2024 ANNUAL SEWAGE REPORT

GRAND VALLEY WASTEWATER TREATMENT PLANT

For the period of
January 1st, 2024 to December 31st, 2024

Prepared for The Town of Grand Valley by the Ontario Clean Water Agency

Town of GRAND VALLEY

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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1. System Description

The Grand Valley Wastewater Treatment Plant (WWTP) is an extended aeration plant with tertiary treatment and is located at 18 Watson Road in Grand Valley, Ontario. The WWTP and its collection system are owned by the Town of Grand Valley and the Operating Authority is the Ontario Clean Water Agency (OCWA). As per ECA 9611-CFVLRG, the plant's rated capacity is 1,555 m^3/d and its peak capacity is 5,300 m^3/d. The major process units consist of inlet works, preliminary treatment consisting of screening and grit removal, influent flow measurement, secondary treatment systems consisting of biological treatment in the aerations tanks, secondary sedimentation in two clarifiers, and tertiary treatment consisting of a sand filtration system, phosphorus removal and UV disinfection. Sludge is managed through sludge digestion in primary and secondary digesters and stored in one sludge storage tank prior to haulage. The WWTP discharges the treated effluent via its outfall into the Grand River.

An overview of Grand Valley Wastewater Treatment Plant can be found in the following table:

Table 1. Grand Valley Wastewater Treatment Plant Overview

Facility Name	Grand Valley Wastewater Treatment Plant
Facility Type	Extended Air STP with Tertiary Treatment
Plant Classification	WWT II, WWC II
Works Number	110000301
Design Capacity	1,555 m^3/day
Peak Capacity	5,300 m^3/day
Receiving Water	Grand River
Environmental Compliance Approval	9611-CFVLRG, Issued July 27, 2022

2. Monitoring Data Influent

As per Section 11(4)(a) of ECA 9611-CFVLRG *a summary and interpretation of all Influent, Imported Sewage monitoring data, and a review of the historical trend of the sewage characteristics and flow rates* is required.

2.1 Influent ECA Monitoring Program

The following tables (Table 2 and Table 3) outline the influent monitoring program at the Grand Valley 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. These parameters were analyzed by an accredited analytical laboratory (SGS Canada Inc., Lakefield, Ontario). The sampling frequencies meet the requirements set out in Schedule D of ECA 9611-CFVLRG.

Table 2. Influent (Raw Sewage) Water Quality Monitoring Program and Sampling Frequencies- *as per (ECA 9611-CFVLRG), Schedule D*

Parameter	Sample Type	Minimum Frequency
BOD_5[2A]	24 hour composite	Weekly
Total Suspended Solids[2A]	24 hour composite	Weekly

Total Phosphorous[2A]	24 hour composite	Weekly
Total Kjeldahl Nitrogen[2A]	24 hour composite	Weekly

[2A]Refer to the Appendix A 2023 PAR for monthly sample results.

Table 3. Imported Sewage (Receiving Station) Monitoring Program and Sampling Frequencies- *as per (ECA 9611-CFVLRG), Schedule D*

Parameter	Sample Type	Minimum Frequency
BOD_5	Grab	Monthly as occurs
Total Suspended Solids	Grab	Monthly as occurs
Total Phosphorus	Grab	Monthly as occurs
Total Kjeldahl Nitrogen	Grab	Monthly as occurs

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

The following parameters in Table 4 are not reportable as they do not have limits or objectives but are monitored on a regular basis (see Section 2.1 for sampling frequency) as required by ECA 9611-CFVLRG. Table 4 summarizes the monitoring data for the reporting period.

Table 4. Raw Sewage (Influent) Quality Analysis for 2024

Parameter	Average (mg/L)	Minimum (mg/L)	Maximum (mg/L)
BOD_5[4A]	142.94	90.25	208.00
Total Suspended Solids[4A]	152.98	111.25	250.80
Total Phosphorous[4A]	2.38	1.62	4.60
Total Kjeldahl Nitrogen[4A]	21.09	15.76	25.84

[4A]Refer to Appendix A 2024 PAR for monthly sample results.

Influent Laboratory analysis for the reporting year averaged a Biochemical Oxygen Demand (BOD_5) annual concentration of 142.94 mg/L, a Total Suspended Solids (TSS) concentration of 152.98 mg/L, a Total Phosphorus (TP) concentration of 2.38 mg/L and a Total Kjeldahl Nitrogen concentration of 21.09 mg/L. When comparing the data to 2023 trends, all parameter concentrations are lower in 2024 than in 2023. The average concentration of BOD_5 in 2023 was 150.61 mg/L (7.67 mg/L lower in 2024). In 2023 TSS annual average concentration was 169.81 mg/L (16.83 mg/L lower in 2024). In 2023 TP annual average concentration was 2.41 mg/L (0.03 mg/L lower in 2024) and TKN annual average concentration in 2023 was 22.56 mg/L (1.47 mg/L lower in 2024).

