks
Visual Inspection:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK	
Electrical Inspection:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK	

Programming Parameter of Instrument			
Parameter	Value	Parameter	Value
Sensor Mode	Flow	4 mA Set Point	0.00
Transducer	XRS-10	20 mA Set Point	225
Unit	m	Flowrate Unit	L/S
Low Calibration Point	1.171 m	Method of Flow calculation	Ratio Metric
High Calibration Point	0.3 m	Low Flow Cutoff	0.001m
Sensor Offset	0 m	Zero Head Offset	0m
Maximum Head	0.572	Flow Exponent	1.53

Test Point Report						
Reference Distance (m)	Measured Distance (m)	Calculated Flow (L/s)	UUT Flow Display (L/s)	Calculated (mA)	Measured (mA)	Deviaiton (L/s)
0.186	1.176	40.33	40.27	6.87	6.85	-0.06
0.115	0.113	19.33	19.37	5.37	5.39	0.04

**Calculations**  
**Flow Calculations**  
 $Q = q_{cal} (h/h_{cal})^{Exp}$  Where,  $Q$ = Discharge Flow,  $q_{cal}$  = max flow,  $h$  = head,  $h_{cal}$  = max head  
 $Exp = 1.5$  , Hence,  
 $Q = 225(0.186/0.572)^{1.53}$   
 $Q = 40.33$

Instrument Test Information and Results					
Input(%)	Calculated Flow (L/S)	Calculated O/P (mA)	HMI Display (L/S)	UUT Measured Output (mA)	Deviation (L/S)
0	0.00	4.00	0.00	4.01	0.00
25	56.25	8.00	56.54	8.02	-0.29
50	112.50	12.00	112.62	12.05	-0.12
75	168.75	16.00	168.51	15.98	0.24
100	225.00	20.00	224.97	19.99	0.03

Information of Tools used for Verification of the Instruments		
Device Description:	Manufacturer	Model
Electrical Multimeter	Fluke	179

\* Refer Calibration Tools Certificates submittal for more Information

Verification Test Result:  Passed  Fail  Not Verified

Overall Remarks: Program parameters verified. Measurement working as per specification

Service Technician : Parth Panchal

Stamp/Signature

Printed Date: July 30, 2025



IndusControl Inc  
3170 Ridgeway Dr, Unit 11  
Mississauga, ON, L5L 5R4

## VERIFICATION REPORT ELECTRO-MAGNETIC FLOW MEASUREMENT

Customer Name:	Township of Tay	Site/Plant Address:	150 INDUSTRIAL ROAD
Plant Name:	Victoria Harbour WWTP		VICTORIA HARBOUR, ON L0K2A0

Device Information	
Make:	KROHNE
Model:	IFC100
Order Code:	N/A
Serial No.:	A15011061
Tag:	FIT302
Job Location:	Wash water waste
Asset Id	0000350375

Service Information	
Date:	July 30, 2025
Report No:	CO1644-2507-36
Job No:	CO1644-2507

Sensor Details	
Line size:	80 mm 3 inch
GKL:	5.2021
Mounting	Remote

Flow Details	
Unit:	L/SEC
Flow Range:	0 - 35
Current Output:	4-20 mA
4 mA Set Point	0
20 mA Set Point	35

Inst. Reading	AS FOUND	AS LEFT
TOTALIZER (m3)	236761.73	236762.57
FLOW (l/sec)	9.6	0

Maintenance Checklist	Remarks
Visual Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Electrical Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Sensor Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Transmitter Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	

Instrument Test Information and Results					
Set-Point as Per Calibration KIT	Calculated Flow (l/sec)	Calculated O/P (mA)	UUT Display (l/sec)	UUT Measured Output (mA)	Deviation (l/sec)
0	0.00	4.00	0.000	4.00	0.00
A	1.99	4.91	2.010	4.94	-0.02
B	3.99	5.82	4.030	5.83	-0.04
C	7.97	7.64	7.990	7.66	-0.02
D	19.93	13.11	19.980	13.14	-0.05

Information of Tools used for Verification of the Instruments			
Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 2
Device Description:	Calibrator	Electrical Multimeter	NA
Manufacturer:	Krohne	Fluke	NA
Model No:	GS8B	179	NA

\* Refer Calibration Tools Certificates submittal for more Information

Overall Test Result:	<input checked="" type="checkbox"/> <b>Passed</b>	<input type="checkbox"/> <b>Fail</b>	<input type="checkbox"/> <b>Not Verified</b>
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Overall Remarks:	Measurement working as per specification
------------------	--

Service Technician :	Parth Panchal	Stamp/Signature	
Printed Date:	July 30, 2025		



IndusControl Inc  
3170 Ridgeway Dr, Unit 11  
Mississauga, ON, L5L 5R4

## VERIFICATION REPORT ELECTRO-MAGNETIC FLOW MEASUREMENT

Customer Name: Township of Tay  
Plant Name: Victoria Harbour WWTP

Site/Plant Address: 150 INDUSTRIAL ROAD  
VICTORIA HARBOUR, ON L0K2A0

### Device Information

Make: KROHNE  
Model: IFC100  
Order Code: N/A  
Serial No.: A16038207  
Tag: FIT301  
Job Location: Sewage water  
Asset Id: 0000350376

### Service Information

Date: July 30, 2025  
Report No: CO1644-2507-37  
Job No: CO1644-2507

### Flow Details

Unit: L/SEC  
Flow Range: 0 - 150  
Current Output: 4-20 mA  
4 mA Set Point: 0  
20 mA Set Point: 150

### Sensor Details

Line size: 200 mm 8 inch  
GKL: 7.9688  
Mounting: Remote

Inst. Reading	AS FOUND	AS LEFT
TOTALIZER (m3)	6587440.13	6587445.17
FLOW (l/sec)	23.3	17.2

### Maintenance Checklist

Visual Inspection:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK
Electrical Inspection:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK
Sensor Installation:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK
Transmitter Installation:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> NOT OK

### Remarks

### Instrument Test Information and Results

Set-Point as Per Calibration KIT	Calculated Flow (l/sec)	Calculated O/P (mA)	UUT Display (l/sec)	UUT Measured Output (mA)	Deviation (l/sec)
0	0.00	4.00	0.010	4.01	-0.01
A	19.08	6.03	19.120	6.05	-0.04
B	38.15	8.07	38.060	7.98	0.09
C	76.31	12.14	76.220	12.08	0.09

### Information of Tools used for Verification of the Instruments

Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 2
Device Description:	Calibrator	Electrical Multimeter	NA
Manufacturer:	Krohne	Fluke	NA
Model No:	GS8B	179	NA

\* Refer Calibration Tools Certificates submittal for more Information

Overall Test Result:  **Passed**  **Fail**  **Not Verified**

Overall Remarks: Measurement working as per specification

Service Technician : Parth Panchal

Stamp/Signature

Printed Date: July 30, 2025



IndusControl Inc  
3170 Ridgeway Dr, Unit 11  
Mississauga, ON, L5L 5R4

## VERIFICATION REPORT ELECTRO-MAGNETIC FLOW MEASUREMENT

Customer Name: Township of Tay Site/Plant Address: 150 INDUSTRIAL ROAD  
Plant Name: Victoria Harbour WWTP VICTORIA HARBOUR, ON L0K2A0

Device Information	Service Information
Make: <u>Siemens</u>	Date: <u>July 30, 2025</u>
Model: <u>Multiranger 100</u>	Report No: <u>CO1644-2507-38</u>
Order Code: <u>7ML50331AA002A</u>	Job No: <u>CO1644-2507</u>
Serial No.: <u>PBD/H 8100252</u>	
Tag: <u>LIT 302</u>	
Job Location: <u>Reservoir-1</u>	
Asset Id: <u>0000350407</u>	

Sensor Details	Flow Details
Unit: <u>Meter</u>	Unit: <u>cm</u>
Sensor Mode: <u>Level</u>	Range: <u>0 -110</u>
Transducer: <u>XPS-10</u>	Current Output: <u>4-20 mA</u>
	4 mA Set Point: <u>0</u>
	20 mA Set Point: <u>110</u>

Inst. Reading	AS FOUND	AS LEFT
Level (cm)	62.38	62.22

Maintenance Checklist	Remarks
Visual Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Electrical Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Sensor Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Transmitter Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	

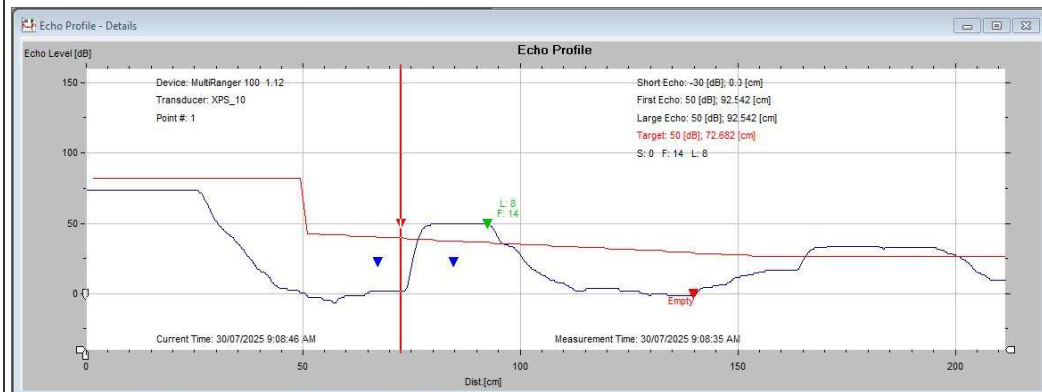
Instrument Test Information and Results					
Input (%)	Calculated Level (cm)	Calculated Input (mA)	UUT Display (cm)	UUT Measured Output (mA)	Deviation (cm)
0	0.00	4.00	0.00	4.00	0.00
25	27.50	8.00	27.47	8.01	0.03
50.0	55.00	12.00	55.09	12.03	-0.09
75	82.50	16.00	82.47	15.91	0.03
100	110.00	20.00	110.08	20.06	-0.08

Information of Tools used for Verification of the Instruments			
Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 3
Device Description:	Electrical Multimeter	NA	NA
Manufacturer:	Fluke	NA	NA
Model No:	179	NA	NA

\* Refer Calibration Tools Certificates submittal for more Information

Overall Test Result:  **Passed**  **Fail**  **Not Verified**

### Echo Profile



Overall Remarks: Measurement works as per specification

Service Technician : Parth Panchal Stamp/Signature   
Printed Date: July 30, 2025



IndusControl Inc.  
151 Superior Blvd, Unit #13  
Mississauga, ON, L5T 2L1.

