

ANNUAL PERFORMANCE REPORT

ENVIRONMENTAL COMPLIANCE APPROVAL No. 9513-B5WKV6

ELMVALE WASTEWATER TREATMENT PLANT

FOR THE PERIOD:
JANUARY 1, 2025 – DECEMBER 31, 2025

*Prepared for the Corporation of the Township of
Springwater by the Ontario Clean Water Agency*



2025 Annual Performance Report

The Corporation of the Township of Springwater: Elmvale Wastewater Treatment Plant

Amended ECA No. 9513-B5WKV6 (Issue Date: November 20, 2018)

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

REQUIREMENTS FOR ANNUAL PERFORMANCE REPORT

This annual performance report was prepared in accordance with the Amended Environmental Compliance Approval 9513-B5WKV6 for the Elmvale Wastewater Treatment Plant as per Section 11.(4).

11. REPORTING

(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. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
- b. 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;
- c. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
- d. a summary of all operating issues encountered and corrective actions taken;
- e. 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;
- f. a summary of any effluent quality assurance or control measures undertaken
- g. a summary of the calibration and maintenance activities 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;
- h. 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 are 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 Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;
- i. a summary of any complaints received and any steps taken to address the complaints;
- j 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;
- k. a summary of all Notice of Modification to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.

2025 Annual Performance Report

The Corporation of the Township of Springwater: Elmvale Wastewater Treatment Plant

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l. 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 results 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.

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This report was prepared in accordance with its Amended Environmental Compliance Approval (ECA) No. 9513-B5WKV6 (issued on November 20, 2018) as per Section 11.4. Elements a. through m. during the ‘Reporting Period’ of January 1, 2025 to December 31, 2025.

1. System Description

The Elmvale Wastewater Treatment Plant (WWTP) is classified as a Class II Wastewater Treatment and Collection system designed for the collection, transmission, treatment of sanitary sewage and disposal of final effluent to the Wye River via the Sewage Treatment Plant. The works is owned by the Township of Springwater and operated on behalf of the Owner by the Ontario Clean Water Agency (OCWA). Raw sewage is collected via the separate sewer system to the Main Sewage Pumping Station (Bishop Park PS). In 2022, Queen Street Lift Station was completed and brought online, which discharges into Bishop Park PS. All collected sewage is then transmitted from the Bishop Park PS to the Elmvale Sewage Treatment Plant for treatment and disposal. The rated capacity of the plant is 1,800 m³/day.

The Elmvale WWTP consists of a preliminary grit removal system, with a manual gate valve that can be used to bypass flow when the flow exceeds 5,600 m³/day. It also consists of two aeration tanks, two clarifiers, four sand filter modules and a UV disinfection system. Alum is added to aid in phosphorus removal.

Sludge management consists of a two-stage aerobic digester with sludge storage, complete with an air mixing system, sludge transfer pumping chamber, digester transfer/drain sump, and a digester decant sump.

The final effluent outfall discharges into the Wye River. The works is equipped with a stand-by diesel generator in the event of power loss to the system.

An overview of the Elmvale Wastewater Treatment System can be found in the following table:

Table 1. Elmvale WWTP System Overview

Facility Name	Elmvale Wastewater Treatment Plant
Facility Type	Extended Aeration with Sand Filtration, Chemical Phosphorus Removal, and UV disinfection
Plant Classification	Class II Wastewater Treatment and Collection
Works Number	110000169
Rated Capacity	1,800 m ³ /day
Discharge Point	Wye River
Environmental Compliance Approval (ECA)	9513-B5WKV6 (issued November 20, 2018)

2. Monitoring Data – Influent

ECA 9513-B5WKV6, Section 11.4.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;”

2.1 Influent ECA Monitoring Program

The following table outlines the influent monitoring program at the Elmvale Wastewater Treatment Plant as required by the most recent 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. 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 9513-B5WKV6, Schedule D

Parameters	Sample Type	Minimum Frequency
Biochemical Oxygen Demand (BOD ₅)	24 Hour Composite	Monthly
Total Suspended Solids (TSS)	24 Hour Composite	Monthly
Total Phosphorus (TP)	24 Hour Composite	Weekly
Total Kjeldahl Nitrogen (TKN)	24 Hour Composite	Monthly

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

The following parameters 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 seen in the below table for samples taken and analyzed during the reporting period. Sample results are based on monthly and weekly 24-hour composite samples and analyzed by an accredited external laboratory.

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

2025	BOD ₅ (mg/L)	Total Suspended Solids (mg/L)	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)
January	128.00	85.00	3.27	26.10
February	144.00	124.00	3.34	34.20
March	53.00	110.00	1.31	11.70
April	93.00	90.50	2.14	22.95
May	156.00	168.00	3.30	32.50
June	124.00	41.00	3.67	36.30

2025	BOD₅ (mg/L)	Total Suspended Solids (mg/L)	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)
July	136.00	82.00	3.89	27.90
August	284.00	211.00	4.33	41.50
September	219.00	68.00	4.22	35.10
October	162.50	145.50	4.40	43.40
November	144.00	89.00	3.20	26.90
December	140.00	95.00	3.28	36.10
Annual Average	145.64	110.36	3.37	31.50

Influent laboratory analysis throughout the year indicated an average of 3.37 mg/L of Total Phosphorus, 145.64 mg/L of Biochemical Oxygen Demand (BOD₅), 110.36 mg/L of Total Suspended Solids (TSS) and 31.50 mg/L Total Kjeldahl Nitrogen.

The highest observed monthly average of Total Phosphorus (TP) was 4.40 mg/L in October, BOD₅ was 284.00 mg/L in August, Total Suspended Solids was 211.00 mg/L in August and Total Kjeldahl Nitrogen was 43.40 mg/L in October.

2.3 Raw Sewage Characteristics: Review of Historical Trends

A review of the historical trends for influent sewage characteristics, shown in Figure 1 to Figure 4 indicates the following:

- BOD₅ – average BOD₅ concentration in the raw sewage has fluctuated year-over-year with an increase in concentration from 2023 to 2025. The average annual concentration in 2020 was 100.75 mg/L, 121.33 mg/L, 128.17 mg/L, and 107.67 mg/L for 2021, 2022 and 2023 respectively.
- Total Suspended Solids – from 2014 to 2016 there was a steady increase in concentration, which was followed by a notable decrease in 2017. From 2017 to 2021, the influent TSS remained steady, however there was an increase of ~20 mg/L in concentration from 2021 to 2022. From 2022 to 2023 there was a notable decrease in concentration of over 20 mg/L. In 2024 and 2025 there has been an increase of over 20 mg/L in concentration.
- Total Phosphorous - Concentrations have remained fairly consistent, varying from 2.37 to 3.37 mg/L over the last ten years. The lowest average annual average was in 2020 at 2.37 mg/L and the highest was 3.37 mg/L in 2025.
- Total Kjeldahl Nitrogen – concentrations from 2014 to 2020 were fairly consistent. Since 2020, there has been a steady increase of ~ 10 mg/L. From 2022 to 2023 there was a notable decrease in concentration of over 9 mg/L and remained steady in 2024. However in 2025 the concentration increased by over 6 mg/L.