Imported Sewage Quality:

The following parameters in Table 5 are not reportable as they do not have limits or objectives but are monitored on a regular basis (see Section 2.1 for sampling frequency) as required by ECA 9611-CFVLRG. Table 5 summarizes the monitoring data for the reporting period.

Table 5. Imported Raw Sewage Quality Analysis for 2024

Parameter	Average (mg/L)	Minimum (mg/L)	Maximum (mg/L)
BOD_5	2584.23	359.00	5150.00
Total Suspended Solids	9053.46	325.00	36700.00
Total Phosphorous	53.69	5.80	268.00
Total Kjeldahl Nitrogen	325.77	30.00	1320.00

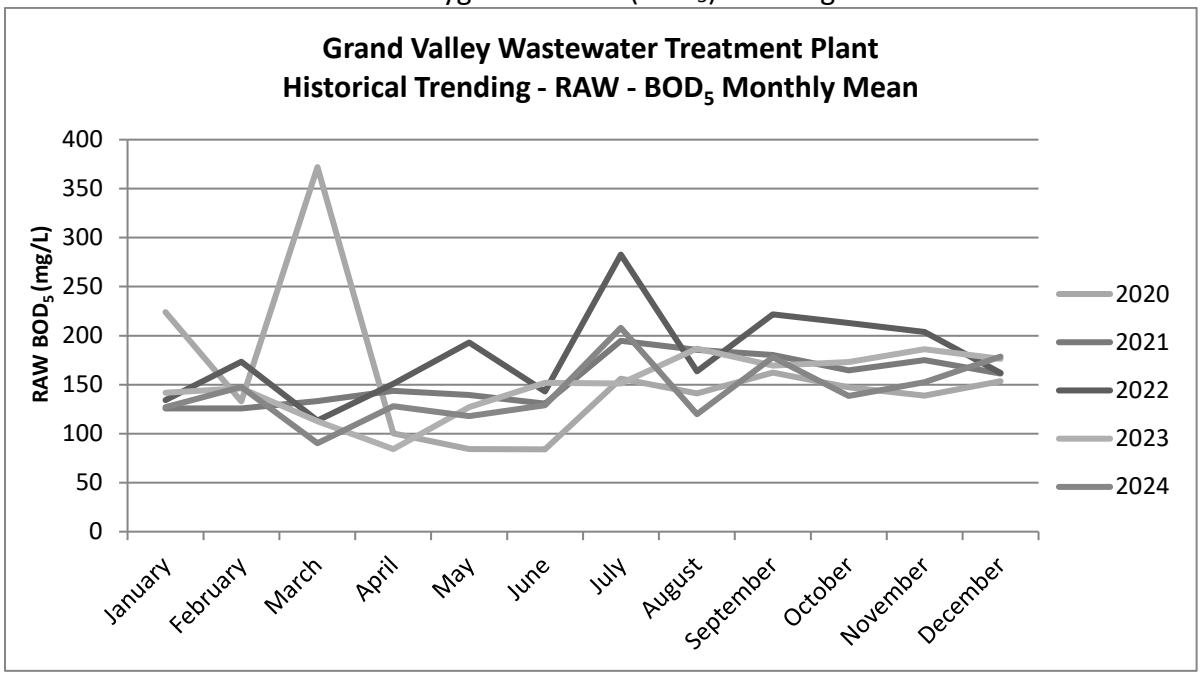
Laboratory analysis for the reporting year for imported sewage averaged a Biochemical Oxygen Demand (BOD_5) annual concentration of 2584.23 mg/L, a Total Suspended Solids (TSS) concentration of 9053.46 mg/L, a Total Phosphorus (TP) concentration of 53.69 mg/L and a Total Kjeldahl Nitrogen concentration of 325.77 mg/L. When comparing the data to 2023 trends all parameter concentrations are lower in 2024 than in 2023. The average concentration of BOD_5 in 2023 was 4260.00 mg/L (1675.77 mg/L lower in 2024). In 2023, TSS annual average concentration was 13795.45 mg/L (4741.99 mg/L lower in 2024). In 2023, TP annual average concentration was 81.12 mg/L (27.43 mg/L lower in 2024) and TKN annual average concentration was 478.77 mg/L (153 mg/L lower in 2024).