## VERIFICATION REPORT ELECTRO-MAGNETIC FLOW MEASUREMENT

Customer Name: Township of Tay      Site/Plant Address: 150 INDUSTRIAL ROAD  
 Plant Name: Victoria harbour WWTP      VICTORIA HARBOUR, ON L0K2A0

**Device Information**  
 Make: Siemens  
 Model: Multiranger 200  
 Order Code: 7ML1033-2AA00-2A  
 Serial No.: PBD/FN 090385  
 Tag: LIT 202  
 Channel: Channel-2  
 Asset Id: 0000350320

**Service Information**  
 Date: July 30, 2025  
 Report No: CO1644-2507-39  
 Job No: CO1644-2507

**Sensor Details**  
 Unit: Meter  
 Sensor Mode: Level  
 Transducer: XRS-15

**Flow Details**  
 Unit: Meter  
 Range: 0 -1.310  
 Current Output: 4-20 mA  
 4 mA Set Point: 0  
 20 mA Set Point: 1.310

Inst. Reading	AS FOUND	AS LEFT
Level (Meter)	0.31	0.37

Maintenance Checklist		Remarks
Visual Inspection:	<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Electrical Inspection:	<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Sensor Installation:	<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Transmitter Installation:	<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	

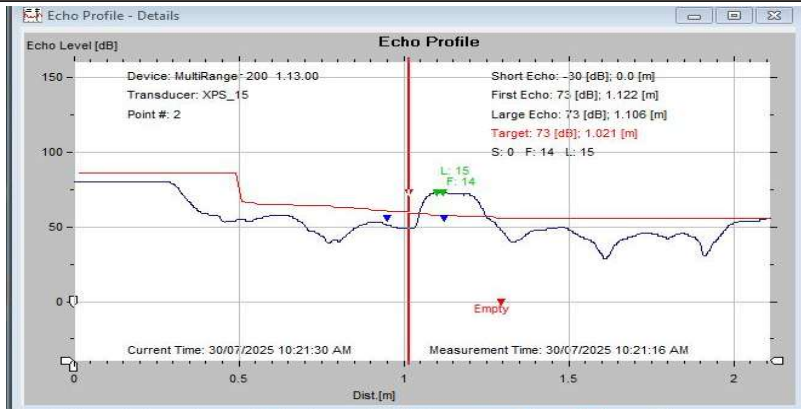
Instrument Test Information and Results					
Input (%)	Calculated Level (Meter)	Calculated Input (mA)	UUT Display (Meter)	UUT Measured Output (mA)	Deviation (m)
0	0.000	4.00	0.000	4.01	0.000
25	0.328	8.00	0.321	7.98	0.007
50.0	0.655	12.00	0.645	12.03	0.010
75	0.983	16.00	0.981	16.02	0.002
100	1.310	20.00	1.306	20.02	0.004

Information of Tools used for Verification of the Instruments			
Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 3
Device Description:	Electrical Multimeter	NA	NA
Manufacturer:	Fluke	NA	NA
Model No:	179	NA	NA

\* Refer Calibration Tools Certificates submittal for more Information

Overall Test Result:     **Passed**     **Fail**     **Not Verified**

### Echo Profile



Overall Remarks: Measurement works as per specification.

Service Technician: Parth Panchal      Stamp/Signature:

Printed Date: July 30, 2025



IndusControl Inc.  
151 Superior Blvd, Unit #13  
Mississauga, ON, L5T 2L1.

## VERIFICATION REPORT ELECTRO-MAGNETIC FLOW MEASUREMENT

Customer Name:	Township of Tay	Site/Plant Address:	150 INDUSTRIAL ROAD
Plant Name:	Victoria harbour WWTP		VICTORIA HARBOUR, ON L0K2A0

<u>Device Information</u>		<u>Service Information</u>	
Make:	Siemens	Date:	July 30, 2025
Model:	Multiranger 200	Report No.:	CO1644-2507-40
Order Code:	7ML1033-2AA00-2A	Job No.:	CO1644-2507
Serial No.:	PBD/FN 090385		
Tag:	LIT 202		
Channel:	Channel-1		
Asset Id:	0000350320		

<u>Sensor Details</u>		<u>Flow Details</u>	
Unit:	Meter	Unit:	Meter
Sensor Mode	Level	Range:	0 -1.300
Transducer	XRS-15	Current Output:	4-20 mA
		4 mA Set Point	0
		20 mA Set Point	1.300

Inst. Reading	AS FOUND	AS LEFT
Level (Meter)	0.47	0.5

Maintenance Checklist	Remarks
Visual Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Electrical Inspection: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Sensor Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	
Transmitter Installation: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NOT OK	

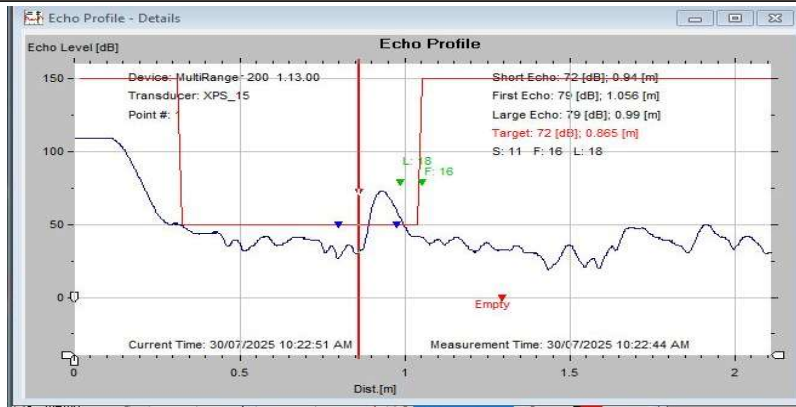
Instrument Test Information and Results					
Input (%)	Calculated Level (Meter)	Calculated Input (mA)	UUT Display (Meter)	UUT Measured Output (mA)	Deviation (m)
0	0.000	4.00	0.000	4.03	0.000
25	0.325	8.00	0.320	7.98	0.005
50.0	0.650	12.00	0.648	12.06	0.002
75	0.975	16.00	0.980	15.98	-0.005
100	1.300	20.00	1.302	20.02	-0.002

Information of Tools used for Verification of the Instruments			
Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 3
Device Description:	Electrical Multimeter	NA	NA
Manufacturer:	Fluke	NA	NA
Model No.:	179	NA	NA

\* Refer Calibration Tools Certificates submittal for more Information

Overall Test Result:  **Passed**  **Fail**  **Not Verified**

### Echo Profile




Overall Remarks: Measurement works as per specification.

Service Technician :	Parth Panchal	Stamp/Signature	
Printed Date:	July 30, 2025		



IndusControl Inc  
3170 Ridgeway Drive Unit 11  
Mississauga, ON, L5L 5R4

### PORTABLE pH METER VERIFICATION / CALIBRATION REPORT

Customer Name:	Township of Tay		Address	150 INDUSTRIAL ROAD, VICTORIA HARBOUR, ON L0K2A0		
Plant Name:	Victoria Harbour WWTP					
Location:	Victoria Harbour WWTP		Date	July 24, 2025		
Tag:	0000350064		Report No	CO1643-2507-12		
Device Discription:	Lab pH Analyzer		Job No	CO1643-2507		
Device Information			pH Sensor Information		pH Sensor Information	
Instrument Make:	Hach		Sensor Make:	Hach	Sensor Make:	Hach
Model/Part No:	HQ40d		Model/Part No:	PHC101	Model/Part No:	LD0101
Serial No:	150900015832		Serial No:	251542561187	Serial No:	152612597018
pH Calibration Test Details						
Standard Solution	Calculated Value(pH)	UUT Display(pH)	UUT Display(mV)	Temp(Celcius)	Test Result	
pH 4.0	4.00	4.01	170.1	27.0	Passed	
pH 7.0	7.00	7.00	-0.70	26.5	Passed	
pH 10.0	10.00	10.01	-174.70	26.6	Passed	
pH after calibration	Slope	-57.22 mV/pH		Offset	-1.4 mV	
DO after calibration	Slope	100%		Offset	0.00 mg\L	
Overall Test Result:	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Fail		<input type="checkbox"/> Not Verified	
Notes:	Device is working as per Specification. Calibration Test Passed.					
Service Technician :	Parth Panchal		Stamp/Signature			
Printed Date:	July 24, 2025					
End of Report			Version: 20-01			



IndusControl Inc  
3170 Ridgeway Drive Unit 11  
Mississauga, ON, L5L 5R4

PORTABLE SPECTROPHOTOMETER  
VERIFICATION REPORT

Customer Name	Township of Tay	Address	150 INDUSTRIAL ROAD, VICTORIA HARBOUR, ON L0K2A0
Plant Name	Victoria Harbour WWTP		
Location	Victoria Harbour WWTP	Date	July 24, 2025
Tag:	0000350065	Report No	CO1643-2507-13
Device Discription	Spectrophotometer	Job No	CO1643-2507

Device Information

Instrument Make:	HACH
Model/Part No:	DR/2800
Serial No:	1228461

Verification / Calibration Test Details

Test Method	Test Filter	Nominal Value	Actual Value	Test Result
Stray Light Check	KV450/3	>2.8 Abs	4.567 Abs	Passed
Photometrical Accuracy	NG9/1	1.568 Abs	1.584 Abs	Passed
	NG5/2	0.628 Abs	0.633 Abs	Passed
	NG11/2	0.316 Abs	0.330 Abs	Passed
Wavelength Accuracy	Ho	358.0-364.0 nm	360.8 nm	Passed
	BG20/2	804.0-810.0 nm	807.3 nm	Passed

Overall Test Result:	<input checked="" type="checkbox"/> Passed	<input type="checkbox"/> Fail	<input type="checkbox"/> Not Verified
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Notes: Device working as per specification. Wavelength Accuracy Test Passed.