Figure 1. Influent: Annual Average BOD₅ Concentration

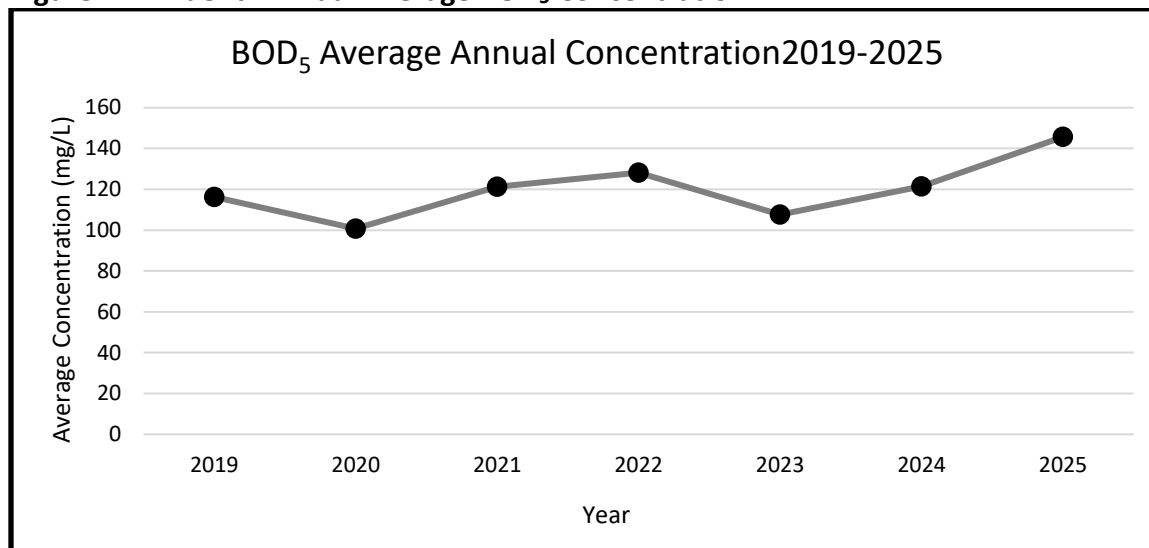


Figure 2. Influent: Annual Average Total Suspended Solids Concentration

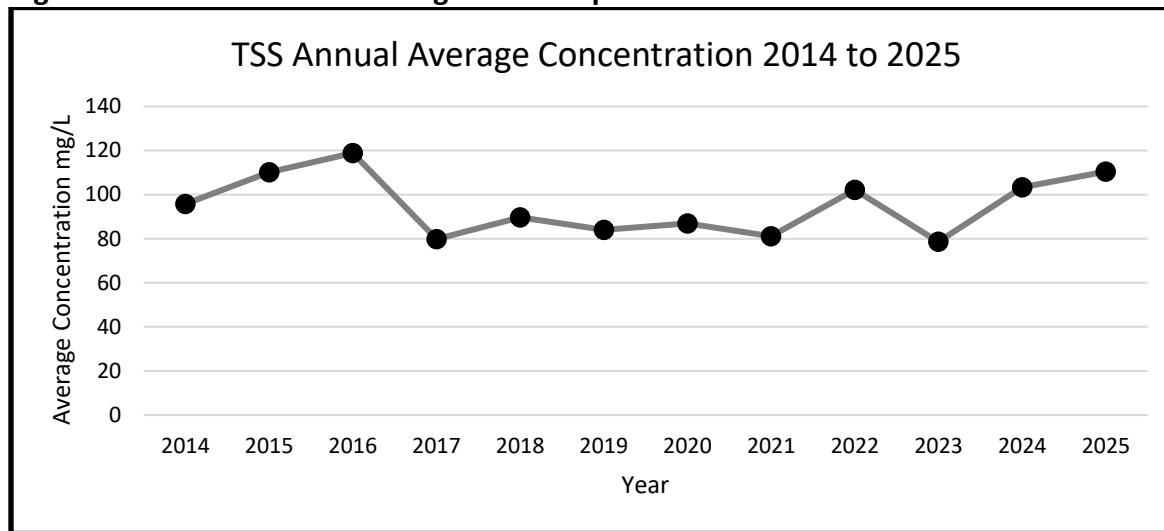


Figure 3. Influent: Annual Average Total Phosphorus Concentration

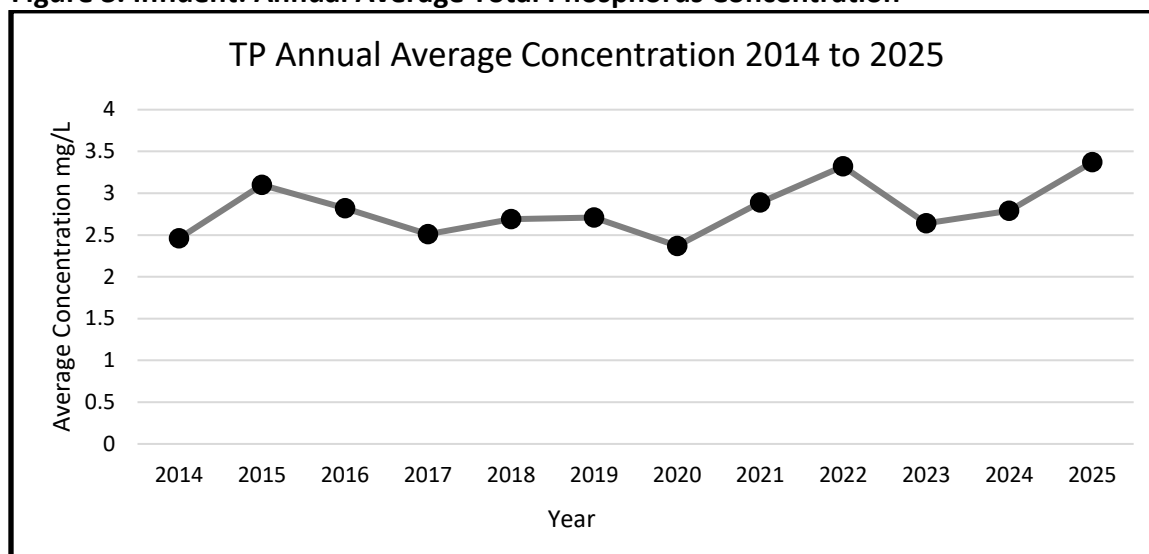
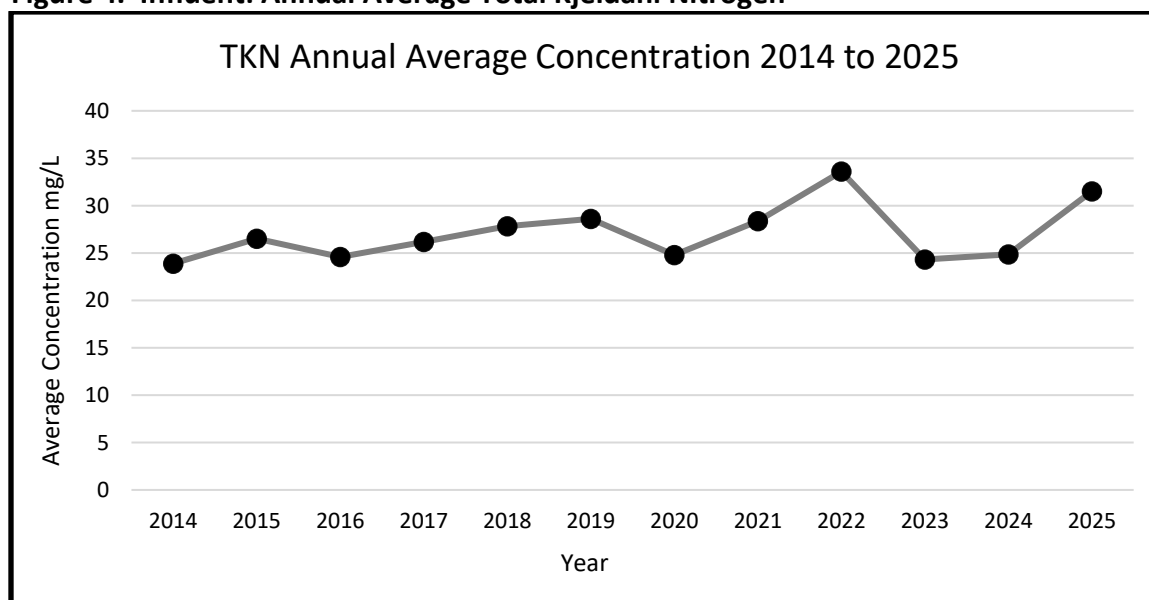


Figure 4. Influent: Annual Average Total Kjeldahl Nitrogen



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

The Rated Capacity listed in the most current ECA for Elmvale WWTP is 1,800 cubic metres per day (m^3/d). 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. 9513-B5WKV6 Section 6(1)(c) requires the Owner to design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with its objective so that the Annual Average Daily Influent Flow is within the Rated Capacity of the Sewage Treatment Plant.

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 of a treatment system is determined by the process unit with the lowest Peak Flow Rate. For Elmvale WWTP, the Plant Peak Flow Rate is limited by the sand filters, which have a Peak Flow Rate of 4,700 cubic metres per day (m³/d).

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.

2.4.1 Comparison of Influent Flow to Rated Capacity

A summary of influent flows data and comparison to the Rated Capacity during the reporting period can be found in the below table and graph.

Table 4: 2025 Influent Flow Average and Maximum Daily Flow Data with Comparison to the Rated Capacity

Month	Average Daily Flow (m ³ /day)	% of Rated Capacity (1,800 m ³ /day)	Peak Flow (m ³ /day)	% of Rated Capacity (4,700 m ³ /day)	Total Volume (m ³)
January	1,056.06	58.67%	1949.90	41.49%	32,738.00
February	923.87	51.33%	1403.00	29.85%	25,868.40
March	2,246.00	124.78%	3843.60	81.78%	69,626.10
April	1,656.51	92.03%	4080.50	86.82%	49,695.20
May	976.88	54.27%	1218.40	25.92%	30,283.20
June	828.01	46.00%	987.30	21.01%	24,840.20
July	712.00	39.56%	952.60	20.27%	22,071.90
August	686.93	38.16%	847.80	18.04%	21,294.90
September	685.47	38.08%	791.90	16.85%	20,564.10
October	678.69	37.71%	860.90	18.32%	21,039.40
November	944.91	52.50%	1245.40	26.50%	28,347.20
December	1,024.69	56.93%	1671.80	35.57%	31,765.40
2025 Avg.	1,035.98	57.55%	4080.50	86.82%	378,134.00

Note: As per the ECA, 'Rated Capacity' is defined as "the Average Daily Flow for which the Works are approved to handle".

Note: As per the ECA, 'Average Daily Flow' is defined as "the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year".

If the Annual Average Daily Flow reaches/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 Flow was below 80% of the Rated Capacity. See *Appendix A* for a detailed description of monthly and annual influent flow information.

Overall for 2025, the Elmvale WWTP operated within the Rated Capacity listed in the most current ECA. The Annual Average Daily Flow for the reporting period was 1035.98 m³/day, which was 57.55% of the Rated Capacity. The highest recorded peak flow event occurred on April 2, 2025 with 4,080.50 m³/day, which was 86.82% of the Peak Flow Rated Capacity, caused by heavy flows due to a high precipitation event and spring thaw.

2.5 Influent Flow and Volume: Review of Historical Trends

The below figures show historical raw (influent) daily average flow trending by month (figure 5) and by year (Figure 6 and 7) from 2020 to 2025. The graph shows that the average flows have remained fairly consistent year over year. There is a consistent peak in the months of March and April that would represent warmer temperatures resulting in snowmelt and seasonal precipitation.