2.3 Raw Sewage (Influent) Characteristics and Influent Flowrates: Review of Historical Trends

Sewage Characteristics

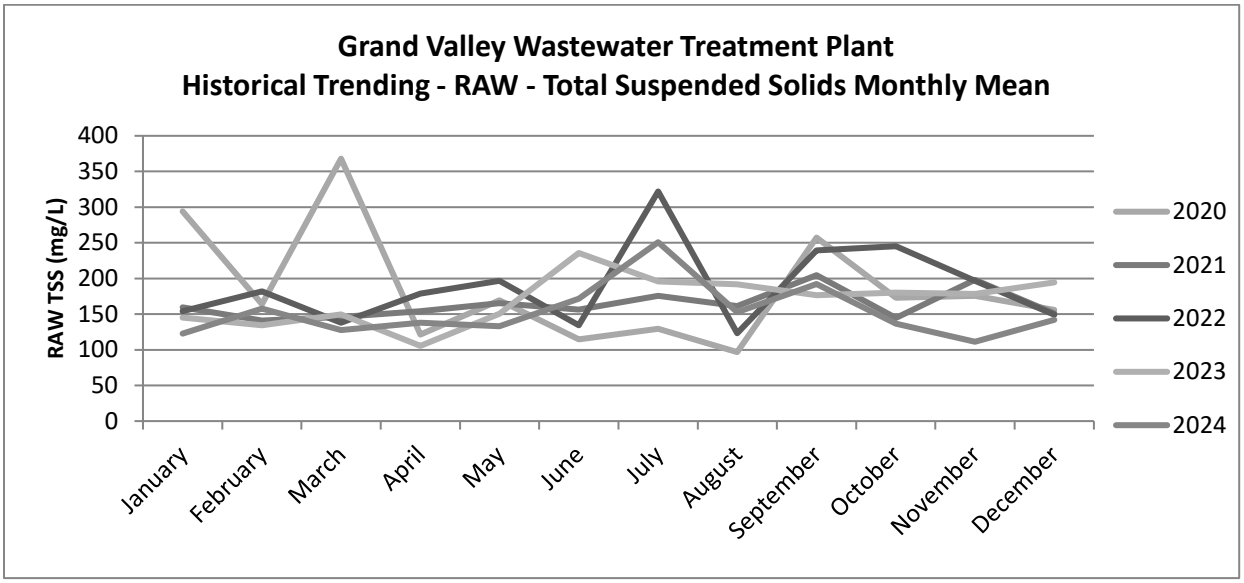
The below graph shows historical raw Biochemical Oxygen Demand (BOD_5) trending from 2020 to 2024. A review of the trends from the last 5 years for BOD_5 shows that the average BOD_5 concentration in the raw sewage has fluctuated year over year. A slightly lower BOD_5 loading was observed in 2024 comparatively to previous years.

Figure 1. Historical Raw Biochemical Oxygen Demand (BOD_5) trending from 2020 to 2024



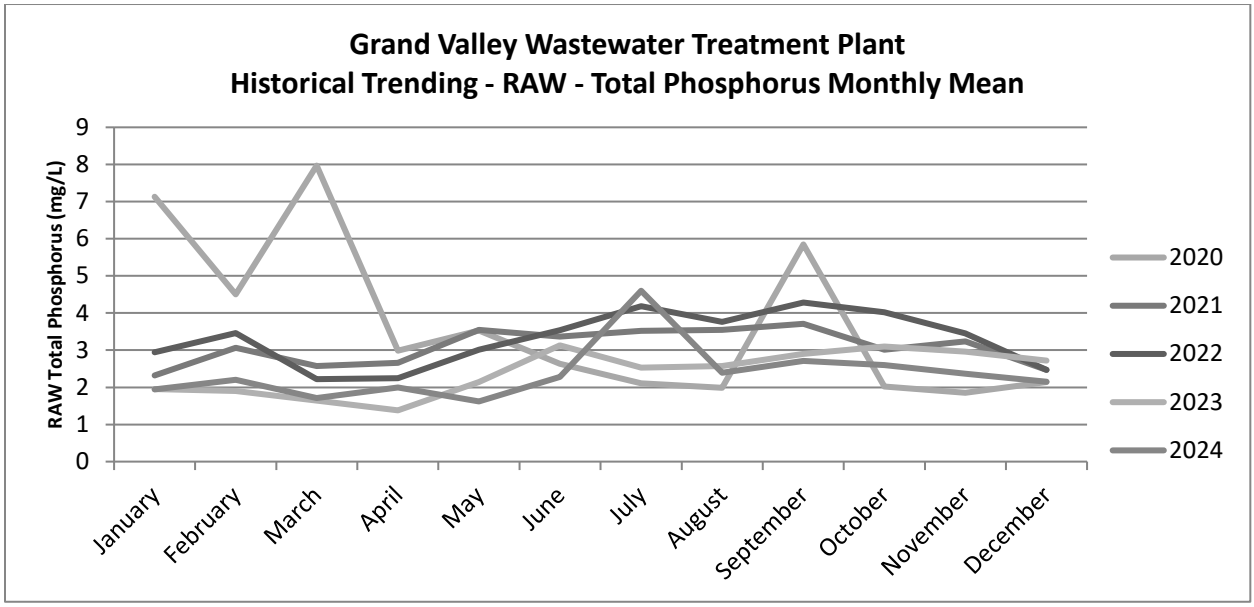
The below graph shows the historical raw Total Suspended Solids trending from 2020 to 2024. A review of the current 2024 trends versus the last 5 years has shown consistency in loadings of Total Suspended Solids for the majority of the years.