Service Technician :	Parth Panchal	Stamp/Signature	
Printed Date:	January 0, 1900		


End of Report

Version: 20-01



IndusControl Inc  
3170 Ridgeway Drive Unit 11  
Mississauga, ON, L5L 5R4

PORTABLE pH METER VERIFICATION / CALIBRATION REPORT

Customer Name:	Township of Tay	Address	150 INDUSTRIAL ROAD, VICTORIA HARBOUR, ON L0K2A0		
Plant Name:	Victoria Harbour WWTP				
Location:	Victoria Harbour WWTP	Date	July 24, 2025		
Tag:	0000359767	Report No	CO1643-2507-14		
Device Discription:	Lab pH Analyzer	Job No	CO1643-2507		
Device Information			pH Sensor Information		
Instrument Make:	Hach	Sensor Make:	Hach		
Model/Part No:	HQ1110	Model/Part No:	PHC101		
Serial No:	241851110002	Serial No:	251542561169		
pH Calibration Test Details					
Standard Solution	Calculated Value(pH)	UUT Display(pH)	UUT Display(mV)	Temp(Celcius)	Test Result
pH 4.0	4.00	4.01	174.4	27.2	Passed
pH 7.0	7.00	7.00	-1.50	26.7	Passed
pH 10.0	10.00	10.01	-176.50	26.9	Passed
pH after calibration	Slope	98%		Offset	-1.3 mV
Overall Test Result:	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Fail		<input type="checkbox"/> Not Verified
Notes:	Device is working as per Specification. Calibration Test Passed.				
Service Technician :	Parth Panchal	Stamp/Signature			
Printed Date:	July 24, 2025				
End of Report				Version: 20-01	

2025 Annual Performance Report

# Appendix C

Biosolids Quantity and Haulage Records

Deliveries From Victoria Harbour WWTP To Farm Fields								
Delivered	Ticket	NASM	Field	Drvr	Trck	Trlr	#Loads	Volume In M <sup>3</sup>
06 May,2025	83230	24877	Dubeau-Field:1	1000	T440	TT017	3	126.00
06 May,2025	86107	24877	Dubeau-Field:1	270	T081	TT099	3	126.00
06 May,2025	86247	24877	Dubeau-Field:1	345	T071	TT049	3	114.00
<b>Totals for May:</b>							<b>9</b>	<b>366.00</b>
28 Jul,2025	84779	62642	Newcombe-Field:1	342	T089	TT100	1	42.00
29 Jul,2025	84781	62642	Newcombe-Field:1	342	T089	TT100	2	84.00
29 Jul,2025	87042	62642	Newcombe-Field:1	336	T080	TT101	2	84.00
30 Jul,2025	87176	62636	Woodheads-Field:1	323	T088	TT046	1	36.40
30 Jul,2025	84456	62642	Newcombe-Field:1	61	T082	TT089	1	42.00
30 Jul,2025	84783	62642	Newcombe-Field:1	342	T089	TT100	1	42.00
<b>Totals for July:</b>							<b>8</b>	<b>330.40</b>
14 Aug,2025	84129	24872	Home/Far Side-Field:FAR SIDE	270	T086	TT080	1	42.00
14 Aug,2025	84480	24872	Home/Far Side-Field:FAR SIDE	61	T082	TT089	1	42.00
14 Aug,2025	84807	24872	Home/Far Side-Field:FAR SIDE	342	T089	TT100	1	42.00
15 Aug,2025	84482	24872	Home/Far Side-Field:FAR SIDE	61	T082	TT089	3	126.00
15 Aug,2025	87073	24872	Home/Far Side-Field:FAR SIDE	336	T080	TT101	2	84.00
<b>Totals for August:</b>							<b>8</b>	<b>336.00</b>
03 Sep,2025	80134	24872	Home/Far Side-Field:FAR SIDE	317	T060	TT102	2	84.00
03 Sep,2025	84505	24872	Home/Far Side-Field:FAR SIDE	61	T082	TT089	2	84.00
03 Sep,2025	87091	24872	Home/Far Side-Field:FAR SIDE	336	T080	TT101	2	84.00
03 Sep,2025	87230	24872	Home/Far Side-Field:FAR SIDE	342	T089	TT100	2	84.00
<b>Totals for September:</b>							<b>8</b>	<b>336.00</b>
16 Oct,2025	83298	62622	Rowe-Field:1	317	T060	TT102	2	84.00
16 Oct,2025	84246	62622	Rowe-Field:1	270	T081	TT099	2	84.00
17 Oct,2025	84248	62622	Rowe-Field:1	270	T081	TT099	2	84.00
17 Oct,2025	84873	62622	Rowe-Field:1	300	T071	TT084	1	42.00
<b>Totals To October:</b>							<b>7</b>	<b>294.00</b>
<b>Totals To NASM #24872, Farm 'Home/Far Side', Field 'FAR SIDE':</b>							<b>16</b>	<b>672.00</b>
<b>Totals To NASM #24877, Farm 'Dubeau', Field '1':</b>							<b>9</b>	<b>366.00</b>
<b>Totals To NASM #62622, Farm 'Rowe', Field '1':</b>							<b>7</b>	<b>294.00</b>
<b>Totals To NASM #62636, Farm 'Woodheads', Field '1':</b>							<b>1</b>	<b>36.40</b>
<b>Totals To NASM #62642, Farm 'Newcombe', Field '1':</b>							<b>7</b>	<b>294.00</b>
<b>Grand Totals:</b>							<b>40</b>	<b>1,662.40</b>

Deliveries From Victoria Harbour WWTP To Other Locations							
Delivered	Ticket	To	Drvr	Trck	Trlr	#Loads	Volume In M <sup>3</sup>
07 Jan,2025	81804	Rohes 7 Lagoon	270	T081	TT099	3	126.00
07 Jan,2025	81893	Rohes 7 Lagoon	269	T080	TT084	2	84.00
08 Jan,2025	81805	Rohes 7 Lagoon	270	T081	TT099	3	126.00
08 Jan,2025	81846	Rohes 7 Lagoon	273	T087	TT100	1	42.00
09 Jan,2025	83668	Rohes 7 Lagoon	61	T082	TT089	1	42.00
<b>Totals for January:</b>						<b>10</b>	<b>420.00</b>
10 Feb,2025	82065	Rohes 9 Lagoon	61	T082	TT089	1	42.00
11 Feb,2025	81862	Rohes 9 Lagoon	273	T087	TT092	1	36.40
11 Feb,2025	82066	Rohes 9 Lagoon	61	T082	TT089	1	42.00
12 Feb,2025	82016	Rohes 9 Lagoon	270	T081	TT080	2	84.00
24 Feb,2025	81869	Rohes 9 Lagoon	273	T087	TT092	2	72.80
26 Feb,2025	82699	Rohes 9 Lagoon	323	T077	TT100	3	126.00
27 Feb,2025	83356	Rohes 9 Lagoon	336	T080	TT080	2	84.00
28 Feb,2025	83357	Rohes 9 Lagoon	336	T080	TT080	2	84.00
<b>Totals for February:</b>						<b>14</b>	<b>571.20</b>
12 Mar,2025	81877	Rohes 9 Lagoon	273	T087	TT092	1	36.40
12 Mar,2025	82708	Rohes 9 Lagoon	323	T077	TT100	2	84.00
13 Mar,2025	82034	Rohes 4 Lagoon	270	T081	TT099	1	42.00
16 Mar,2025	82037	Rohes 4 Lagoon	270	T081	TT099	3	126.00
16 Mar,2025	82081	Rohes 4 Lagoon	61	T082	TT089	3	126.00
16 Mar,2025	82710	Rohes 4 Lagoon	323	T077	TT100	3	126.00
16 Mar,2025	83365	Rohes 4 Lagoon	336	T080	TT080	3	126.00
<b>Totals for March:</b>						<b>16</b>	<b>666.40</b>
09 Apr,2025	82058	Rohes 9 Lagoon	270	T081	TT099	1	42.00
09 Apr,2025	82098	Rohes 9 Lagoon	61	T082	TT062	1	38.00
09 Apr,2025	86143	Rohes 9 Lagoon	342	T089	TT100	2	84.00
22 Apr,2025	86087	Rohes 4 Lagoon	270	T081	TT099	1	42.00
23 Apr,2025	82115	Rohes 4 Lagoon	61	T080	TT084	1	42.00
23 Apr,2025	86089	Rohes 4 Lagoon	270	T081	TT099	2	84.00
<b>Totals for April:</b>						<b>8</b>	<b>332.00</b>
09 May,2025	83702	Rohes 4 Lagoon	61	T082	TT089	1	42.00
09 May,2025	86188	Rohes 4 Lagoon	342	T089	TT100	1	42.00
09 May,2025	86253	Rohes 4 Lagoon	345	T077	TT049	1	38.00
<b>Totals for May:</b>						<b>3</b>	<b>122.00</b>
05 Jun,2025	87118	Rohes 4 Lagoon	336	T080	TT101	1	42.00
06 Jun,2025	84404	Rohes 4 Lagoon	61	T082	TT089	3	126.00
06 Jun,2025	86468	Rohes 4 Lagoon	342	T089	TT100	1	42.00
09 Jun,2025	84406	Rohes 4 Lagoon	61	T082	TT089	3	126.00
10 Jun,2025	84408	Rohes 4 Lagoon	61	T082	TT089	3	126.00
13 Jun,2025	84411	Rohes 4 Lagoon	61	T082	TT089	2	84.00
16 Jun,2025	83765	Rohes 4 Lagoon	270	T081	TT099	1	42.00
23 Jun,2025	86487	Rohes 4 Lagoon	342	T089	TT100	1	42.00
25 Jun,2025	83772	Rohes 4 Lagoon	270	T081	TT099	3	126.00
25 Jun,2025	86491	Rohes 4 Lagoon	342	T089	TT100	2	84.00
25 Jun,2025	86909	Rohes 4 Lagoon	345	T077	TT080	1	42.00
25 Jun,2025	86982	Rohes 4 Lagoon	127	T060	TT049	2	76.00
26 Jun,2025	86379	Rohes 4 Lagoon	127	T086	TT100	2	84.00
<b>Totals for June:</b>						<b>25</b>	<b>1,042.00</b>
23 Sep,2025	84851	Rohes 9 Lagoon	300	T071	TT084	2	84.00
23 Sep,2025	84949	Rohes 9 Lagoon	61	T082	TT089	2	84.00