Figure 5. Average Daily Influent Flow by Month

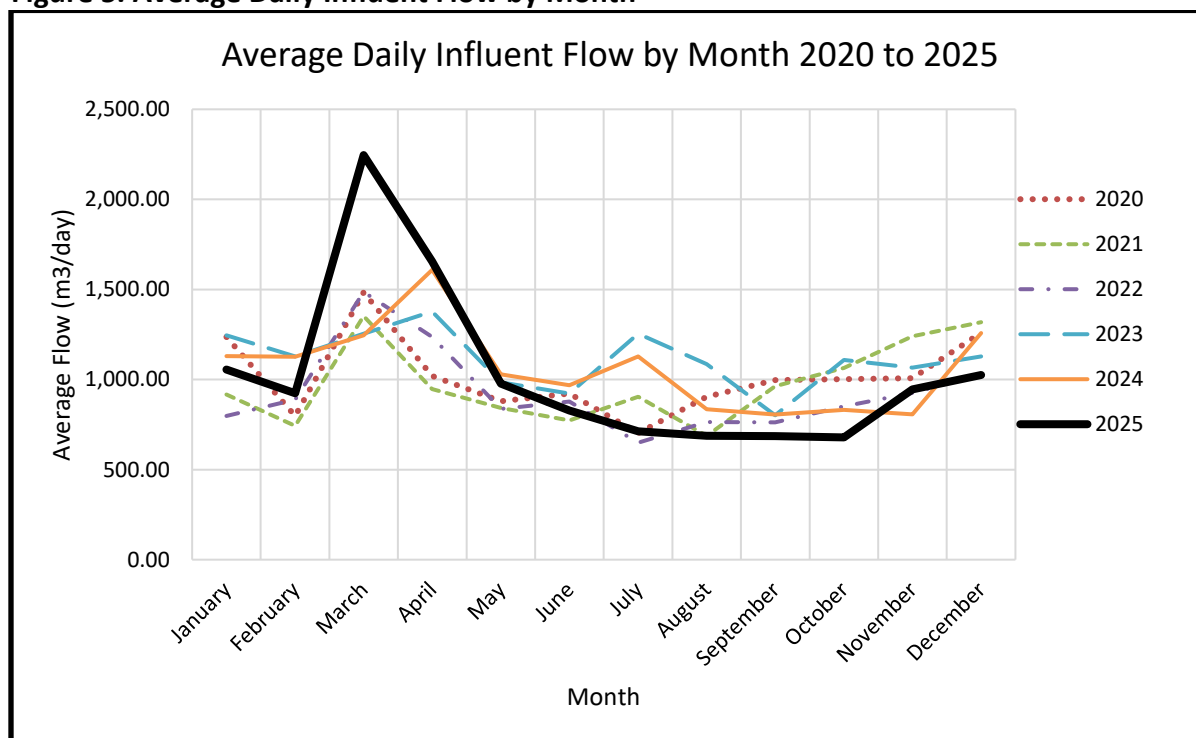


Figure 6. Average Daily Influent Flow by Year compared to ECA Rated Capacity

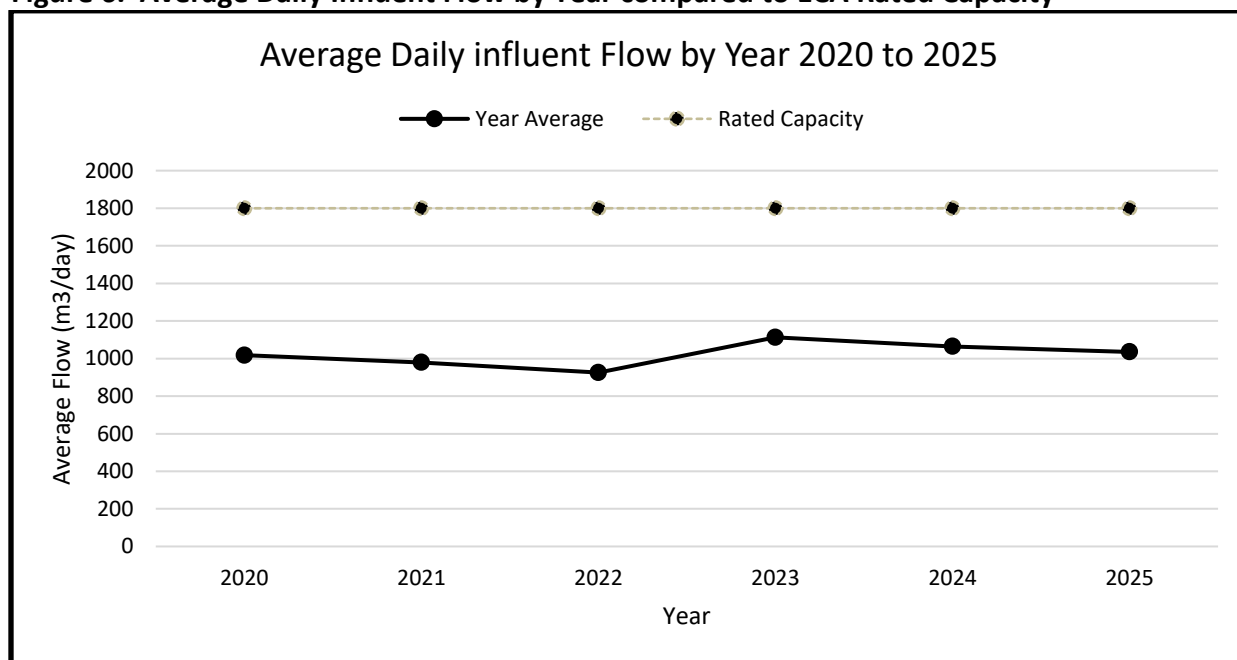
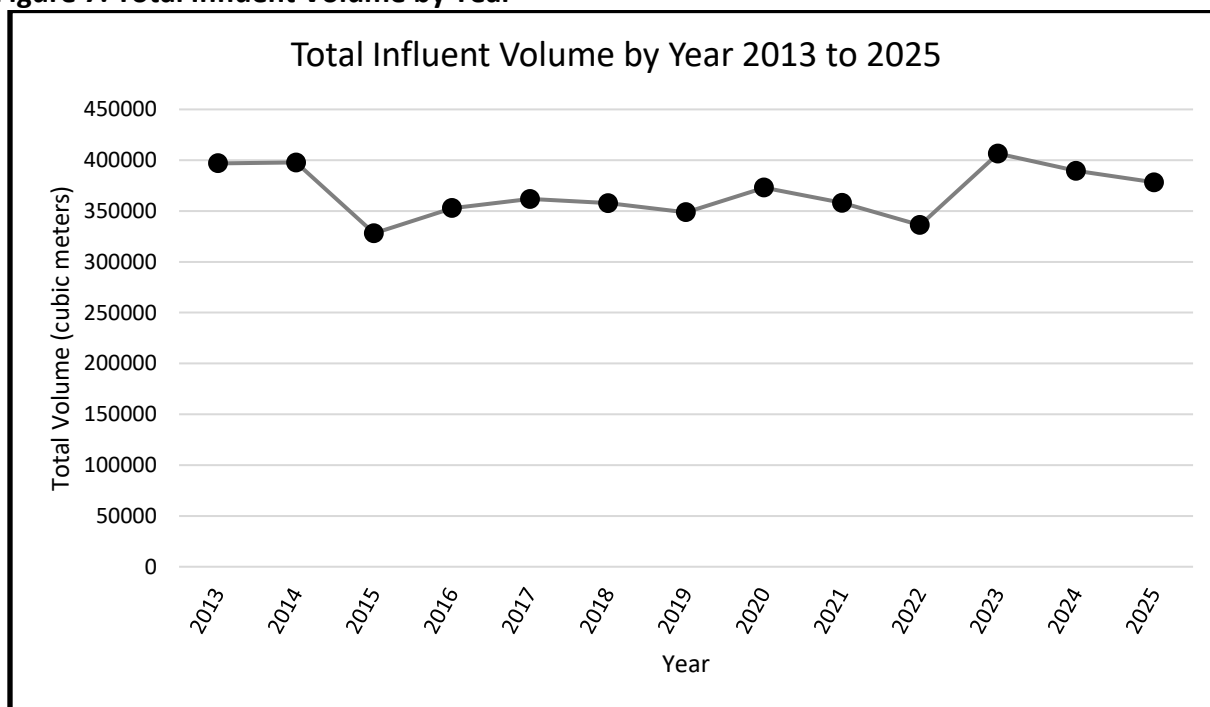


Figure 7. Total Influent Volume by Year



Overall, historical influent flow trends from 2020 to 2025 indicate stable system loading with predictable seasonal increases during spring melt conditions.

3. Monitoring Data – Effluent

ECA 9513-B5WKV6, Section 11.4.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 *“regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry’s effluent quality requirements”*

3.1 Effluent ECA Monitoring Program

The following table outlines the monitoring program at the Elmvale WWTP as per its 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. Unless specified as a probe sample, the samples were analyzed by an external laboratory.

Table 5: Final Effluent Monitoring Program- as per ECA 9513-B5WKV6, Schedule D

Parameter	Sample Type	Minimum Frequency
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	24 hour composite	Monthly
Total Suspended Solids	24 hour composite	Monthly
Total Phosphorus	24 hour composite	Weekly
Total Ammonia Nitrogen	24 hour composite	Monthly
Nitrate Nitrogen	24 hour composite	Monthly
<i>E. coli</i>	Grab	Weekly
pH	Grab/Probe	Weekly
Temperature	Grab/Probe	Weekly
Total Chlorine Residual ^{5A}	Grab	Monthly

^{5A}The current ECA 9513-B5WKV6 includes a monthly grab Total Chlorine Residual sample. On November 22, 2018, MECP Inspector Mark Bailey (Barrie District Office) confirmed via e-mail that the MECP Approvals Engineer suggested the chlorine residual monitoring be disregarded. As such, the Total Chlorine Residual sampling has been excluded from the Effluent Monitoring Program for the system.

The following table outlines the final effluent objectives, limits and loadings at the Elmvale WWTP as per its ECA. The applicable effluent parameters are either “concentrations” expressed as milligrams per litre or “loadings” expressed as kilograms per day. As per Schedule C, concentration limits for CBOD₅, TSS and TP are reportable based on an annual average effluent concentration, *E.Coli* based on a monthly Geometric Mean Density and pH based on a Single Sample Result. Loading Limits are reportable based on a either a Monthly Average Daily Effluent

Loading (TP) or based on and Annual Average Daily Effluent Loading (CBOD₅ and TSS) and Annual Total Effluent Loading (TP).

Table 6: Final Effluent Design Objectives- as per ECA 9513-B5WKV6, Schedule B

Parameter	Averaging Calculator	Objective
CBOD ₅	Annual Average Effluent Concentration	8.0 mg/L
Total Suspended Solids	Annual Average Effluent Concentration	4.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.1 mg/L
<i>E.Coli</i>	Monthly Geometric Mean Density	150 organisms per 100 mL
pH	Single Sample Result	6.5 – 8.5 inclusive

Table 7: Final Effluent Design Limits- as per ECA 9513-B5WKV6, Schedule C

Parameter	Averaging Calculator	Limit
CBOD ₅	Annual Average Effluent Concentration	10.0 mg/L
CBOD ₅ Loadings	Annual Average Daily Effluent Loading	18.0 kg/d
Total Suspended Solids	Annual Average Effluent Concentration	5.0 mg/L
Total Suspended Solids Loading	Annual Average Daily Effluent Loading	9.0 kg/d
Total Phosphorus	Monthly Average Effluent Concentration	0.17 mg/L
	Annual Average Effluent Concentration	0.13 mg/L
Total Phosphorus Loading	Monthly Average Daily Effluent Loading	0.3 kg/d
	Annual Total Effluent Loading	82.8 kg/year
<i>E.Coli</i>	Monthly Geometric Mean Density	200 organisms per 100 mL
pH	Single Sample Result	6.0 – 9.5 inclusive

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

A review of the monitoring data shows that all Elmvale WWTP final effluent parameters were within the objectives (as applicable) and limits set out in the most current ECA for the duration of the reporting period, inclusive of:

- CBOD₅ annual average effluent concentration
- CBOD₅ annual average daily effluent loading
- Total Suspended Solids annual average effluent concentration
- Total Suspended Solids annual average daily effluent loading
- Total Phosphorus monthly and annual average effluent concentration
- Total Phosphorous monthly and annual total average daily effluent loading
- pH, all 2025 single sample results
- *E. Coli* monthly geometric mean density

It should be noted that as per the ECA, the objectives are non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs. Exceedances of objectives are not reportable.

The following tables summarize monthly and annual data in comparison to the applicable ECA objectives and limits for the reporting period.