Figure 2. Historical Raw Total Suspended Solids trending from 2020 to 2024



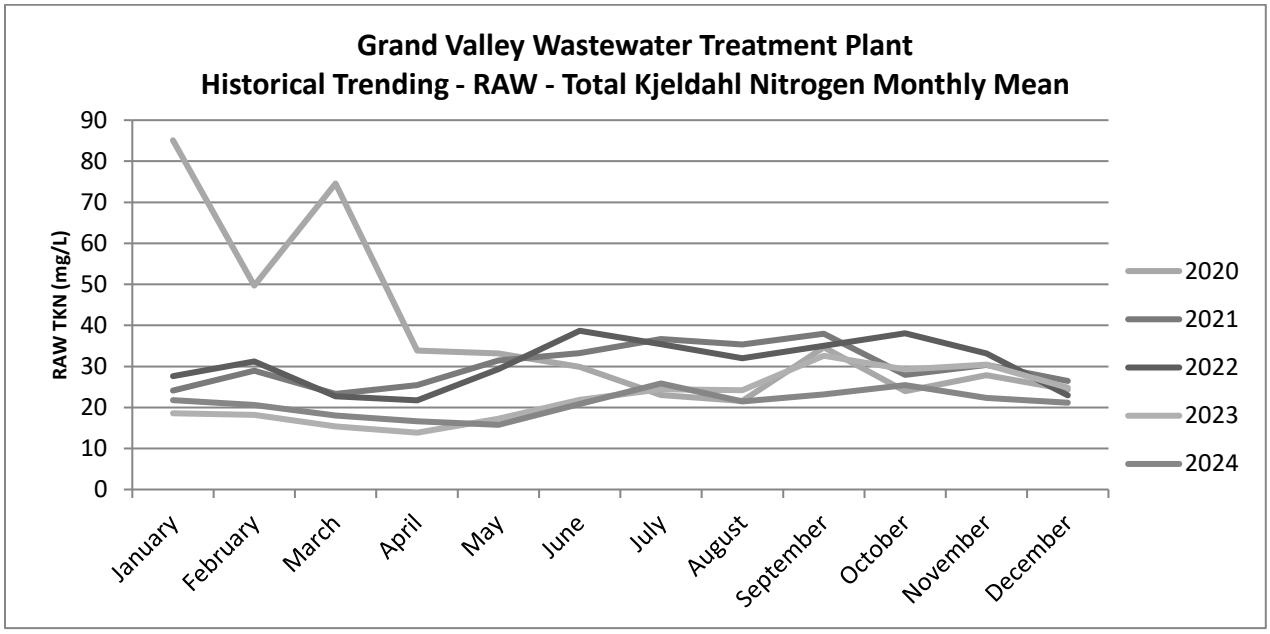
The below graph shows the historical raw Total Phosphorus trending from 2020 to 2024. A review of the current 2024 trends versus the last 5 years has shown a continued slight decrease in concentrations of total phosphorus for the majority of the year.

Figure 3. Historical Raw Total Phosphorus trending from 2020 to 2024



The below graph shows the historical raw Total Kjeldahl Nitrogen trending from 2020 to 2024. A review of the current 2024 trends versus the last 5 years shows a continued decrease in TKN concentrations year over year.

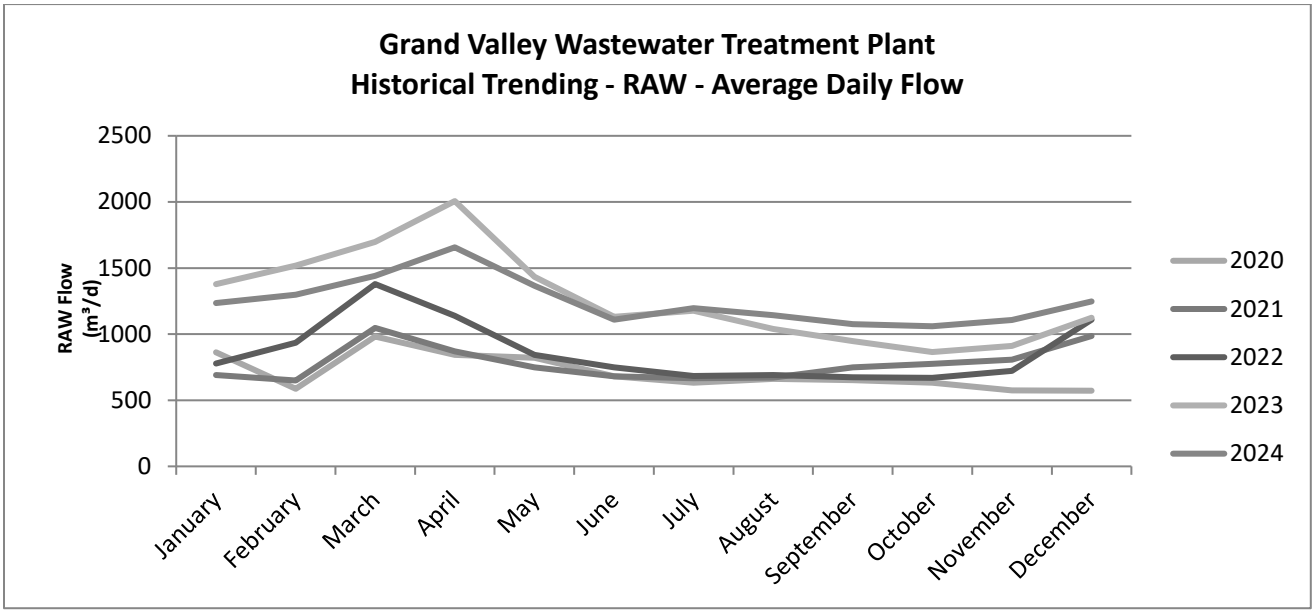
Figure 4. Historical Raw Total Kjeldahl Nitrogen trending from 2020 to 2024