Deliveries From Victoria Harbour WWTP To Other Locations							
Delivered	Ticket	To	Drvr	Trck	Trlr	#Loads	Volume In M <sup>3</sup>
23 Sep,2025	87254	Rohes 9 Lagoon	342	T089	TT100	1	42.00
23 Sep,2025	87714	Rohes 9 Lagoon	336	T080	TT101	2	84.00
<b>Totals for September:</b>						<b>7</b>	<b>294.00</b>
24 Oct,2025	84644	Rohes 9 Lagoon	307	T083	TT022	2	72.80
24 Oct,2025	84876	Rohes 9 Lagoon	300	T071	TT084	2	84.00
27 Oct,2025	84878	Rohes 9 Lagoon	300	T071	TT084	1	42.00
<b>Totals for October:</b>						<b>5</b>	<b>198.80</b>
09 Dec,2025	84365	Rohes 7 Lagoon	300	T071	TT084	2	84.00
10 Dec,2025	85136	Rohes 7 Lagoon	270	T081	TT099	2	84.00
16 Dec,2025	84663	Rohes 7 Lagoon	307	T090	TT092	2	72.80
23 Dec,2025	84376	Rohes 7 Lagoon	300	T071	TT084	2	84.00
23 Dec,2025	85145	Rohes 7 Lagoon	270	T086	TT099	1	42.00
<b>Totals for December:</b>						<b>9</b>	<b>366.80</b>
<b>Totals To Rohes 4 Lagoon:</b>						<b>45</b>	<b>1,878.00</b>
<b>Totals To Rohes 7 Lagoon:</b>						<b>19</b>	<b>786.80</b>
<b>Totals To Rohes 9 Lagoon:</b>						<b>33</b>	<b>1,348.40</b>
<b>Grand Totals:</b>						<b>97</b>	<b>4,013.20</b>

Solids & Nutrients

Period: 01/01/2025 to 12/31/2025

Works: 1675 / Digester Type: Aerobic

<b>Solids &amp; Nutrients</b>	<b>Metals &amp; Criteria</b>	<b>Last 4 Samples</b>
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Facility Works Number: 120003227

Receiver:

Facility Owner:

Service Population:

Facility Classification:

Total Design Capacity:

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

Month	Hauled Vol. (m³)	Total Solids (mg/L)	Volatile Solids (mg/L)	Total Phosphorus (mg/L)	Total Ammonia Nitrogen (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Ammonia + Nitrate (mg/L)	Potassium (mg/L)
Parameter Short Name	HauledVol	TS	VS	TP	NH3p_NH4p_N	NO3-N	NO2-N	TKN	Calculation in Report	K
T/S	IH Month.Total	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	- no T/S	Lab Published Month Mean
Jan	420.00	14,200.00	10,100.00	336.00	2.50	122.00	4.00	666.00	62.25	55.20
Feb	571.20	11,900.00	9,580.00	247.00	5.20	3.00	3.00	715.00	4.10	52.20
Mar	666.40	11,500.00	9,250.00	246.00	17.70	3.00	3.00	634.00	10.35	53.20
Apr	332.00	11,100.00	8,120.00	233.00	5.30	3.00	3.00	637.00	4.15	39.00
May	488.00	12,300.00	8,740.00	312.00	6.60	3.00	3.00	599.00	4.80	55.00
Jun	1,042.00	13,600.00	8,920.00	303.00	2.40	3.00	3.00	578.00	2.70	47.00
Jul	330.40	13,700.00	9,290.00	335.00	7.00	3.00	3.00	615.00	5.00	46.00
Aug	336.00	16,000.00	10,000.00	451.00	4.15	3.00	3.00	657.00	3.58	54.50
Sep	630.00	16,100.00	9,930.00	415.00	1.00	65.00	3.00	566.00	33.00	50.00
Oct	492.80	15,400.00	9,750.00	388.00	1.50	86.00	3.00	568.00	43.75	44.00
Nov		17,400.00	13,300.00	477.00	4.90	67.00	3.00	866.00	35.95	55.00
Dec	366.80	12,800.00	8,780.00	341.00	1.00	120.00	3.00	622.00	60.50	42.00
<b>Average</b>	515.96	13,833.33	9,646.67	340.33	4.94	40.08	3.08	643.58	22.51	49.43
<b>Total</b>	5,675.60	166,000.00	115,760.00	4,084.00	59.25	481.00	37.00	7,723.00	270.13	593.10

Solids & Nutrients

**Metals & Criteria**

Last 4 Samples

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

Month	Arsenic (mg/L)	Cadmium (mg/L)	Cobalt (mg/L)	Chromium (mg/L)	Copper (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Lead (mg/L)	Selenium (mg/L)	Zinc (mg/L)
Parameter Short Name	As	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Se	Zn
T/S	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean
Jan	0.10	0.01	0.02	0.12	2.41	0.00	0.05	0.15	0.10	0.10	6.05
Feb	0.10	0.01	0.02	0.10	1.82	0.00	0.05	0.11	0.10	0.10	4.39
Mar	0.10	0.01	0.02	0.09	1.76	0.00	0.05	0.09	0.10	0.10	4.07
Apr	0.10	0.01	0.02	0.10	1.90	0.00	0.05	0.09	0.10	0.10	4.00
May	0.10	0.01	0.03	0.13	2.50	0.00	0.06	0.13	0.10	0.10	5.00
Jun	0.10	0.01	0.03	0.16	2.50	0.00	0.05	0.14	0.10	0.10	5.00
Jul	0.10	0.01	0.02	0.15	2.60	0.00	0.05	0.15	0.10	0.10	6.00
Aug	0.10	0.01	0.04	0.17	3.50	0.00	0.07	0.23	0.15	0.10	8.50
Sep	0.10	0.01	0.03	0.15	3.10	0.00	0.06	0.21	0.10	0.10	8.00
Oct	0.10	0.01	0.03	0.15	2.70	0.00	0.05	0.21	0.20	0.10	7.00
Nov	0.10	0.01	0.03	0.22	3.20	0.00	0.07	0.23	0.20	0.10	8.00
Dec	0.10	0.01	0.02	0.11	2.20	0.00	0.05	0.14	0.10	0.10	6.00
Average	0.10	0.01	0.03	0.14	2.52	0.00	0.06	0.16	0.12	0.10	6.00
Max. Permissible Metal Concentrations (mg/kg of Solids)	170.00	34.00	340.00	2,800.00	1,700.00	11.00	94.00	420.00	1,100.00	34.00	4,200.00
Metal Concentrations in Sludge (mg/kg)	7.23	0.58	1.83	9.99	181.87	0.11	4.00	11.37	8.73	7.23	433.80

Solids & Nutrients

Metals & Criteria

**Last 4 Samples**

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

Parameter Short Name	Time Series	09/02/2025	10/06/2025	11/03/2025	12/01/2025	Average	Metal Concentrations in Sludge (mg/kg)	Max. Permissible Metal Concentrations (mg/kg of Solids)
As (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	6.48	170
Cd (mg/L)	Lab Published	0.01	0.01	0.01	0.01	0.01	0.62	34
Co (mg/L)	Lab Published	0.03	0.03	0.03	0.02	0.03	1.78	340
Cr (mg/L)	Lab Published	0.15	0.15	0.22	0.11	0.16	10.21	2800
Cu (mg/L)	Lab Published	3.10	2.70	3.20	2.20	2.80	181.52	1700
Hg (mg/L)	Lab Published	0.00	0.00	0.00	0.00	0.00	0.10	11
Mo (mg/L)	Lab Published	0.06	0.05	0.07	0.05	0.06	3.73	94
Ni (mg/L)	Lab Published	0.21	0.21	0.23	0.14	0.20	12.80	420
Pb (mg/L)	Lab Published	0.10	0.20	0.20	0.10	0.15	9.72	1100
Se (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	6.48	34
Zn (mg/L)	Lab Published	8.00	7.00	8.00	6.00	7.25	470.02	4200
E.Coli Dry Wt (cfu/g)	Lab Published						E. Coli average is the GMD	
TS (mg/L)	Lab Published	16,100.00	15,400.00	17,400.00	12,800.00	15,425.00		
VS (mg/L)	Lab Published	9,930.00	9,750.00	13,300.00	8,780.00	10,440.00		
TP (mg/L)	Lab Published	415.00	388.00	477.00	341.00	405.25		
NO2-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		
TKN (mg/L)	Lab Published	566.00	568.00	866.00	622.00	655.50		
K (mg/L)	Lab Published	50.00	44.00	55.00	42.00	47.75		
NH3p_NH4p_N (mg/L)	Lab Published	1.00	1.50	4.90	1.00	2.10		
NO3-N (mg/L)	Lab Published	65.00	86.00	67.00	120.00	84.50		