Table 8. Effluent Sampling Results: CBOD₅ Concentration

Timeframe	Average (mg/L)	Within Limits? (10.0 mg/L)	Within Objectives? (8.0 mg/L)
January	2.00	--	--
February	2.00	--	--
March	<2.00	--	--
April	<2.00	--	--
May	<2.00	--	--
June	<2.00	--	--
July	<2.00	--	--
August	<2.00	--	--
September	2.00	--	--
October	<2.00	--	--
November	<2.00	--	--
December	<2.00	--	--
2025 Average	2.00	Yes	Yes

**As per the ECA, CBOD₅ Concentration Averaging Calculator is an Annual Average Effluent Concentration.*

Table 9. Effluent Sampling Results: CBOD₅ Loadings

Timeframe	Average (kg/d)	Within Limits? (18.0 kg/d)
January	2.021	--
February	1.802	--
March	< 4.778	--
April	< 3.341	--
May	< 1.982	--
June	< 1.466	--
July	< 1.102	--
August	< 1.079	--
September	1.200	--
October	<1.227	--
November	< 1.693	--
December	< 1.911	--
2025 Average	1.97	Yes

**There are no CBOD₅ loading objectives in the ECA*

**As per the ECA, CBOD5 Loading Averaging Calculator is an Annual Average Daily Effluent Loading.*

Table 10. Effluent Sampling Results: Total Suspended Solids Concentration

Timeframe	Total Suspended Solids		
	Average (mg/L)	Within Limits? (5.0 mg/L)	Within Objectives? (4.0 mg/L)
January	2.25	--	--
February	1.75	--	--
March	3.00	--	--
April	2.80	--	--
May	5.25	No	No
June	2.00	--	--
July	2.20	--	--
August	1.25	--	--
September	1.75	--	--
October	< 1.60	--	--
November	< 1.00	--	--
December	1.80	--	--
2025 Avg.	2.21	Yes	Yes

**As per the ECA, TSS Concentration Averaging Calculator is an Annual Average Effluent Concentration.*

Table 11. Effluent Sampling Results: Total Suspended Solids Loadings

Timeframe	Total Suspended Solids Loadings	
	Average (kg/d)	Within Limits? (9.0 kg/d)
January	2.273	--
February	1.577	--
March	7.167	--
April	4.677	--
May	5.203	--
June	1.466	--
July	1.213	--
August	0.674	--
September	1.050	--
October	< 0.982	--
November	< 0.847	--
December	1.719	--
2025	2.18	Yes

**There are no TSS loading objectives in the ECA*

**As per the ECA, TSS Loading Averaging Calculator is an Annual Average Daily Effluent Loading.*

Table 12. Effluent Sample Results: Total Phosphorus Concentrations

Timeframe	Monthly Average (mg/L)	Within Limit? (Monthly: 0.17 mg/L) (Annual: 0.13 mg/L)	Within Objectives? (Monthly: 0.1 mg/L) (Annual: N/A)
January	0.05	Yes	Yes
February	0.04	Yes	Yes
March	< 0.04	Yes	Yes
April	< 0.04	Yes	Yes
May	0.05	Yes	Yes
June	0.07	Yes	Yes
July	0.10	Yes	Yes
August	0.10	Yes	Yes
September	0.11	Yes	No
October	< 0.04	Yes	Yes
November	0.04	Yes	Yes
December	< 0.05	Yes	Yes
2025 Average	0.06	Yes	N/A

**As per the ECA, TP Concentration Averaging Calculator is based on a Monthly Average Effluent Concentration for the Objective and both a Monthly Average Effluent Concentration and Annual Average Concentration for the limits.*

Table 13. Effluent Sample Results: Total Phosphorus Loadings

Timeframe	Total Phosphorus Loadings		
	Average (kg/d)	Within Monthly Limits? (0.3 kg/d)	Within Annual Limits? (82.8 kg/yr)
January	0.051	--	--
February	0.036	--	--
March	< 0.084	--	--
April	< 0.067	--	--
May	0.050	--	--
June	0.051	--	--
July	0.057	--	--
August	0.053	--	--
September	0.065	--	--
October	< 0.022	--	--
November	0.034	--	--
December	< 0.050	--	--
2025 Average	0.06	Yes	--
Total Phosphorus (kg/year)	21.90	--	Yes

**There are no TP loading objectives in the ECA*

**As per the ECA, TP Loading Averaging Calculator is based on a Monthly Annual Average Daily Effluent Loading and an Annual Total Effluent Loading.*

Table 14. Effluent Sample Results: *E. Coli*

2025	<i>E. Coli</i>		
	Mean Geometric Density (orgs/100mL)	Within Monthly Limits? (200 orgs/100mL)	Within Monthly Objectives? (150 orgs/100mL)
January	1.32	Yes	Yes
February	1.57	Yes	Yes
March	1.86	Yes	Yes
April	1.55	Yes	Yes
May	1.19	Yes	Yes
June	3.20	Yes	Yes
July	2.52	Yes	Yes
August	2.14	Yes	Yes
September	1.32	Yes	Yes
October	1.15	Yes	Yes
November	2.26	Yes	Yes
December	1.12	Yes	Yes

**As per the ECA, E.coli Averaging Calculator is based on a Monthly Geometric Mean Density.*

Table 15. Effluent Sample Results: pH

2025	Minimum	Maximum	Within Limits? (6.0 – 9.5)	Within Objectives? (6.5 – 8.5)
January	6.92	7.18	Yes	Yes
February	6.87	7.19	Yes	Yes
March	6.89	7.18	Yes	Yes
April	6.96	7.21	Yes	Yes
May	6.92	7.04	Yes	Yes
June	6.93	7.27	Yes	Yes
July	6.90	7.20	Yes	Yes
August	6.81	7.13	Yes	Yes
September	6.96	7.24	Yes	Yes
October	6.87	7.19	Yes	Yes
November	7.11	7.29	Yes	Yes
December	7.07	7.22	Yes	Yes

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

The following table represents parameters that do not have objectives and limits in the ECA but are required to be sampled as part of the effluent monitoring program. A summary of the monthly sampling results is included in the table below.

Table 16: Additional Effluent Sampling Results: Total Ammonia Nitrogen (TAN), Nitrate Nitrogen and Temperature

Month	Monthly Average Concentration TAN (mg/L)	Monthly Average Concentration Nitrate Nitrogen (mg/L)	Temperature (°C)	
			Minimum	Maximum
January	< 0.10	21.10	7.80	21.10
February	0.10	24.20	8.10	21.20
March	< 0.10	24.40	8.20	11.60
April	< 0.10	16.95	9.80	11.70
May	< 0.10	24.30	11.00	20.10
June	< 0.10	29.10	11.90	21.40
July	< 0.10	38.20	9.90	22.00
August	< 0.10	39.20	13.80	21.00
September	< 0.10	12.70	11.10	17.30
October	< 0.10	37.70	7.40	19.50
November	< 0.10	29.10	9.80	16.70
December	< 0.10	26.00	10.10	15.60
2025 Average	< 0.10	26.91	9.91	18.27

The 2025 effluent monitoring results indicate strong overall treatment performance at the Elmvale WWTP. Key observations include:

- CBOD₅: Effluent CBOD₅ concentrations and loadings remained well below both the design objectives and compliance limits throughout the year, demonstrating effective secondary treatment performance.
- Total Suspended Solids (TSS): TSS concentrations and loadings consistently met the annual objectives and limits. Although a single elevated concentration occurred in May, it did not impact overall compliance.
- Total Phosphorus (TP): TP concentrations and loadings remained well below both the monthly and annual compliance limits, confirming effective chemical phosphorus removal.
- E. coli: Monthly geometric mean densities were consistently far below both the objective and limit, indicating reliable UV disinfection performance.
- pH: All pH measurements were within both the objective and limit ranges, reflecting stable effluent conditions.

- Additional Parameters: Ammonia, nitrate, and temperature results were within expected ranges for the system and did not indicate any abnormal process conditions.

Overall, the Elmvale WWTP met all effluent compliance limits in 2025, and the works operated adequately and effectively throughout the reporting period.

3.3 Effluent Flows

The following table outlines the effluent flow data for 2025:

Table 17: 2025 Effluent Average Daily, Peak and Total Flow Data

Timeframe	Average Daily Flow (m³/day)	Peak Flow (m³/day)	Total Flow (m³/day)
January	1,010.30	1,867.10	31,319.20
February	901.02	1,388.90	25,228.50
March	2,388.87	5,540.60	74,054.90
April	1,670.43	5,502.50	50,113.00
May	991.06	1,519.00	30,723.00
June	732.99	1,017.40	21,989.70
July	551.16	734.70	17,085.90
August	539.58	750.20	16,727.10
September	600.21	651.30	18,006.30
October	613.71	784.60	19,024.90
November	846.70	1,120.90	25,401.00
December	922.08	1,834.10	28,584.50
2025	981.53	5,540.60	358,258.00

The average effluent flow for 2025 was 981.53 m³/day. The month with the highest total flow volume occurred in March (74,054.90 m³ produced) and the day with the highest daily peak flow occurred on March 14, 2025. The total effluent volume produce at the Elmvale WWTP in 2025 was 358,258.00 m³.