Influent Flow

The below graph shows historical raw sewage flow trending from 2020 to 2024. The graph shows that the average daily flows increased in 2024. There is a consistent peak in the months of March and April, which would represent warmer temperatures resulting in snow melt and seasonal precipitation.

Figure 5. Historical Raw Flow Trending from 2020 to 2024



The total raw sewage volume of wastewater treated in 2024 was 455,520.60 m^3. The annual average daily flow of raw sewage was 1,244.59 m^3/day, which represents 80.04 % of the design rated capacity (1,555 m^3/day). The maximum peak flow of 2,331.40 m^3/day occurred on April 14, 2024 due to higher precipitation and snowmelt, which was under the designed peak flow of 5,300 m^3/day. This represents a peak flow of 1.5 times the rated capacity. The wastewater treatment plant operated within the rated capacity 88.22% of the time (332 out of 365 days of the year).

3. Effluent Monitoring

As per Section 11(4)(b) of ECA 9611-CFVLRG, *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* is required.

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

Final effluent is sampled on a regular basis. The following table outlines the monitoring program at the Grand Valley 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. The sampling frequencies meet the requirements set out in Schedule D of ECA 9611-CFVLRG.

Table 6. Final Effluent Monitoring Program – *as per Schedule D of ECA 9611-CFVLRG.*

Parameters	Sample Type	Minimum Frequency
$CBOD_5$[6A]	24-hour Composite	Weekly
Total Suspended Solids[6A]	24-hour Composite	Weekly
Total Phosphorous[6A]	24-hour Composite	Weekly
Total Ammonia Nitrogen[6A]	24-hour Composite	Weekly
E. Coli[6A]	Grab	Weekly
pH	Grab/Analyzer/Probe	Weekly
Temperature	Grab/Analyzer/Probe	Weekly
Un-ionized Ammonia	As Calculated	Weekly

[6A]Refer to the Appendix A PAR for monthly sample results.

3.2 Effluent ECA Objectives and Limits

The following tables outlines the final effluent objectives, limits and loadings at the Grand Valley 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, concertation limits for $CBOD_5$, TSS, TP, and TAN 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 are

reportable based on a Monthly Average Daily Effluent Loading. Any exceedance with the limits found in Table 8 constitutes a non-compliance with ECA 9611-CFVLRG.

Table 7. Final Effluent Design Objectives- *as per Schedule B of ECA 9611-CFVLRG*

Effluent Parameter	Monthly Average Effluent Concentration Objective (mg/L)
$CBOD_5$	8.00
Total Suspended Solids	8.00
Total Phosphorous	0.11
Total Ammonia Nitrogen Dec 01 to Mar 31 Apr 01 to May 31 June 01 to Sept 30 Oct 01 to Nov 30	 3.00 0.80 0.50 0.80
E.Coli	100 CFU/100 mL
pH	between 6.5 - 8.5 inclusive

Table 8. Final Effluent Design Limits- *as per Schedule C of ECA 9611-CFVLRG*

Effluent Parameter	Monthly Average Effluent Concentration Limit (mg/L)	Monthly Average Effluent Loading Limit (kg/day)
$CBOD_5$	10.0	15.6
Total Suspended Solids	10.0	15.6
Total Phosphorous	0.135	0.21
Total Ammonia Nitrogen Dec 01 to March 31 Apr 01 to May 31 June 01 to Sep 30 Oct 01 to Nov 30	 4.0 1.0 0.7 1.0	 6.22 1.56 1.09 1.56
E.Coli[8A]	200 CFU/100 mL	-
pH[8B]	Between 6.0 - 9.5 inclusive	-

[8A]As per ECA 9611-CFVLRG Schedule C, E.Coli concentration is reportable based on a Monthly Geometric Mean Density of Colony Forming Units (CFU)/100 mL

[8B]As per ECA 9611-CFVLRG Schedule C, pH is reportable based on a Single Sample result, where the limit is 6.0 - 9.5 inclusive, at all times.