Solids & Nutrients

Period: 01/01/2025 to 12/31/2025

Works: 1675 / Digester Type: Anaerobic

<b>Solids &amp; Nutrients</b>	<b>Metals &amp; Criteria</b>	<b>Last 4 Samples</b>
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Facility Works Number: 120003227

Receiver:

Facility Owner:

Service Population:

Facility Classification:

Total Design Capacity:

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

Month	Hauled Vol. (m³)	Total Solids (mg/L)	Volatile Solids (mg/L)	Total Phosphorus (mg/L)	Total Ammonia Nitrogen (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Ammonia + Nitrate (mg/L)	Potassium (mg/L)
Parameter Short Name	HauledVol	TS	VS	TP	NH3p_NH4p_N	NO3-N	NO2-N	TKN	Calculation in Report	K
T/S	IH Month.Total	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	- no T/S	Lab Published Month Mean
Jan	420.00	14,200.00	10,100.00	336.00	2.50	122.00	4.00	666.00	62.25	55.20
Feb	571.20	11,900.00	9,580.00	247.00	5.20	3.00	3.00	715.00	4.10	52.20
Mar	666.40	11,500.00	9,250.00	246.00	17.70	3.00	3.00	634.00	10.35	53.20
Apr	332.00	11,100.00	8,120.00	233.00	5.30	3.00	3.00	637.00	4.15	39.00
May	488.00	12,300.00	8,740.00	312.00	6.60	3.00	3.00	599.00	4.80	55.00
Jun	1,042.00	13,600.00	8,920.00	303.00	2.40	3.00	3.00	578.00	2.70	47.00
Jul	330.40	13,700.00	9,290.00	335.00	7.00	3.00	3.00	615.00	5.00	46.00
Aug	336.00	16,000.00	10,000.00	451.00	4.15	3.00	3.00	657.00	3.58	54.50
Sep	630.00	16,100.00	9,930.00	415.00	1.00	65.00	3.00	566.00	33.00	50.00
Oct	492.80	15,400.00	9,750.00	388.00	1.50	86.00	3.00	568.00	43.75	44.00
Nov		17,400.00	13,300.00	477.00	4.90	67.00	3.00	866.00	35.95	55.00
Dec	366.80	12,800.00	8,780.00	341.00	1.00	120.00	3.00	622.00	60.50	42.00
<b>Average</b>	515.96	13,833.33	9,646.67	340.33	4.94	40.08	3.08	643.58	22.51	49.43
<b>Total</b>	5,675.60	166,000.00	115,760.00	4,084.00	59.25	481.00	37.00	7,723.00	270.13	593.10

Solids & Nutrients

**Metals & Criteria**

Last 4 Samples

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

Month	Arsenic (mg/L)	Cadmium (mg/L)	Cobalt (mg/L)	Chromium (mg/L)	Copper (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Lead (mg/L)	Selenium (mg/L)	Zinc (mg/L)
Parameter Short Name	As	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Se	Zn
T/S	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean	Lab Published Month Mean
Jan	0.10	0.01	0.02	0.12	2.41	0.00	0.05	0.15	0.10	0.10	6.05
Feb	0.10	0.01	0.02	0.10	1.82	0.00	0.05	0.11	0.10	0.10	4.39
Mar	0.10	0.01	0.02	0.09	1.76	0.00	0.05	0.09	0.10	0.10	4.07
Apr	0.10	0.01	0.02	0.10	1.90	0.00	0.05	0.09	0.10	0.10	4.00
May	0.10	0.01	0.03	0.13	2.50	0.00	0.06	0.13	0.10	0.10	5.00
Jun	0.10	0.01	0.03	0.16	2.50	0.00	0.05	0.14	0.10	0.10	5.00
Jul	0.10	0.01	0.02	0.15	2.60	0.00	0.05	0.15	0.10	0.10	6.00
Aug	0.10	0.01	0.04	0.17	3.50	0.00	0.07	0.23	0.15	0.10	8.50
Sep	0.10	0.01	0.03	0.15	3.10	0.00	0.06	0.21	0.10	0.10	8.00
Oct	0.10	0.01	0.03	0.15	2.70	0.00	0.05	0.21	0.20	0.10	7.00
Nov	0.10	0.01	0.03	0.22	3.20	0.00	0.07	0.23	0.20	0.10	8.00
Dec	0.10	0.01	0.02	0.11	2.20	0.00	0.05	0.14	0.10	0.10	6.00
Average	0.10	0.01	0.03	0.14	2.52	0.00	0.06	0.16	0.12	0.10	6.00
Min. Acceptable Ammonia + Nitrate Nitrogen to Metal Ratio	100.00	500.00	50.00	6.00	10.00	1,500.00	180.00	40.00	15.00	500.00	4.00
Ammonia + Nitrate Nitrogen to Metal Ratio in Sludge	224.54	2,783.58	884.60	162.53	8.93	14,564.88	405.62	142.80	185.83	224.54	3.74

Solids & Nutrients

Metals & Criteria

**Last 4 Samples**

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

Parameter Short Name	Time Series	09/02/2025	10/06/2025	11/03/2025	12/01/2025	Average	Metal Concentrations in Sludge (mg/kg)	Max. Permissible Metal Concentrations (mg/kg of Solids)
As (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	6.48	170
Cd (mg/L)	Lab Published	0.01	0.01	0.01	0.01	0.01	0.62	34
Co (mg/L)	Lab Published	0.03	0.03	0.03	0.02	0.03	1.78	340
Cr (mg/L)	Lab Published	0.15	0.15	0.22	0.11	0.16	10.21	2800
Cu (mg/L)	Lab Published	3.10	2.70	3.20	2.20	2.80	181.52	1700
Hg (mg/L)	Lab Published	0.00	0.00	0.00	0.00	0.00	0.10	11
Mo (mg/L)	Lab Published	0.06	0.05	0.07	0.05	0.06	3.73	94
Ni (mg/L)	Lab Published	0.21	0.21	0.23	0.14	0.20	12.80	420
Pb (mg/L)	Lab Published	0.10	0.20	0.20	0.10	0.15	9.72	1100
Se (mg/L)	Lab Published	0.10	0.10	0.10	0.10	0.10	6.48	34
Zn (mg/L)	Lab Published	8.00	7.00	8.00	6.00	7.25	470.02	4200
E.Coli Dry Wt (cfu/g)	Lab Published						E. Coli average is the GMD	
TS (mg/L)	Lab Published	16,100.00	15,400.00	17,400.00	12,800.00	15,425.00		
VS (mg/L)	Lab Published	9,930.00	9,750.00	13,300.00	8,780.00	10,440.00		
TP (mg/L)	Lab Published	415.00	388.00	477.00	341.00	405.25		
NO2-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		
TKN (mg/L)	Lab Published	566.00	568.00	866.00	622.00	655.50		
K (mg/L)	Lab Published	50.00	44.00	55.00	42.00	47.75		
NH3p_NH4p_N (mg/L)	Lab Published	1.00	1.50	4.90	1.00	2.10		
NO3-N (mg/L)	Lab Published	65.00	86.00	67.00	120.00	84.50		

2025 Annual Performance Report

# Appendix D

Records of Bypass, Overflow and Spill Events

# Ontario Clean Water Agency Environmental Incident Report

Facility ID: 1675 EIncidentReport  
Facility Name: Victoria Harbour WWTP  
Address: 158 Industrial Road  
City: Victoria Harbour  
Province: Ontario  
Postal Code: L0K 2A0  
Date of Occurrence: 03/17/2025  
Time of Occurrence: 02:15:00 PM

## Nature of the Incident

Level 1 Contingency  Level 2 Contingency  Level 3 Contingency [Click here To Show the Definitions](#)

Incident affected:  Air  Water  Land  Nothing

What was discharged or emitted?

- |  |  |
|--|--|
| <input type="checkbox"/> Chlorine                              | <input type="checkbox"/> Oil/Diesel/Gas                                |
| <input type="checkbox"/> Sodium Hypochlorite                   | <input checked="" type="checkbox"/> Untreated or partly treated sewage |
| <input type="checkbox"/> Calcium Chloride                      | <input type="checkbox"/> Odours  |
| <input type="checkbox"/> Aluminum Compounds (Specify in Other) | <input type="checkbox"/> Water   |
| <input type="checkbox"/> Arsenic                               | <input type="checkbox"/> Iron Coagulants                               |
| <input type="checkbox"/> Fluoride                              |  |

Other: \_\_\_\_\_

## If this was a discharge, spill or emission...

If a liquid, approximately what quantity was released?: 333400 Litres

If a gas, approximately what quantity was released?: \_\_\_\_\_

If a solid, approximately what quantity was released?: \_\_\_\_\_ Kg

What was the source of release?:

Heavy rains, and warmer weather causing snow melt leading to a cloth filter bypass

Where did the release go?:

Sturgeon Bay

If it entered a watercourse:  Yes  No

If it went off site:  Yes  No

Duration of the release?: 40 minutes

Is the release now stopped?:  Yes  No

Was there any damage? (i.e. property and/or environmental):  Yes  No  N/A

If "Yes", describe below and fill out "Insurance Claim" report

**Action(s) Taken**

What actions were taken to control the incident?