Figure 8. Average Daily Effluent Flows during the Reporting Period

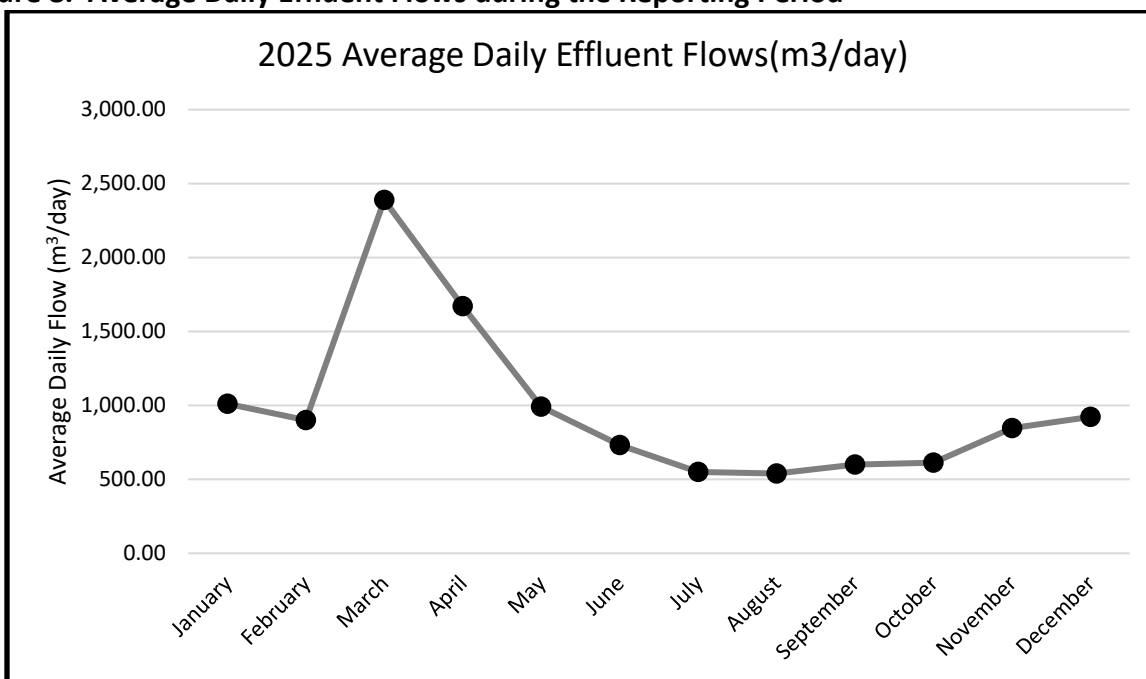
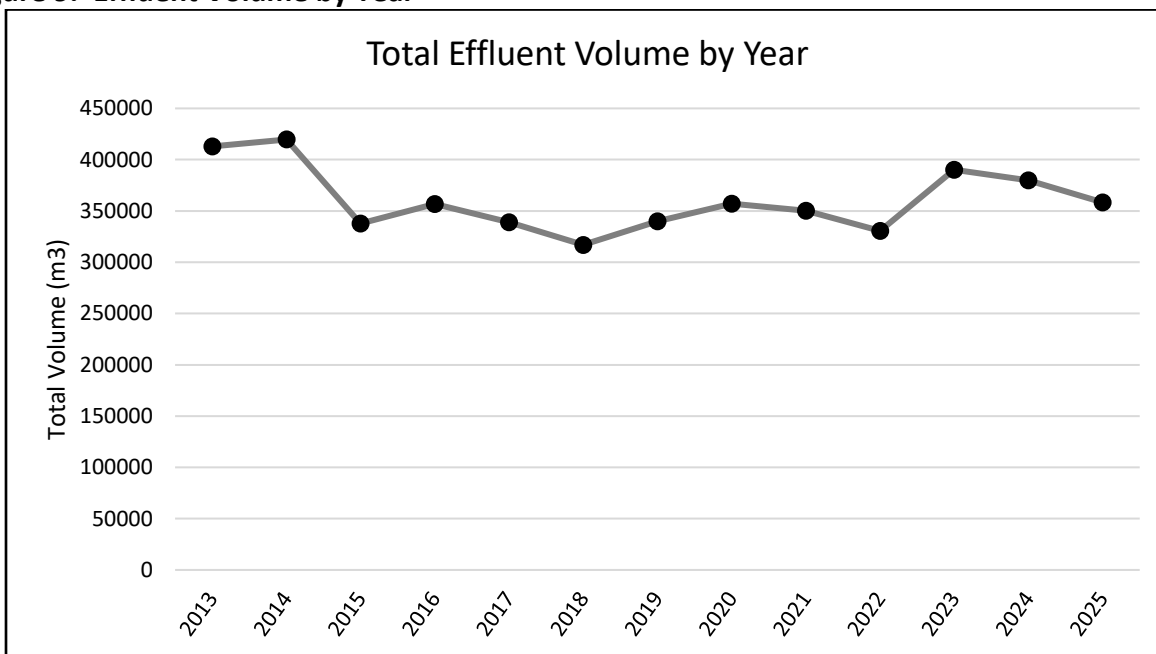


Figure 9. Effluent Volume by Year



Effluent flow patterns in 2025 were consistent with expected seasonal variability, with elevated flows during spring melt conditions and no abnormal or unexpected flow behaviour observed.

3.4 Success & Adequacy of the Works

In 2025, the Elmvale WWTP produced effluent with the following removal rates:

Parameter	Average Removal Rate for 2025
Total Suspended Solids	97.68%
Total Phosphorus	98.18%

During the reporting period, Elmvale WWTP provided overall effective wastewater treatment, producing final effluent with average removal rates of 97.68% for Total Suspended Solids and 98.18% for Total Phosphorus.

Based on the monitoring program and effluent quality data, Elmvale WWTP provided effective treatment and complied with all effluent compliance limits and objectives during the reporting period. Prior to 2023, Elmvale WWTP struggled to meet compliance and objective limits for the Annual Average Concentrations for Total Suspended Solids, however, in December 2022 sand filter #3 and #4 were refurbished. Since refurbishment, while there have been the occasional single sample results exceedance of the objectives, typically during times of high flows, the monthly and annual TSS concentrations have remained been below both the objective and compliance limits.

Currently, the works is running adequately and successfully to treat and dispose of final effluent that meets ECA standards. The Elmvale WWTP is currently in the process of upgrades under the ECA LOF to the preliminary treatment system, Post-Secondary Treatment system, Disinfection system and Sludge Management system.

Please refer to **Appendix A** for detailed performance assessment report.

4. Monitoring Schedule

ECA 9513-B5WKV6, Section 11, Part 4. c. 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;”

The following deviations from the sampling schedule occurred within the reporting period:

Scheduled Sample Date	Actual Sample Date	Sample Type	Reason for Deviation
February 5, 2025	February 12, 2025	Monthly Sludge Sample	Sample was taken later in the month due to maintenance
March 12, 2025	March 11, 2025	Weekly 24-Hour raw composite and final	Samples were taken one day early due to staff training

Scheduled Sample Date	Actual Sample Date	Sample Type	Reason for Deviation
		effluent composite and grab samples	
March 19, 2025	March 18, 2025	Weekly 24-Hour raw composite and final effluent composite and grab samples	Samples were taken one day early due to staff training
November 5, 2025	November 6, 2025	Sludge & Monthly parameters & Weekly 24-Hour raw composite and final effluent composite and grab samples	Samples were taken one day later due to a contractor error
December 3, 2025	December 9, 2025	Monthly parameters for 24-Hour raw and final effluent composite sample	Samples taken on the 9th due to operator error

None of the deviations from the monitoring schedule impacted data completeness or regulatory reporting.

The sampling schedule and requirements for the reporting period was prepared, based on the ECA monitoring conditions, a schedule for the current reporting year (2025) and next reporting year (2026) can be found in Appendix B.

5. Operating Issues & Corrective Actions

ECA 9513-B5WKV6, Section 11, Part 4. d. requires:

“A summary of all operating issues encountered and corrective actions taken;”

There were no operating issues encountered for the reporting year with respect to the Wastewater Treatment Plant. Routine operational adjustments were performed as part of normal process control, but no issues requiring corrective action were identified.

6. Repair & Maintenance Activities

ECA 9513-B5WKV6, Section 11, Part 4. e. 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

A computerized Work Management System (WMS) is utilized to schedule and document maintenance activities. The WMS allows users 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

Scheduled preventative maintenance work orders are automatically generated by the WMS and are assigned to applicable Operations staff. The WMS also allows for the creation of real-time emergency and corrective work orders for any unscheduled maintenance that may occur.

6.2 Preventative Maintenance

Preventative maintenance activities carried out during the reporting period on major structure(s), equipment, apparatus or mechanisms forming the system are summarized below:

- Aeration blower inspection/service
- Digester blower inspection/service
- Diesel engine inspection/service

6.3 Repairs & Improvements

Repairs/improvements made during the reporting period on major structure(s), equipment, apparatus or mechanisms forming the system are summarized below:

- Elmvale WWTP inlet gas detector sensor replacement
- Elmvale WWTP screw pump 2 repairs
- Elmvale WWTP HVAC Repairs Control Board replacement

All maintenance and repair activities were completed as required, and no equipment failures or maintenance issues impacted compliance or treatment performance during the reporting period.

7. Quality Assurance & Control Measures

ECA 9513-B5WKV6, Section 11, Part 4. f. 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 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

The 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 during the reporting period.

7.5 In-house Analysis

In-house analysis is 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. See section 8 below for further information on calibration and maintenance of monitoring equipment.

The quality assurance and control measures implemented during the reporting period were effective in ensuring accurate monitoring results and maintaining compliance with effluent requirements.

8. Calibration & Maintenance – Monitoring Equipment

ECA 9513-B5WKV6, Section 11, Part 4. g. requires:

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

The flow meters used to measure the raw sewage and final effluent were successfully calibrated on June 2, 2025 by Flowmetrix Technical Services. A portable Hach DR900 unit was calibrated by Indus Control on July 23, 2025.

A copy of the calibration records can be found in **Appendix C**.

The quality assurance and control measures implemented during the reporting period were effective in ensuring accurate and reliable monitoring results that supported compliance assessment and process control.

9. Design Objective Requirements

ECA 9513-B5WKV6, Section 11, Part 4. h. 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 are not achieved more than 50% of the time in a year, or there is an increasing trend of deterioration of Final Effluent quality;*
- ii. *When Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;”*

9.1 Effluent Quality Design Objectives and Annual Average Daily Influent Flow

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

Table 18. Percentage of Time Design Objectives were Achieved in 2025

Parameter	% of Time Objectives were Achieved
CBOD ₅	100
Total Suspended Solids	100
Total Phosphorus	92
<i>E.Coli</i>	100
pH	100

All monthly and annual average concentration ECA design objectives were achieved for all parameters during the reporting period, with the one exception of Total Phosphorus being 0.01 above the objective in September. In addition, the annual average daily flow of raw sewage was 1,035.98 m³/day or 57.55% for the Rated Capacity, indicating that pro-active actions are not required as the works did not reach an annual average that was 80% or more of the rated capacity.

The single Total Phosphorus objective exceedance did not represent a trend of deteriorating effluent quality, and overall performance remained stable throughout the reporting period.

Refer to Appendix A for detailed Performance Assessment Report for the facility, including raw and final effluent discharge data and influent and effluent flow data.

9.2 Efforts Made to Achieve Design Objectives, Assessment of Issues and Proactive Actions

OCWA made best efforts to ensure that the effluent was essentially free of floating and settleable solids, and did not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters throughout 2025.

Staff routinely monitor plant effluent quality and adjust process as required to maintain a high level of effluent quality from the Elmvale WWTP. In 2021 and 2022, the facility underwent exploratory additional sampling for TSS to determine effluent quality pre and post sand filtration. Based on those results and in December 2022, refurbishment of sand filter #3 and #4 (two of the four tertiary sand filters) took place. Post refurbishment showed a significant reduction in solids leaving the plant, to the point where the final effluent complied with both the ECA limits but also the objectives for 2023, 2024, and 2025.

In addition, The Township of Springwater obtained a third party review of the current and future needs of the WWTP and upgrades are currently being implemented. Since the beginning of January, 2023 Elmvale WWTP has been solely running on the two refurbished sand filters. The two sand filters that were not refurbished (#1 and #2) have been placed offline and are only being used as back-up or in emergency standby situations until the planned post secondary filtration upgrades have been completed.

Overall, Elmvale WWTP no longer has notable trending towards deteriorating effluent quality as of 2023 for all of the effluent monitoring parameters. Based on these efforts, the facility is expected to continue meeting both design objectives and compliance limits under current loading conditions.