3.3 Effluent Monitoring Data: Summary and Interpretation of Reporting Year and Comparison to Objectives and Effluent Limit

Analytical and monitoring data for the Grand Valley Wastewater Treatment Facility is stored in OCWAs data management system (WISKI). Annual and monthly averages for flows, $CBOD_5$, Suspended Solids, Total Phosphorous, Nitrogen-series and *E.coli* can be found in Appendix A. A comparison of analytical data from effluent samples to the effluent objectives and effluent limits shown in tables 9 to 17.

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 2024 reporting period:

- CBOD5 monthly average daily effluent concentration
- CBOD5 monthly average daily effluent loading
- TSS monthly average daily effluent concentration
- TSS monthly average daily effluent loading
- TP monthly average daily effluent concentration
- TP monthly average daily effluent loading
- TAN monthly average daily effluent concentrations
- TAN monthly average daily effluent loading
- E.coli monthly geometric mean

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 is not reportable as a non-compliance.

The following tables summarize monthly and annual data in comparison to the applicable ECA objectives and limits for the reporting period. Refer to *Appendix A* 2024 Annual Performance Report for a more detailed description of monthly sample results.

Table 9. 2024 Effluent Sampling Results: $CBOD_5$ and $CBOD_5$ Loading Concentrations[9A]

	Monthly Average Concentration (mg/L)	Within Objectives (8.0 mg/L)	Within Limits (10.0 mg/L)	Monthly Average Loading (kg/d)	Within Objectives (kg/d)	Within Limits (15.60 kg/d)
January	<2.20	Yes	Yes	<2.78	n/a	Yes
February	<2.00	Yes	Yes	<2.58	n/a	Yes
March	<2.00	Yes	Yes	<2.93	n/a	Yes
April	<2.00	Yes	Yes	<3.38	n/a	Yes
May	<2.00	Yes	Yes	<2.90	n/a	Yes
June	<2.00	Yes	Yes	<2.18	n/a	Yes
July	<2.00	Yes	Yes	<2.17	n/a	Yes
August	<2.00	Yes	Yes	<2.05	n/a	Yes
September	<2.00	Yes	Yes	<1.92	n/a	Yes
October	<2.00	Yes	Yes	<1.93	n/a	Yes
November	<2.50	Yes	Yes	<2.68	n/a	Yes
December	<2.40	Yes	Yes	<2.84	n/a	Yes

[9A]As per the ECA, $CBOD_5$ Concentration Averaging Calculator is a Monthly Average Effluent Concentration

[9A]As per the ECA, $CBOD_5$ Loading Limits Concentration Averaging Calculator is a Monthly Average Daily Effluent Loading

Table 10. 2024 Effluent Sampling Results: TSS and TSS Loading Concentrations[10A]

	Monthly Average Concentration (mg/L)	Within Objectives (8.0 mg/L)	Within Limits (10.0 mg/L)	Monthly Average Loading (kg/d)	Within Objectives (kg/d)	Within Limits (15.60 kg/d)
January	<2.20	Yes	Yes	<2.78	n/a	Yes
February	<2.50	Yes	Yes	<3.23	n/a	Yes
March	<3.50	Yes	Yes	<5.12	n/a	Yes
April	<3.50	Yes	Yes	<5.91	n/a	Yes
May	3.00	Yes	Yes	4.35	n/a	Yes
June	3.25	Yes	Yes	3.55	n/a	Yes
July	<2.20	Yes	Yes	<2.38	n/a	Yes
August	<2.50	Yes	Yes	<2.57	n/a	Yes
September	<2.00	Yes	Yes	<1.92	n/a	Yes
October	<2.20	Yes	Yes	<2.12	n/a	Yes
November	<2.25	Yes	Yes	<2.41	n/a	Yes
December	<2.40	Yes	Yes	<2.84	n/a	Yes

[10A]As per the ECA, TSS Concentration Averaging Calculator is a Monthly Average Effluent Concentration

[10A]As per the ECA, TSS Loading Limits Concentration Averaging Calculator is a Monthly Average Daily Effluent Loading

Table 11. 2024 Effluent Sampling Results: TP and TP Loading Concentrations[11A]

	Monthly Average Concentration (mg/L)	Within Objectives (0.11 mg/L)	Within Limits (0.135 mg/L)	Monthly Average Loading (kg/d)	Within Objectives (kg/d)	Within Limits (0.21 kg/d)
January	<0.03	Yes	Yes	<0.04	n/a	Yes
February	<0.03	Yes	Yes	<0.04	n/a	Yes
March	<0.04	Yes	Yes	<0.06	n/a	Yes
April	<0.03	Yes	Yes	<0.05	n/a	Yes
May	<0.04	Yes	Yes	<0.06	n/a	Yes
June	<0.04	Yes	Yes	<0.04	n/a	Yes
July	<0.03	Yes	Yes	<0.04	n/a	Yes
August	<0.04	Yes	Yes	<0.04	n/a	Yes
September	<0.03	Yes	Yes	<0.03	n/a	Yes
October	<0.03	Yes	Yes	<0.03	n/a	Yes
November	<0.03	Yes	Yes	<0.04	n/a	Yes
December	<0.04	Yes	Yes	<0.05	n/a	Yes