- Operator arrived onsite, throttled back clarifier valve to reduce flow to filters

What actions have been taken to remediate the incident?

- Operations started continuous filter backwashes to help remove solids from plugging filter cloth  
- Diverted water to waste cells and sludge holding tank, manually operating filter backwash and solid waste to manage flow

Was this a reportable spill or discharge?:  Yes  No

If "Yes", at what time was it first reported to the MOE?

10:07 am - Monday March 17, 2025

Was it reported to the MOE district office?:  Yes  No

If "Yes", which office/location and who was the contact?: Phillip Sauer - Barrie District Office

Was it reported to MOE SAC?:  Yes  No

If "Yes", at what time was it reported to MOE SAC?:

6:15pm - March 15, 2025

Was it reported to Municipality?:  Yes  No

If "Yes", at what time was it reported to Municipality?:

8:36 pm - March 15, 2025

**External Assistance/Involvement**

Was corporate or area office assistance requested?:  Yes  No

If "Yes", was it received?:  Yes  No

Was external emergency assistance requested?:  Yes  No

If "Yes", from who?:  Fire Department  Equipment Suppliers  Canutec  
 Ambulance or Hospital  MOE  Coast Guard  
 Police  Municipality

Other: \_\_\_\_\_

Was there any media involvement?:  Yes  No

If "Yes", who?: \_\_\_\_\_

Was the public affected?:  Yes  No

If "Yes", how?: \_\_\_\_\_

Updated By: Lauren Orlovski 03/18/2025 08:56:04 AM

### **Comments:**

Victoria Harbour WWTP - Bypass Notification (ENDED)

Facility: Victoria Harbour WWTP

Works #: 120003227

SAC Incident #: 1-J1FE3Z

Address: 158 Industrial Road, Victoria Harbour

Treatment Skipped: Cloth Filters

Treatment Provided: Headworks, Clarifier, UV

Date & Time of Start: March 15, 2025 @ 1415 hrs

Date & Time of End: March 15, 2025 @1455 hrs

Duration: 40 minutes

Volume: 333.4 m3

Effluent Discharge: Sturgeon Bay

#### Incident Description

- Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant
- Cloth filters were unable to maintain flow, resulting in a bypass of cloth filters

#### Actions Taken to Control Incident

- Operations staff responded to a filter alarm and arrived on site
- Operations staff throttled back clarifier valve to reduce flow to filters and allow clarifier to settle

#### Samples

- Collected 2 set of grab samples, to be analyzed for CBOD5, TSS, TP, TAN, and E.Coli
- Results to be provided upon receipt from laboratory

#### Reporting/Notification to SAC/Health Unit/MECP

March 15, 2025

- 1702 hrs - OCWA Operator (Paul LaChapelle) notified OCWA PCT (Lauren Orlovski) of bypass event
- 1815 hrs - OCWA Operator (Joel Wilson) contacted Spills Action Centre (SAC) and notified Environmental Officer (EO) Edholvia Campos of the ended bypass event.

- 1825 hrs - OCWA Operator (Joel Wilson) contacted Simcoe Muskoka District Health Unit (SMDHU), and left a voicemail with Public Health Inspector (PHI)
- 1855 hrs - PHI (SMDHU) Pauline Loo returned call to OCWA.
- 2036 hrs - OCWA Senior Operations Manager (SOM) (Mark Yandt) notified the Municipality of bypass event.

March 17, 2025

- 1007 hrs - OCWA PCT (Lauren Orlovski) notified MECP Barrie District Office Inspector, Phillip Sauer of the bypass event.

An additional email will be provided when the sample results are received.

Thank you,

Lauren Orlovski

# Ontario Clean Water Agency Environmental Incident Report

Facility ID: 1675 EIncidentReport  
Facility Name: Victoria Harbour WWTP  
Address: 158 Industrial Road  
City: Victoria Harbour  
Province: Ontario  
Postal Code: L0K 2A0  
Date of Occurrence: 03/17/2025  
Time of Occurrence: 11:24:00 PM

## Nature of the Incident

Level 1 Contingency  Level 2 Contingency  Level 3 Contingency [Click here To Show the Definitions](#)

Incident affected:  Air  Water  Land  Nothing

What was discharged or emitted?

- |  |  |
|--|--|
| <input type="checkbox"/> Chlorine                              | <input type="checkbox"/> Oil/Diesel/Gas                                |
| <input type="checkbox"/> Sodium Hypochlorite                   | <input checked="" type="checkbox"/> Untreated or partly treated sewage |
| <input type="checkbox"/> Calcium Chloride                      | <input type="checkbox"/> Odours  |
| <input type="checkbox"/> Aluminum Compounds (Specify in Other) | <input type="checkbox"/> Water   |
| <input type="checkbox"/> Arsenic                               | <input type="checkbox"/> Iron Coagulants                               |
| <input type="checkbox"/> Fluoride                              |  |

Other: \_\_\_\_\_

## If this was a discharge, spill or emission...

If a liquid, approximately what quantity was released?: 1575900 Litres

If a gas, approximately what quantity was released?: \_\_\_\_\_

If a solid, approximately what quantity was released?: \_\_\_\_\_ Kg

What was the source of release?:

Heavy rain and snowmelt lead to bypass of cloth filters

Where did the release go?:

Sturgeon Bay

If it entered a watercourse:  Yes  No

If it went off site:  Yes  No

Duration of the release?: 3 hours and 20 minutes

Is the release now stopped?:  Yes  No

Was there any damage? (i.e. property and/or environmental):  Yes  No  N/A

If "Yes", describe below and fill out "Insurance Claim" report

**Action(s) Taken**

What actions were taken to control the incident?

- Throttled flow to clarifier
- Shut air off to cell 2 and 3 to have decant settle to create more room in process

What actions have been taken to remediate the incident?

- Samples collected
- Process changes to divert flows back to headworks to avoid bypassing again

Was this a reportable spill or discharge?:  Yes  No

If "Yes", at what time was it first reported to the MOE?

10:07 am - March 17, 2025

Was it reported to the MOE district office?:  Yes  No

If "Yes", which office/location and who was the contact?: Phillip Sauer - Barrie District Office

Was it reported to MOE SAC?:  Yes  No

If "Yes", at what time was it reported to MOE SAC?:

4:50 am - March 16, 2025

Was it reported to Municipality?:  Yes  No

If "Yes", at what time was it reported to Municipality?:

10:57 am - March 16, 2025

**External Assistance/Involvement**

Was corporate or area office assistance requested?:  Yes  No

If "Yes", was it received?:  Yes  No

Was external emergency assistance requested?:  Yes  No

If "Yes", from who?:  Fire Department  Equipment Suppliers  Canutec  
 Ambulance or Hospital  MOE  Coast Guard  
 Police  Municipality

Other: \_\_\_\_\_

Was there any media involvement?:  Yes  No

If "Yes", who?: \_\_\_\_\_

Was the public affected?:  Yes  No

If "Yes", how?: \_\_\_\_\_

Updated By: Lauren Orlovski 03/18/2025 09:03:11 AM

**Comments:**

Victoria Harbour WWTP - Bypass Notification (ENDED)  
Facility: Victoria Harbour WWTP  
Works #: 120003227  
SAC Incident #: 1-J1VFM0  
Address: 158 Industrial Road, Victoria Harbour  
Treatment Skipped: Cloth Filters  
Treatment Provided: Partially Treated, UV disinfected Effluent  
Date & Time of Start: March 15, 2025 @ 2324 hrs  
Date & Time of End: March 16, 2025 @ 0244 hrs  
Duration: 200 minutes  
Volume: 1,575.9 m3  
Effluent Discharge: Sturgeon Bay

Incident Description

- Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant
- Cloth filters were unable to maintain flow, resulting in a bypass of cloth filters

Actions Taken to Control Incident

- Operator manually operated the wastewater treatment plant to divert flows from the filter to waste holding tanks.
- All process/waste tanks/connecting channels were at max capacity, operator unable to throttle the clarifier to slow the flow to avoid bypass at beginning of bypass
- As flows trended downward, flow was reduced to the clarifier
- Shut off air to cell 2 and cell 3 to settle decant to allow for a few feet of water to be removed from each tank to create more room

Samples

- Collected 2 set of grab samples, to be analyzed for CBOD5, TSS, TP, TAN, and E.Coli
- Results to be provided upon receipt from laboratory

Reporting/Notification to SAC/Health Unit/MECP  
March 16, 2025

- 0405 hrs - OCWA Operator (Joel Wilson) contacted Spills Action Centre

(SAC) and notified Environmental Officer (EO) Lorianne Green of the ended bypass event.

- 0502 hrs - OCWA Operator (Joel Wilson) contacted Simcoe Muskoka District Health Unit (SMDHU), and left a voicemail with Public Health Inspector (PHI)
- 0520 hrs - PHI (SMDHU) Pauline Loo returned call to OCWA.
- 1036 hrs - OCWA Senior Operations Manager (SOM) (Mark Yandt) notified the Municipality of bypass event.

March 17, 2025

- 1007 hrs - OCWA PCT (Lauren Orlovski) notified MECP Barrie District Office Inspector, Phillip Sauer of the bypass event. No further actions required.