10. Community Complaints

ECA 9513-B5WKV6, Section 11, Part 4. i. requires:

“A summary of any complaints received and any steps taken to address the complaints;”

During the reporting period there was no community complaints received for the WWTP and three received for the collection system. For further details, refer to the Township of Springwater Municipal Sewage Collection System Annual Performance Report for details related to the Municipal Collection System community complaint received.

11. By-pass, Spill or Abnormal Discharge Events Summary

ECA 9513-B5WKV6, Section 11, Part 4. 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;”

11.1 By-pass Events

There was one by-pass event at the WWTP during the reporting period.

On April 29, 2025, severe thunderstorms and high winds resulted in a power outage due to fallen trees on Hydro lines. The power was phasing in and out which resulted in the transfer switch transferring from backup power to neutral. An OCWA Operator responded to the alarms and the generator was running upon arrival, however there was no power reaching the plant equipment. As a results of the power phasing in and out the UV did not have power for one hour. OCWA staff then switched off the main breaker to isolate the utility power from the plant. The plant was then fully running on the generator and the UV was confirmed to be working properly on generator power. On April 29, 2025 at 2250 hours Hydro was restored and the plant switched back to utility power. Samples were collected as per the ECA and analyzed at a certified laboratory. The Spills Action Center, MOH, MECP Inspector and the Township of Springwater were verbally notified on April 30, 2025, and a written notification was sent on May 2, 2025. No further actions were required. The bypass event did not result in any effluent compliance issues, and the corrective actions taken were appropriate and effective.

See Appendix D for the Environmental Incident Report

11.2 Overflow and Spill Events

There were no overflow or spills events at the WWTP during the reporting period. There was two collection system overflow events which occurred during the reporting period at Bishop Park Pumping Station. *For more information on the incident refer to the Township of Springwater Sewage Collection System Annual Performance Report for further details.*

11.3 Abnormal Discharge Events

There were no abnormal discharge events at the WWTP during the reporting period.

12. Notice of Modification to Sewage Works

ECA 9513-B5WKV6, Section 11, Part 4. k. requires:

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

There was no Notice of Modification to Sewage Works completed during the reporting period.

13. Conformance to Procedure F-5-1

ECA 9513-B5WKV6, Section 11, Part 4. 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;”

Currently Elmvale treatment and collection systems are operating at an adequate level to ensure the requirements of the ECA are met on a consistent and reliable basis, as shown throughout the 2025 reporting year.

13.1 Efforts Made to Achieve Conformance with F-5-1 during the Reporting Period

Overall, Elmvale WWTP had no issues with regards to conforming to Procedure F-5-1 through the 2025 year. The following projects were undertaken during the reporting period in an effort to achieve continued conformance with Procedure F-5-1.

13.2 Proposed/Planned Future Work to Achieve Conformance with F-5-1

Proposed/planned projects for 2026 to support efforts to continually achieve conformance with Procedure F-5-1 are summarized below:

Planned Scope of Work
Elmvale WWTP Phase 1 Upgrades - Tertiary Filters, UV Modules, Sludge Transfer Pumps, Inlet Bar Screen Upgrades
Elmvale WWTP Pump Repairs/replacement
Elmvale WWTP Outfall Sewer Inspection
Elmvale WWTP Turbo Blower Servicing

Once the Phase 1 work outlined in the table above is completed, the Elmvale WWTP Phase 2 upgrades are planned to follow. Elmvale WWTP future Phase 2 upgrades will include the installation of two motor control centers (MCCs), one utility power service and six local control panels as well as the installation of two prefabricated buildings, HVAC systems, and new lighting for multiple facilities. In addition, a Water & Wastewater Master Plan Study is currently underway to evaluate the current and future needs of the water and wastewater servicing across the Township of Springwater.

14. Construction and Commissioning Schedule Updates

ECA 9513-B5WKV6, Section 11, Part 4. m. 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;”

During the reporting period, there were no changes or updates on the construction and commissioning operation of the Proposed Works listed in the ECA. All proposed works listed (Queen Street Lift Station Upgrade) were completed in August of 2022. A Director’s notice of commissioning is provided prior to modifications and once work is completed.

The Phase 1 upgrades under the LOF are currently underway.

- Preliminary Treatment System
 - Install one (1) new mechanical screen and screening compactor, to replace the existing static screen. Work scheduled to be completed in 2026.
 - Provide and install power system for new mechanical screen and screening compactor.
- Post-Secondary Treatment System:
 - Modify two (2) existing sand filters to install two cloth media disk filtration systems. Work scheduled to be completed in 2026.
 - Provide new power supply for the two cloth media disk filtration systems. Work scheduled to be completed in 2026.
- Disinfection System:
 - Replace two (2) existing ultraviolet disinfection (UV 3000) system with two new UV 3000plus system. Completed in 2026.
 - Removal of the existing flap gates and replace with a serpentine weir. Completed in 2026.
 - Install new isolation gates at the outlet of each UV channel.
 - Provide new power supply for UV3000plus system. Completed in 2026.
- Sludge Management System:
 - Replace the existing sludge transfer pump with a new sludge transfer pump. Work scheduled to be completed in 2026.

2025 Annual Performance Report

Appendix A

Performance Assessment Report: Annual Flow, Influent and Effluent Quality

5634 ELMVALE WASTEWATER TREATMENT FACILITY 110000169																
	1 / 2025	2/ 2025	3/ 2025	4/ 2025	5/ 2025	6/ 2025	7/ 2025	8/ 2025	9/ 2025	10/ 2025	11/ 2025	12/ 2025	<--Total-->	<--Avg-->	<--Max-->	<-Criteria-->
Flows																
Raw Flow: Total - Raw m³/d	32,738.00	25,868.40	69,626.10	49,695.20	30,283.20	24,840.20	22,071.90	21,294.90	20,564.10	21,039.40	28,347.20	31,765.40	378,134.00			0.00
Raw Flow: Avg - Raw m³/d	1,056.06	923.87	2,246.00	1,656.51	976.88	828.01	712.00	686.93	685.47	678.69	944.91	1,024.69		1,035.98		1,800.00
Raw Flow: Max - Raw m³/d	1,949.90	1,403.00	3,843.60	4,080.50	1,218.40	987.30	952.60	847.80	791.90	860.90	1,245.40	1,671.80			4,080.50	0.00
Raw Flow: Count - Raw 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 - Eff m³/d	31,319.20	25,228.50	74,054.90	50,113.00	30,723.00	21,989.70	17,085.90	16,727.10	18,006.30	19,024.90	25,401.00	28,584.50	358,258.00			0.00
Eff. Flow: Avg - Eff m³/d	1,010.30	901.02	2,388.87	1,670.43	991.06	732.99	551.16	539.58	600.21	613.71	846.70	922.08		981.53		
Eff. Flow: Max - Eff m³/d	1,867.10	1,388.90	5,540.60	5,502.50	1,519.00	1,017.40	734.70	750.20	651.30	784.60	1,120.90	1,834.10			5,540.60	0.00
Eff Flow: Count - Eff 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
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Eff mg/L	2.00	2.00	<	2.00	<	2.00	<	2.00	<	2.00	<	2.00			2.00	
Eff: # of samples of cBOD5 - Eff	1.00	1.00		1.00		1.00		1.00		1.00		1.00	14.00			0.00
Loading: cBOD5 - Eff kg/d	2.021	1.802	<	4.778	<	3.341	<	1.982	<	1.466	<	1.102	<	1.079		1.200
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw mg/L	128.00	144.00		53.00		93.00		156.00		124.00		136.00		284.00		219.00
Raw: # of samples of BOD5 - Raw	1.00	1.00		1.00		2.00		1.00		1.00		1.00		1.00		2.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw mg/L	85.00	124.00		110.00		90.50		168.00		41.00		82.00		211.00		68.00
Raw: # of samples of TSS - Raw	1.00	1.00		1.00		2.00		1.00		1.00		1.00		2.00		1.00
Eff: Avg TSS - Eff mg/L	2.25	1.75		3.00		2.80		5.25		2.00		2.20		1.25		1.75
Eff: # of samples of TSS - Eff	4.00	4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00
Loading: TSS - Eff kg/d	2.273	1.577		7.167		4.677		5.203		1.466		1.213		0.674		1.050
Percent Removal: TSS - Raw %	97.35	98.59		97.27		96.91		96.88		95.12		97.32		99.41		97.43
Total Phosphorus: TP																
Raw: Avg TP - Raw mg/L	3.27	3.34		1.31		2.14		3.30		3.67		3.89		4.33		4.22
Raw: # of samples of TP - Raw	4.00	4.00		4.00		5.00		4.00		4.00		5.00		4.00		4.00
Eff: Avg TP - Eff mg/L	0.05	0.04	<	0.04	<	0.04		0.05		0.07		0.10		0.11	<	0.11
Eff: # of samples of TP - Eff	4.00	4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00
Loading: TP - Eff kg/d	0.051	0.036	<	0.084	<	0.067		0.050		0.051		0.057		0.053		0.065
Percent Removal: TP - Raw %	98.47	98.80		97.32		98.13		98.48		98.09		97.33		97.75		97.45
Nitrogen Series																
Raw: Avg TKN - Raw mg/L	26.10	34.20		11.70		22.95		32.50		36.30		27.90		41.50		35.10
Raw: # of samples of TKN - Raw	1.00	1.00		1.00		2.00		1.00		1.00		1.00		1.00		1.00
Eff: Avg TAN - Eff mg/L	<	0.10	<	0.10	<	0.10	<	0.10	<	0.10	<	0.10	<	0.10	<	0.10
Eff: # of samples of TAN - Eff	1.00	1.00		1.00		2.00		1.00		1.00		1.00		2.00		1.00
Loading: TAN - Eff kg/d	<	0.101	<	0.090	<	0.239	<	0.167	<	0.099	<	0.073	<	0.055	<	0.054
Eff: Avg NO3-N - Eff mg/L	21.10	24.20		24.40		16.95		24.30		29.10		38.20		39.20		32.70
Eff: # of samples of NO3-N - Eff	1.00	1.00		1.00		2.00		1.00		1.00		1.00		2.00		1.00
Eff: Avg NO2-N - Eff mg/L	<	0.03	<	0.11	<	0.03	<	0.03	<	0.03	<	0.03	<	0.03	<	0.03
Eff: # of samples of NO2-N - Eff	1.00	1.00		1.00		2.00		1.00		1.00		1.00		2.00		1.00
Disinfection																
Eff: GMD E. Coli MPN - Eff MPN	1.32	1.57		1.86		1.55		1.19		3.20		2.52		2.14		1.32
Eff: # of samples of E. Coli MPN - Eff	4.00	4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00