[11A]As per the ECA, TP Concentration Averaging Calculator is a Monthly Average Effluent Concentration

[11A]As per the ECA, TP Loading Limits Concentration Averaging Calculator is a Monthly Average Daily Effluent Loading

Table 12. 2024 Effluent Sampling Results: TAN and TAN Loading Concentrations[12A]

Month	Monthly Average Concentration (mg/L)	Within Monthly Objective? (3.0 mg/L Dec 1-Mar 31) (0.8 mg/L April 1-May 31) (0.5 mg/L June 1-Sept 30) (0.8 mg/L Oct 1- Nov 30)	Within Monthly Compliance Limit? (4.0 mg/L Dec 1-Mar 31) (1.0 mg/L April 1-May 31) (0.7 mg/L June 1-Sept 30) (1.0 mg/L Oct 1- Nov 30)	Monthly Loading Limit (kg/d)	Within Monthly Compliance Loading Limit? (6.22 kg/d Dec 1-Mar 31) (1.56 kg/d Apr 1-May 31) (1.09 kg/d Jun 1-Sep 30) (1.0 mg/L Oct 1- Nov 30)
January	<0.10	Yes	Yes	<0.13	Yes
February	<0.10	Yes	Yes	<0.13	Yes
March	<0.10	Yes	Yes	<0.15	Yes
April	<0.13	Yes	Yes	<0.21	Yes
May	<0.10	Yes	Yes	<0.15	Yes
June	<0.10	Yes	Yes	<0.11	Yes
July	<0.10	Yes	Yes	<0.11	Yes
August	<0.10	Yes	Yes	<0.10	Yes
September	<0.10	Yes	Yes	<0.10	Yes
October	<0.10	Yes	Yes	<0.10	Yes
November	<0.10	Yes	Yes	<0.11	Yes
December	<0.10	Yes	Yes	<0.12	Yes

[12A]As per the ECA, TAN Concentration Averaging Calculator is a Monthly Average Effluent Concentration

[12A]As per the ECA, TAN Loading Limits Concentration Averaging Calculator is a Monthly Average Daily Effluent Loading

Table 13. 2024 Effluent Sampling Results: *E.Coli* Concentrations[13A]

	Monthly Geometric Mean Density (CFU/100 mL)	Within Objectives (100 CFU/100 mL)	Within Limits (200 CFU/100 mL)
January	2.00	Yes	Yes
February	1.68	Yes	Yes
March	2.00	Yes	Yes
April	2.00	Yes	Yes
May	2.00	Yes	Yes
June	1.68	Yes	Yes
July	2.00	Yes	Yes
August	1.68	Yes	Yes
September	1.68	Yes	Yes
October	1.52	Yes	Yes
November	1.68	Yes	Yes
December	1.52	Yes	Yes

[13A]As per the ECA, E.Coli Concentration Averaging Calculator is a Monthly Geometric Mean Density

Table 14. 2024 Effluent Sampling Results: pH[14A]

	pH			
	pH Monthly Minimum	pH Monthly Maximum	Within Objectives (6.5-8.5)	Within Limits (6.0-9.5)
January	7.12	7.44	Yes	Yes
February	7.33	7.44	Yes	Yes
March	7.45	7.59	Yes	Yes
April	7.25	7.71	Yes	Yes
May	7.39	7.48	Yes	Yes
June	7.38	7.41	Yes	Yes
July	7.31	7.67	Yes	Yes
August	7.39	7.62	Yes	Yes
September	7.41	7.54	Yes	Yes
October	7.39	7.51	Yes	Yes
November	7.46	7.58	Yes	Yes
December	7.31	7.59	Yes	Yes

[14A] As per the ECA, pH is based on a single sample result, inclusive, at all times

Table 15. 2024 Effluent Sampling: Minimum and Maximum Temperature

	Temperature[15A]	
	Monthly Minimum (^{o}C)	Monthly Maximum (^{o}C)
January	11.10	12.50
February	4.90	12.20
March	10.70	14.10
April	11.80	12.40
May	13.30	15.70
June	15.40	17.90
July	17.60	19.90
August	18.10	20.00
September	9.20	19.50
October	16.70	18.90
November	14.10	17.10
December	12.50	13.90

[15A] Required as per Schedule D Monitoring Program- there are no objectives or limits listed within the ECA

Table 16. 2024 Effluent Sampling: Minimum and Maximum of Un-Ionized Ammonia

	Un-Ionized Ammonia[16A]		
	Monthly Average	Monthly Minimum	Monthly Maximum
January	<0.001	<0.001	<0.001
February	<0.001	<0.001	<0.001
March	<0.001	<0.001	<0.001
April	<0.002	<0.001	0.003
May	<0.001	<0.001	0.002
June	<0.001	<0.001	<0.001
July	<0.001	<0.001	<0.001
August	<0.001	<0.001	0.001
September	<0.001	<0.001	<0.001
October	<0.001	<0.001	<0.001
November	<0.001	<0.001	<0.001
December	<0.001	<0.001	<0.001