# Ontario Clean Water Agency Environmental Incident Report

Facility ID: 1675 EIncidentReport  
Facility Name: Victoria Harbour WWTP  
Address: 158 Industrial Road  
City: Victoria Harbour  
Province: Ontario  
Postal Code: L0K 2A0  
Date of Occurrence: 03/16/2025  
Time of Occurrence: 06:26:00 AM

## Nature of the Incident

Level 1 Contingency  Level 2 Contingency  Level 3 Contingency [Click here To Show the Definitions](#)

Incident affected:  Air  Water  Land  Nothing

What was discharged or emitted?

- |  |  |
|--|--|
| <input type="checkbox"/> Chlorine                              | <input type="checkbox"/> Oil/Diesel/Gas                                |
| <input type="checkbox"/> Sodium Hypochlorite                   | <input checked="" type="checkbox"/> Untreated or partly treated sewage |
| <input type="checkbox"/> Calcium Chloride                      | <input type="checkbox"/> Odours  |
| <input type="checkbox"/> Aluminum Compounds (Specify in Other) | <input type="checkbox"/> Water   |
| <input type="checkbox"/> Arsenic                               | <input type="checkbox"/> Iron Coagulants                               |
| <input type="checkbox"/> Fluoride                              |  |

Other: \_\_\_\_\_

## If this was a discharge, spill or emission...

If a liquid, approximately what quantity was released?: 7000000 Litres

If a gas, approximately what quantity was released?: \_\_\_\_\_

If a solid, approximately what quantity was released?: \_\_\_\_\_ Kg

What was the source of release?:

Heavy rains, and warm weather causing snowmelt lead to a cloth filter bypass

Where did the release go?:

Sturgeon Bay

If it entered a watercourse:  Yes  No

If it went off site:  Yes  No

Duration of the release?: 15 hours

Is the release now stopped?:  Yes  No

Was there any damage? (i.e. property and/or environmental):  Yes  No  N/A

If "Yes", describe below and fill out "Insurance Claim" report

**Action(s) Taken**

What actions were taken to control the incident?

- Contacted ROHES to haul loads from outside holding tank
- Opened clarifier gaate from process tanks to lower levels flowing into holding cells
- Wate pump turned on to help slow flows to the filters

What actions have been taken to remediate the incident?

- Diverted flow to waste tank, emptied by haulers
- Decanted 2 feet of water to process tank

Was this a reportable spill or discharge?:  Yes  No

If "Yes", at what time was it first reported to the MOE?

10:07 am - March 17, 2025

Was it reported to the MOE district office?:  Yes  No

If "Yes", which office/location and who was the contact?: Phillip Sauer - Barrie District Office

Was it reported to MOE SAC?:  Yes  No

If "Yes", at what time was it reported to MOE SAC?:

6:53 am - March 16, 2025

Was it reported to Municipality?:  Yes  No

If "Yes", at what time was it reported to Municipality?:

10:57 am - March 16, 2025

**External Assistance/Involvement**

Was corporate or area office assistance requested?:  Yes  No

If "Yes", was it received?:  Yes  No

Was external emergency assistance requested?:  Yes  No

If "Yes", from who?:  Fire Department  Equipment Suppliers  Canutec  
 Ambulance or Hospital  MOE  Coast Guard  
 Police  Municipality

Other: \_\_\_\_\_

Was there any media involvement?:  Yes  No

If "Yes", who?: \_\_\_\_\_

Was the public affected?:  Yes  No

If "Yes", how?: \_\_\_\_\_

Updated By: Lauren Orlovski 03/18/2025 09:43:53 AM

### **Comments:**

Victoria Harbour WWTP - Bypass Notification (ENDED)

Facility: Victoria Harbour WWTP

Works #: 120003227

SAC Incident #: 1-J2D9SW

Address: 158 Industrial Road, Victoria Harbour

Treatment Skipped: Cloth Filters

Treatment Provided: Headworks, Clarifier, UV

Date & Time of Start: March 16, 2025 @ 0626 hrs

Date & Time of End: March 16, 2025 @2130 hrs

Duration: 904 minutes

Volume: 7,000 m3

Effluent Discharge: Sturgeon Bay

#### Incident Description

- Heavy rainfall and snow melt contributed to increased flows to the wastewater treatment plant
- Cloth filters were unable to maintain flow, resulting in a bypass of cloth filters

#### Actions Taken to Control Incident

- Operations staff noticed flows beginning to increase in the system, opened clarifier gate to ensure process tanks don't overflow
- Continuous monitoring of tank levels
- Contacted ROHES haulers to haul loads from outside holding tank
- After hauling from the holding tank, waste pump was turned on in manual to slow flows to the filter
- Used grindex to waste from the bottom of cell 3 into holding tank to make room for flows

#### Samples

- Collected 3 set of grab samples, to be analyzed for CBOD5, TSS, TP, TAN, and E.Coli
- Results to be provided upon receipt from laboratory

Reporting/Notification to SAC/Health Unit/MECP

March 16, 2025

- 0653 hrs OCWA Operator (Joel Wilson) contacted Spills Action Centre (SAC) and notified Environmental Officer (EO) Shawn Kowba of the beginning of the bypass event.
- 0734 hrs OCWA Operator (Joel Wilson) contacted SMDHU, PHI and left a voicemail
- 0752 hrs Pauline Loo, PHI, SMDHU returned call for the bypass event. March 17, 2025
- 1007 hrs - OCWA PCT (Lauren Orlovski) notified MECF Barrie District Office Inspector, Phillip Sauer of the bypass event. No further actions required.
- 1251 hrs - OCWA PCT (Lauren Orlovski) called SAC, EO - Justin Chin to notify of the ended bypass event. No further actions required.
- 1432 hrs - OCWA PCT (Lauren Orlovski) left a voicemail with the PHI, SMDHU.
- 1556 hrs - Anne Marie, PHI, SMDHU returned call to OCWA PCT, notified of the ended bypass event. No further actions required.

2025 Annual Performance Report

# Appendix E

2025 & 2026 Sampling Schedules

**2025 Laboratory Sampling Requirements**  
**Victoria Harbour Wastewater Treatment Plant**

Environmental Compliance Approval #4066-CTPNQA Issue Date: June 26, 2025

Org #: 1675, Works #: 120003227

Revision#: 1 Revision Date: 2025-07-11

Frequency	Timeframe	Source	Parameters
<b>WEEKLY</b>	Every Monday	FINAL EFFLUENT (8-HOUR COMPOSITE)	CBOD5, Total Suspended Solids, Total Phosphorus, Total Ammonia Nitrogen, Total Kjeldahl Nitrogen, Nitrate as Nitrogen, Nitrite as Nitrogen
		FINAL EFFLUENT (GRAB)	E.Coli
		FINAL EFFLUENT (GRAB/PROBE/ANALYZER)	pH, Temperature
		FINAL EFFLUENT (AS CALCULATED)	Un-ionized Ammonia
<b>MONTHLY</b>	First Monday of the Month	RAW SEWAGE (8 HOUR COMPOSITE)	BOD5, Total Suspended Solids, Total Phosphorus, Total Kjeldahl Nitrogen
		BIOSOLIDS <sup>a</sup> (Grab)	Total Solids; Volatile Solids; Alkalinity; Total Kjeldahl Nitrogen; Ammonia + Ammonium; Dissolved Reactive Phosphorus; Nitrate + Nitrite; Arsenic; Boron; Cadmium; Cobalt; Chromium; Copper; Mercury; Potassium; Molybdenum; Sodium; Nickel; Total Phosphorus;
<b>QUARTERLY</b>	First Monday of January, April, July and October	BIOSOLIDS (Grab)	Total Solids; Total Phosphorus, Total Ammonia Nitrogen, Nitrate as Nitrogen, Metal Scan [Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium, Selenium, Zinc]
<b>ANNUAL<sup>b</sup></b>	First Week of April	FINAL EFFLUENT (GRAB)	Acute Lethality

Unless specified, samples listed are required by ECA #4066-CTPNQA

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

<sup>a</sup>Two samples shall be taken during the two-month period before the transfer date. At least one of them shall be taken during the one-month period before the transfer date. (O.Reg. 267/03)

<sup>b</sup>Reference Wastewater Systems Effluent Regulations (WSER) Section 11(1). Sampling frequency based on the total effluent deposited from the previous calendar year  
As per ECA 4066-CTPNQA: Weekly means once every week, Monthly means once every month, Quarterly means once every three months, Annually means once every year

**2025 Sampling Calendar**  
**VICTORIA HARBOUR WWTP (ORG #1675)**  
 WWT II, WWC II, ECA# 3389-A5BKJJ

JANUARY						
M	T	W	T	F	ST	SU
		1	2	3	4	5
<b>6 - Q/M/W</b>	7	8	9	10	11	12
<b>13 - W</b>	14	15	16	17	18	19
<b>20 - W</b>	21	22	23	24	25	26
<b>27 - W</b>	28	29	30	31		

FEBRUARY						
M	T	W	T	F	ST	SU
					1	2
<b>3 - M/W</b>	4	5	6	7	8	9
<b>10 - W</b>	11	12	13	14	15	16
17	<b>18 - W</b>	19	20	21	22	23
<b>24 - W</b>	25	26	27	28		

MARCH						
M	T	W	T	F	ST	SU
					1	2
<b>3 - M/W</b>	4	5	6	7	8	9
<b>10 - W</b>	11	12	13	14	15	16
<b>17 - W</b>	18	19	20	21	22	23
<b>24 - W</b>	25	26	27	28	29	30
<b>31 - W</b>						

APRIL						
M	T	W	T	F	ST	SU
	1	2	3	4	5	6
<b>7 - A/Q/M/W</b>	8	9	10	11	12	13
<b>14 - W</b>	15	16	17	18	19	20
21	<b>22 - W</b>	23	24	25	26	27
<b>28 - W</b>	29	30				