2025 Annual Performance Report

Appendix B

Sampling Schedules

2025 Sampling Calendar

ELMVALE WASTEWATER TREATMENT PLANT

Class II WWT Class II WWC - ECA #9513-B5WKV6 Issue Date: November 20, 2018

Org #5634, Works #110000169

Rev. 4 - 2024.11.29

JANUARY						
M	T	W	TH	F	St	Su
30-W	31	1	2	3	4	5
6	7	8-W;M;SL	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		

FEBRUARY						
M	T	W	TH	F	St	Su
					1	2
3	4	5-W;M;SL	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		

MARCH						
M	T	W	TH	F	St	Su
					1	2
3	4	5-W;M;SL	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						

APRIL						
M	T	W	TH	F	St	Su
	1	2-W;M;SL	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				

MAY						
M	T	W	TH	F	St	Su
			1	2	3	4
5	6	7-W;M;SL	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	

JUNE						
M	T	W	TH	F	St	Su
						1
2	3	4-W;M;SL	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						

As per ECA 9513-B5WKV6 , Section 9(d) i. Weekly mean once every week; ii. Monthly means once every month

Stat Holiday/Weekend

W=Weekly; M=Monthly; SL=Sludge

Sample Day

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

2025 Sampling Calendar

ELMVALE WASTEWATER TREATMENT PLANT

Class II WWT Class II WWC - ECA #9513-B5WKV6 Issue Date: November 20, 2018

Org #5634, Works #110000169

Rev. 4 - 2024.11.29

JULY						
M	T	W	TH	F	St	Su
	1	2-W;M;SL	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	31			

AUGUST						
M	T	W	TH	F	St	Su
				1	2	3
4	5	6-W;M;SL	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

SEPTEMBER						
M	T	W	TH	F	St	Su
1	2	3-W;M;SL	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					

OCTOBER						
M	T	W	TH	F	St	Su
		1-W;M;SL	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		

NOVEMBER						
M	T	W	TH	F	St	Su
					1	2
3	4	5-W;M;SL	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

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

As per ECA 9513-B5WKV6 , Section 9(d) i. Weekly mean once every week; ii. Monthly means once every month

Stat Holiday/Weekend

W=Weekly; M=Monthly; SL=Sludge

Sample Day

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

2026 Sampling Calendar

ELMVALE WASTEWATER TREATMENT PLANT

Class II WWT Class II WWC - ECA #9513-B5WKV6 Issue Date: November 20, 2018

Org #5634, Works #110000169

Rev. 0 - 2025.12.19

JANUARY						
M	T	W	TH	F	St	Su
			1	2	3	4
5	6-W;M;SL	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						
M	T	W	TH	F	St	Su
						1
2	3- W;M;SL	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						
M	T	W	TH	F	St	Su
						1
2	3- W;M;SL	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						
M	T	W	TH	F	St	Su
		1	2	3	4	5
6	7- W;M;SL	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						
M	T	W	TH	F	St	Su
				1	2	3
4	5- W;M;SL	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						
M	T	W	TH	F	St	Su
1	2- W;M;SL	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					

As per ECA 9513-B5WKV6 , Section 9(d) i. Weekly mean once every week; ii. Monthly means once every month

Stat Holiday/Weekend

Sample Day

W=Weekly; **M**=Monthly; **SL**=Sludge

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

2026 Sampling Calendar

ELMVALE WASTEWATER TREATMENT PLANT

Class II WWT Class II WWC - ECA #9513-B5WKV6 Issue Date: November 20, 2018

Org #5634, Works #110000169

Rev. 0 - 2025.12.19

JULY						
M	T	W	TH	F	St	Su
		1	2	3	4	5
6	7- W;M;SL	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						
M	T	W	TH	F	St	Su
					1	2
3	4- W;M;SL	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						
M	T	W	TH	F	St	Su
	1- W;M;SL	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						
M	T	W	TH	F	St	Su
			1	2	3	4
5	6- W;M;SL	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						
M	T	W	TH	F	St	Su
						1
2	3- W;M;SL	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						
M	T	W	TH	F	St	Su
	1- W;M;SL	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			

As per ECA 9513-B5WKV6 , Section 9(d) i. Weekly mean once every week; ii. Monthly means once every month

Stat Holiday/Weekend
Sample Day

W=Weekly; **M**=Monthly; **SL**=Sludge

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

2025 Annual Performance Report

Appendix C

Calibration Reports: Flow Meters



Plant operator: Flowmetrix

Device information

Location	Elmvale WWTP ID Influent
Device tag	Inlet
Module name	Promag L
Nominal diameter	DN200 / 8"
Device name	Promag 400
Order code	5L4C2H-D009/101
Serial number	NA0CD716000
Firmware version	02.00.01

Heartbeat
Technology

Calibration

Calibration factor	1.0689
Zero point	3

Verification information

Operating time (counter)	2364d21h27m37s
Date/time (manually recorded)	02.06.25 09:16
Verification ID	8

Overall verification result

 Passed	Details see next page
--	-----------------------

*Result of the complete device functionality test via Heartbeat Technology

Confirmation

Heartbeat Verification verifies the function of the flowmeter within the specified measuring tolerance, over the useful lifetime of the device, with a total test coverage > 94 %, and complies with the requirements for traceable verification according to DIN EN ISO 9001:2008 Section 7.6 a.

Notes

Date

Operator's signature

Inspector's signature

Plant operator: Flowmetrix

Device identification and verification identification

Serial number	NA0CD716000
Device tag	Inlet
Verification ID	8

Heartbeat
Technology

Sensor

	 Passed
Shot time symmetry	 Passed
Hold voltage symmetry	 Passed
Coil current loss	 Passed
Coil current stability	 Passed
Coil resistance	 Passed
Cable defect	 Passed
Cable defect	 Passed
Cable defect	 Passed

Sensor electronic module (ISEM)

	 Passed
External reference voltage	 Passed
Linearity of electrode measuring circuit	 Passed
Offset of electrode measuring circuit	 Passed

System status

	 Passed
--	--

I/O module

	 Passed
Input/output 1	 Passed
Input/output 2	 Not done
Input/output 3	 Not done

AS FOUND CERTIFICATION
FAIL

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA-North Simcoe	[MUT] MANUFACTURER	Milltronics
CONTACT	Michelle Neal	MODEL	Multiranger Plus
	Senior Operations Manager	CONVERTER SERIAL NUMBER	C26694/2/1
	1128 Flos Rd 10 E		
	Elmvale ON L0L 1P0	PLANT ID	Elmvale WWTP
	T: 705 715 1411	METER ID	Influent Flow
	E:mneal@ocwa.com	FIT ID	n/a
		CLIENT TAG	n/a
		OTHER	OCWA: 81217
VER. BY - FM	Charles Francisco	GPS COORDINATES	n/a
Quality Management Standards Information -		VERIFICATION DATE	June 2nd, 2025
Reference equipment and instrumentation used to		CAL. FREQUENCY	Annua;
conduct this verification test is found in our AC-QMS		CAL. DUE DATE	Jun-26
document at the time this test was conducted.			

PROGRAMMING PARAMETERS				TOTALIZER	
THROAT DIMENSION (DN)	inches	6	AS FOUND	n/a	M3
EMPTY DISTANCE	m	0.9719	AS LEFT	n/a	M3
MAX. HEAD	m	0.429	DIFFERENCE	n/a	M3
DEAD ZONE	m	0.543	TEST CRITERIA		
BLANKING DISTANCE	m	0.300	AS FOUND CERTIFICATION TEST	Yes	
MAX. FLOW	LPS	100.1	ALLOWABLE [%] ERROR	15	
F.S. RANGE - O/P	LPS	100.1	COMPONENTS TESTED		
Zero Offset	m	0			
			CONVERTER DISPLAY	yes	
			mA OUTPUT	yes	
			TOTALIZER	no	
			ACCURACY BASED ON [% o.r.]	yes	
Ultrasonic sensor installed to ensure full scale flow condition			ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.		

AS FOUND TEST RESULTS						
		89.6	56.8	30.0		% F.S. Range
		0.400	0.300	0.200		m
REF. FLOW RATE		89.621	56.886	29.976		LPS
MUT [Reading]		106.100	71.640	36.815		LPS
MUT [Difference]		16.479	14.754	6.839		LPS
MUT [% Error]		18.39	25.94	22.81		%
mA OUTPUT		18.330	13.096	8.793		mA
MUT [Reading]	min. 4.000 mA	20.157	15.433	10.143		mA
MUT [Difference]	max. 20.000 mA	1.827	2.337	1.350		mA
MUT [% Error]		9.97	17.85	15.35		%
TOTALIZER - REF. FLOW RATE						
TOTALIZER [MUT]						
TEST TIME						
CALC. TOTALIZER						
ERROR						

COMMENTS			QUALITY MANAGEMENT STANDARDS INFO.			RESULTS		
Note: Unable to complete verification as values are out from tolerance and programmed values needs to be changed, specifically Empty Distance.			[QMS] INFORMATION	IDENT.	ID #	TEST	AVG % o.r.	PASS FAIL
Unit reads 3 to 4 LPS when the flume is empty.			[REFERENCE] LEVEL	Sim. BOARD	Yes	DISPLAY	24.37	FAIL
Unit was not serviced on return trip as unit is not currently in use.			PROCESS METER	PM	0	mA OUTPUT	14.39	PASS
			STOP WATCH	SW	No	TOTALIZER	N/A	N/A

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

AS FOUND CERTIFICATION
PASS

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA-North Simcoe	[MUT] MANUFACTURER	Milltronics
CONTACT	Michelle Neal	MODEL	Multiranger Plus
	Senior Operations Manager	CONVERTER SERIAL NUMBER	C/28694/1/1
	1128 Flos Rd 10 E		
	Elmvale ON L0L 1P0		
	T: 705 715 1411	PLANT ID	Elmvale WWTP
	E:mneal@ocwa.com	METER ID	Final Effluent Flow Meter
		FIT ID	N/A
		CLIENT TAG	N/A
		OTHER	OCWA: 81229
		GPS COORDINATES	N/A
VER. BY - FM	Charles Francisco	VERIFICATION DATE	June 9th 2025
Quality Management Standards Information -		CAL. FREQUENCY	Annual
Reference equipment and instrumentation used to		CAL. DUE DATE	June 2026
conduct this verification test is found in our AC-QMS			
document at the time this test was conducted.			

PROGRAMMING PARAMETERS				TOTALIZER	
NOTCH ANGLE (φ)	inches	90	AS FOUND	n/a	M3
EMPTY DISTANCE, TX to notch	m	0.965	AS LEFT	n/a	M3
TRANSDUCER (TX), to sump flc	m	n/a	DIFFERENCE	n/a	M3
SUMP LEVEL, zero flow	m	n/a	TEST CRITERIA		
			AS FOUND CERTIFICATION TEST	Yes	
MAX. HEAD	m	0.350	ALLOWABLE [%] ERROR	15	
BLANKING DISTANCE	m	0.300	COMPONENTS TESTED		
DEAD ZONE	m	0.315			
MAX. FLOW	LPS	100.0	CONVERTER DISPLAY	yes	
F.S. RANGE - O/P	LPS	100.0	mA OUTPUT	yes	
			TOTALIZER	no	
			ACCURACY BASED ON [% o.r.]	No	
Ultrasonic sensor installed to ensure full scale flow condition			ERROR DOCUMENTED IN THIS REPORT: BASED ON % F.S.		