MAY						
M	T	W	T	F	ST	SU
			1	2	3	4
<b>5 - M/W</b>	6	7	8	9	10	11
<b>12 - W</b>	13	14	15	16	17	18
19	<b>20 - W</b>	21	22	23	24	25
<b>26 - W</b>	27	28	29	30	31	

JUNE						
M	T	W	T	F	ST	SU
						1
<b>2 - M/W</b>	3	4	5	6	7	8
<b>9 - W</b>	10	11	12	13	14	15
<b>16 - W</b>	17	18	19	20	21	22
<b>23 - W</b>	24	25	26	27	28	29
<b>30 - W</b>						

Stat Holiday/Weekend
<b>Sample Day</b>

A = Annual; M = Monthly; W = Weekly

**\*If you are NOT able to sample on the scheduled day, call your PCT as soon as possible\***

**2025 Sampling Calendar**  
**VICTORIA HARBOUR WWTP (ORG #1675)**  
 WWT II, WWC II, ECA# 3389-A5BKJJ

JULY						
M	T	W	T	F	ST	SU
	1	2	3	4	5	6
<b>7 - Q/M/W</b>	8	9	10	11	12	13
<b>14 - W</b>	15	16	17	18	19	20
<b>21 - W</b>	22	23	24	25	26	27
<b>28 - W</b>	29	30	31			

AUGUST						
M	T	W	T	F	ST	SU
				1	2	3
4	<b>5 - M/W</b>	6	7	8	9	10
<b>11 - W</b>	12	13	14	15	16	17
<b>18 - W</b>	19	20	21	22	23	24
<b>25 - W</b>	26	27	28	29	30	31

SEPTEMBER						
M	T	W	T	F	ST	SU
1	<b>2 - M/W</b>	3	4	5	6	7
<b>8 - W</b>	9	10	11	12	13	14
<b>15 - W</b>	16	17	18	19	20	21
<b>22 - W</b>	23	24	25	26	27	28
<b>29 - W</b>	30					

OCTOBER						
M	T	W	T	F	ST	SU
		1	2	3	4	5
<b>6 - Q/M/W</b>	7	8	9	10	11	12
13	<b>14 - W</b>	15	16	17	18	19
<b>20 - W</b>	21	22	23	24	25	26
<b>27 - W</b>	28	29	30	31		

NOVEMBER						
M	T	W	T	F	ST	SU
					1	2
<b>3 - M/W</b>	4	5	6	7	8	9
<b>10 - W</b>	11	12	13	14	15	16
<b>17 - W</b>	18	19	20	21	22	23
<b>24 - W</b>	25	26	27	28	29	30

DECEMBER						
M	T	W	T	F	ST	SU
<b>1 - M/W</b>	2	3	4	5	6	7
<b>8 - W</b>	9	10	11	12	13	14
<b>15 - W</b>	16	17	18	19	20	21
<b>22 - W</b>	23	24	25	26	27	28
<b>29 - W</b>	30	31				

Stat Holiday/Weekend
<b>Sample Day</b>

Q = Quarterly; A = Annual; M = Monthly; W = Weekly

**\*If you are NOT able to sample on the scheduled day, call your PCT as soon as possible\***

**2026 Laboratory Sampling Requirements**  
**Victoria Harbour Wastewater Treatment Plant**

Environmental Compliance Approval #4066-CTPNQA, Issue Date: June 26, 2025

Org #: 1675, Works #: 120003227

Revision#: 2 Revision Date: 2026-01-05

Frequency	Timeframe	Source	Parameters
<b>WEEKLY</b>	Every Tuesday	FINAL EFFLUENT (8-HR Composite) <sup>c</sup>	CBOD5; Total Suspended Solids; Total Phosphorus; Total Ammonia Nitrogen; Total Kjeldahl Nitrogen, Nitrate as Nitrogen, Nitrite as Nitrogen, Un-ionized Ammonia (as Calculated)
		FINAL EFFLUENT (Grab) <sup>c</sup>	<i>E.Coli</i> ; pH; Temperature
<b>MONTHLY</b>	First Tuesday of the Month	INFLUENT (RAW) (8- HR Composite)	BOD5; Total Suspended Solids; Total Phosphorus; Total Kjeldahl Nitrogen
		BIOSOLIDS <sup>a</sup> (Grab)	Total Solids; Total Phosphorus; Total Ammonia Nitrogen; Nitrate as Nitrogen; Volatile Solids; Alkalinity; Total Kjeldahl Nitrogen; Ammonia + Ammonium; Dissolved Reactive Phosphorus; Nitrate + Nitrite; Arsenic; Cadmium; Cobalt; Chromium; Copper; Lead; Mercury; Molybdenum; Nickel; Potassium; Sodium; Selenium; Zinc; <i>E.Coli</i>
<b>ANNUAL<sup>b</sup></b>	First Tuesday in June	FINAL EFFLUENT (Grab)	Acute Lethality (Rainbow Trout Single Concentration)

Unless specified, samples listed are required by ECA #4066-CTPNQA

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

<sup>a</sup>Two samples shall be taken during the two-month period before the transfer date. At least one of them shall be taken during the one-month period before the transfer date. More frequent sampling may be required depending on the transfer date. Preference is to take sample monthly before the transfer date. (O.Reg. 267/03)

<sup>b</sup>Reference Wastewater Systems Effluent Regulations (WSER) Section 11(1). Sampling frequency based on the total effluent deposited from the previous calendar year (>2,500 to < 50,000 m3/day). Victoria Harbour WWTP qualified for the reduced sampling (once annually) frequency for Acute Lethality Testing under WSER regulations (11(6)).

<sup>c</sup>Under the ECA, Section 35(d) a schedule for sampling shall be created, and revised and updated every year through rotation of the day of the week/month for the scheduled sampling program

As per ECA #4066-CTPNQA Section 35(c) i) Weekly means once every week, ii) Monthly means once every month; iii) quarterly means once every three months and; iv) annually means once every year.

**2026 Sampling Calendar**  
 VICTORIA HARBOUR WWTP (ORG #1675)  
 WWT II, WWC II, ECA# 4066-CTPNQA

JANUARY						
Su	M	T	W	TH	F	Sa
				1	2	3
4	5	6-M/W	7	8	9	10
11	12	13-W	14	15	16	17
18	19	20-W	21	22	23	24
25	26	27-W	28	29	30	31

FEBRUARY						
Su	M	T	W	TH	F	Sa
1	2	3-M/W	4	5	6	7
8	9	10-W	11	12	13	14
15	16	17-W	18	19	20	21
22	23	24-W	25	26	27	28

MARCH						
Su	M	T	W	TH	F	Sa
1	2	3-M/W	4	5	6	7
8	9	10-W	11	12	13	14
15	16	17-W	18	19	20	21
22	23	24-W	25	26	27	28
29	30	31-W				

APRIL						
Su	M	T	W	TH	F	Sa
			1	2	3	4
5	6	7-M/W/A	8	9	10	11
12	13	14-W	15	16	17	18
19	20	21-W	22	23	24	25
26	27	28-W	29	30		

MAY						
Su	M	T	W	TH	F	Sa
					1	2
3	4	5-M/W	6	7	8	9
10	11	12-W	13	14	15	16
17	18	19-W	20	21	22	23
24	25	26-W	27	28	29	30
31						

JUNE						
Su	M	T	W	TH	F	Sa
	1	2-M/W	3	4	5	6
7	8	9-W	10	11	12	13
14	15	16-W	17	18	19	20
21	22	23-W	24	25	26	27
28	29	30-W				

Stat Holiday/Weekend
Sample Day

**M**=Monthly (Sludge, Influent); **W**=Weekly (Effluent); **A**=Annual (Acute Lethality)

If you are NOT able to sample on the scheduled day, call your PCT as soon as possible

**2026 Sampling Calendar**  
 VICTORIA HARBOUR WWTP (ORG #1675)  
 WWT II, WWC II, ECA# 4066-CTPNQA

JULY						
Su	M	T	W	TH	F	Sa
			1	2	3	4
5	6	7-M/W	8	9	10	11
12	13	14-W	15	16	17	18
19	20	21-W	22	23	24	25
26	27	28-W	29	30	31	

AUGUST						
Su	M	T	W	TH	F	Sa
						1
2	3	4-M/W	5	6	7	8
9	10	11-W	12	13	14	15
16	17	18-W	19	20	21	22
23	24	25-W	26	27	28	29
30	31					

SEPTEMBER						
Su	M	T	W	TH	F	Sa
		1-M/W	2	3	4	5
6	7	8-W	9	10	11	12
13	14	15-W	16	17	18	19
20	21	22-W	23	24	25	26
27	28	29-W	30			

OCTOBER						
Su	M	T	W	TH	F	Sa
				1	2	3
4	5	6-M/W	7	8	9	10
11	12	13-W	14	15	16	17
18	19	20-W	21	22	23	24
25	26	27-W	28	29	30	31

NOVEMBER						
Su	M	T	W	TH	F	Sa
1	2	3-M/W	4	5	6	7
8	9	10-W	11	12	13	14
15	16	17-W	18	19	20	21
22	23	24-W	25	26	27	28
29	30					

DECEMBER						
Su	M	T	W	TH	F	Sa
		1-M/W	2	3	4	5
6	7	8-W	9	10	11	12
13	14	15-W	16	17	18	19
20	21	22-W	23	24	25	26
27	28	29-W	30	31		

Stat Holiday/Weekend
Sample Day

**M**=Monthly (Sludge, Influent); **W**=Weekly (Effluent); **A**=Annual (Acute Lethality)

If you are NOT able to sample on the scheduled day, call your PCT as soon as possible