AS FOUND TEST RESULTS

		12.0	24.7	43.1	68.0	100.0	% F.S. Range
		0.150	0.200	0.250	0.300	0.350	m
REF. FLOW RATE		12.03	24.69	43.13	68.03	100.01	LPS
MUT [Reading]		11.94	25.17	42.58	69.29	100.30	LPS
MUT [Difference]		-0.09	0.48	-0.55	1.26	0.29	LPS
MUT [% Error]		-0.1	0.5	-0.5	1.3	0.3	%
mA OUTPUT		5.924	7.949	10.899	14.883	20.000	mA
MUT [Reading]	min. 4.000 mA	5.916	8.024	10.880	15.075	20.054	mA
MUT [Difference]	max. 20.000 mA	-0.008	0.075	-0.019	0.192	0.054	mA
MUT [% Error]		-0.04	0.37	-0.10	0.96	0.27	%
TOTALIZER - REF. FLOW RATE							
TOTALIZER [MUT]							
TEST TIME							
CALC. TOTALIZER							
ERROR							

COMMENTS

Note: Offset was changed from 10.31 to 0.56.

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] LEVEL	Sim. BOARD	yes
PROCESS METER	PM	0
STOP WATCH	SW	yes

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	0.37	PASS
mA OUTPUT	0.29	PASS
TOTALIZER	N/A	N/A

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

AS FOUND CERTIFICATION
FORWARD FLOW DIRECTION
PASS

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA-North Simcoe	[MUT] MANUFACTURER	ROSEMOUNT
CONTACT	Michelle Neal	MODEL	8750W
	Senior Operations Manager	CONVERTER SERIAL NUMBER	21181946
	1128 Flos Rd 10 E		
	Elmvale ON L0L 1P0	PLANT ID	Discharge Flow Meter
	T: 705 715 1411	METER ID	n/a
	E:mneal@ocwa.com	FIT ID	n/a
		CLIENT TAG	m/a
		OTHER	OCWA: 345553
		GPS COORDINATES	n/a
VER. BY - FM Charles Francisco		VERIFICATION DATE	June 9th, 2025
Quality Management Standards Information -		CAL. FREQUENCY	Annual
Reference equipment and instrumentation used to		CAL. DUE DATE	Jun-26
conduct this verification test is found in our AC-			
QMS document at the time this test was conducted.			

PROGRAMMING PARAMETERS			FORWARD TOTALIZER INFORMATION		
DIAMETER (DN)	mm	150	AS FOUND	547251	M3
F.S. FLOW - MAG	LPS	223.7	AS LEFT	547399	M3
F.S. RANGE - O/P	LPS	150.000	DIFFERENCE	148	M3
TUBE CAL. FACTOR		0840805508277005	TEST CRITERIA		
			AS FOUND CERTIFICATION TEST		Yes
			FORWARD FLOW DIRECTION		Yes
			ALLOWABLE [%] ERROR		5
			COMPONENTS TESTED		
			CONVERTER DISPLAY		yes
			mA OUTPUT		yes
			TOTALIZER		yes
			ACCURACY BASED ON [% o.r.]		yes
VERIFICATOR CAL. FACTOR		1000015010000000	ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.		

FLOW TUBE SIMULATION		0	3	10	30	ft/s
DISPLAY		0.000	3.000	10.000	30.000	ft/s
MUT Reading		0.000	3.000	10.010	30.020	ft/s
MUT % Error		n/a	0.00	0.10	0.07	%
mA OUTPUT		4.000	5.600	9.333	20.000	mA
MUT Reading	4 mA	3.995	5.596	9.331	20.007	mA
MUT % Error	20 mA	-0.12	-0.07	-0.02	0.04	%
TOTALIZER					30.00	ft/s
TEST Accumulation					1864.00	ft
TIME					61.71	seconds
CALC. Velocity					30.21	ft/s
% Error					0.69	%
QUALITY MANAGEMENT STANDARDS INFO.						
[QMS] INFORMATION		IDENT.	ID #			
[REFERENCE] FTS		ROS	1			
PROCESS METER		PM	0			
ANALOG METER		AM	N/A			
STOP WATCH		SW	Yes			

*All values are for "As Found" values.

COMMENTS	RESULTS		
	TEST	AVG % o.r.	PASS FAIL
	DISPLAY	0.06	PASS
	mA OUTPUT	-0.02	PASS
	TOTALIZER	0.69	PASS

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



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

PORTABLE COLORIMETER VERIFICATION REPORT

Customer Name	OCWA-Georgian Bay	Address	3168 Dobson Rd, Springwater, ON, L4M 4S4
Plant Name	N/A		
Location	Sapre	Date	July 23, 2025
OCWA ID	345550	Report No	CO1643-2507-22
Device Discription	Pocket Colorimeter	Job No	CO1643-2507

Device Information

Instrument Make:	Hach
Model/Part No:	DR900
Serial No:	221446601051

Calibration/Verification Test Details

Standard Solution	Calculated Value (ppm)	UUT Display (ppm)	Deviation (ppm)
Blank(0.00)	0.00	0.00	0.00
STD 1(0.23±0.09)	0.23	0.20	-0.03
STD 2(0.92±0.10)	0.92	0.88	-0.04
STD 3(1.60±0.14)	1.60	1.55	-0.05

Information of Device/Instrument use for Verification/Calibration

Device Discription:	DPD-Chlorine LR Spec Check Secondary Standard Kit		
Make:	Hach		
Lot No:	A4205		
Overall Test Result:	☒ Passed	☐ Fail	☐ Not Verified

Notes: Device is working as per specification. Verification Test Passed

Service Technician :	Sanket Trada	Stamp/Signature	
Printed Date:	July 23, 2025		

End of Report

Version: 20-01

2025 Annual Performance Report

Appendix D

Environmental Incident Reports

Ontario Clean Water Agency Environmental Incident Report

Facility ID: 5634 EIncidentReport

Facility Name: Elmvale Wastewater Treatment Plant

Address: 1128 Flos Rd. 10 East

City: Elmvale

Province: Ontario

Postal Code: L0L 1P0

Date of Occurrence: 04/29/2025

Time of Occurrence: 07:28:00 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?

- | | |
|--|--|
| ☐ Chlorine | ☐ Oil/Diesel/Gas |
| ☐ Sodium Hypochlorite | ☒ Untreated or partly treated sewage |
| ☐ Calcium Chloride | ☐ Odours |
| ☐ Aluminum Compounds (Specify in Other) | ☐ Water |
| ☐ Arsenic | ☐ Iron Coagulants |
| ☐ Fluoride | |

Other: _____

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

If a liquid, approximately what quantity was released?: 43000 Litres

If a gas, approximately what quantity was released?: _____

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

What was the source of release?:

Weather Event - severe thunderstorms/high winds resulted in power outage due to fallen tree on Hydro lines. Hydro crews working on the 10th concession west of HWY 27. Power phasing in and out resulted in transfer switch transferring from backup power to neutral.

Where did the release go?:

Wye River

If it entered a watercourse: ☒ Yes ☐ No

If it went off site: ☒ Yes ☐ No

Duration of the release?: 60 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 responded, generator was running, but no power to the equipment. Hydro appeared to be phasing, therefore UV did not have power for 1hr.
Operator switched off the main breaker to isolate the utility power from the plant. Plant fully running on generator. Operator confirmed UV working properly on generator power.
2250 hrs power was restored and switched back to utility power. Operator confirmed plant returned to normal operations.
Samples were collected as per the ECA and will be sent to the lab to be analyzed.

What actions have been taken to remediate the incident?

Sample results to be submitted to applicable parties once lab results are made available.

Was this a reportable spill or discharge?: ☒ Yes ☐ No

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

April 29, 2025 @ 1220 hrs

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

If "Yes", which office/location and who was the contact?: Simcoe Muskoka District Health Unit

Was it reported to MOE SAC?: ☒ Yes ☐ No

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

April 29, 2025 @ 1016 hrs

Was it reported to Municipality?: ☒ Yes ☐ No

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

April 29, 2025 @ 1035 hrs

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: Caitlin Bahen 05/01/2025 01:13:18 PM

Comments:

Event: Partial Bypass - UV
Facility: Elmvale Wastewater Treatment Plant
Works: 110000169
SAC Incident #: 1-O6DP5K
Address: 1128 Flos Rd 10 E, Elmvale, Ontario
Date & Time of Start: April 29, 2025 at 1928 hrs
Date & Time of End: April 29, 2025 at 2028 hrs
Duration: 1 hr
Volume: ~43m³
Discharge Location: Wye River

Incident Description

" Weather Event - severe thunderstorms/high winds resulted in power outage due to fallen tree on Hydro lines. Hydro crews working on the 10th concession west of HWY 27. Power phasing in and out resulted in transfer switch transferring from backup power to neutral.

" Due to the power outage raw flow data loss occurred from 1928 hrs on April 29, 2025 until 1138 hrs on April 30, 2025. Data loss also occurred for the effluent flow between 1928 hrs and 2028 hrs on April 29th.

Actions Taken to Control Incident

" Operator responded, generator was running, but no power to the equipment. Hydro appeared to be phasing, therefore UV did not have power for 1hr.

" Operator switched off the main breaker to isolate the utility power from the plant. Plant fully running on generator. Operator confirmed UV working properly on generator power.

" 2250 hrs, power was restored and switched back to utility power. Operator confirmed plant returned to normal operations.

" Samples were collected as per the ECA and will be sent to the lab to be

analyzed.

Reporting/Notification to SAC/Health Unit/MECP

April 30th 2025

" 1016 hrs OCWA PCT (Caitlin Bahen) verbally notified SAC (Grace Sutcliffe), of the by-pass. No further actions required.

" 1035 hrs OCWA SOM (Michelle Neal) notified the Township of Springwater of the by-pass. Township of Springwater handed out notices to those properties which have a close proximity to the Wye River as a precaution.

" 1102 hrs OCWA PCT (Caitlin Bahen) notified MECP Inspector Mark Bailey of the by-pass. No further actions required.

" 1220 hrs OCWA PCT (Caitlin Bahen) notified the SMDHU (PHI, Sylvia Thompson-Nicholson) of the by-pass. No further actions required.

Corrective Actions

" Sample results to be submitted to applicable parties once lab results are made available.