[16A] *Required as per Schedule D Monitoring Program- there are no objectives or limits listed within the ECA*

Table 17. 2024 Annual Effluent Results Summary

Parameter	Average mg/L	Minimum mg/L	Maximum mg/L	Average Annual Loading kg/d
$CBOD_5$	<2.09	<2.00	<2.50	<2.54
Total Suspended Solids	<2.60	<2.00	<2.60	<5.91
Total Phosphorus	<0.04	<0.03	<0.04	<0.06
Total Ammonia Nitrogen	<0.10	<0.10	<0.13	<0.21
E.Coli (CFU/100 mL)	-	1.52	2.00	-
pH	-	7.12	7.71	-
Temperature (^oC)	-	4.90	20.00	-
Un-Ionized Ammonia	-	<0.001	0.003	-

3.4 Effluent Flow: Summary and Interpretation of Reporting Year

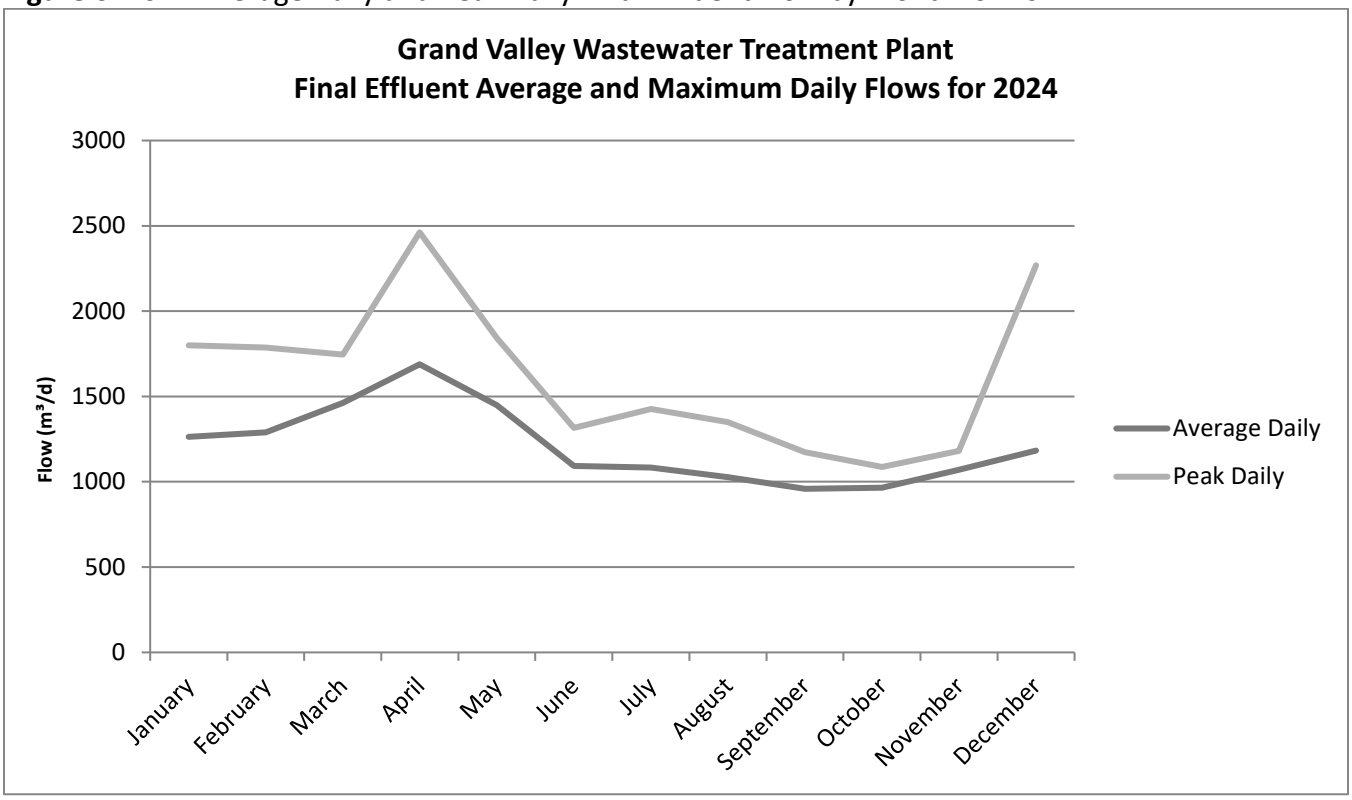
The following table (Table 18) outlines the final effluent average daily flow data in 2023 and the graph shows the final effluent daily and peak final effluent flow by month for the reporting period.

Table 18: Final Effluent Average Daily Flow and Peak Flow Data by Month for 2024

Month	Average Daily (m^3/day)	Peak Daily (m^3/day)	Total (m^3/day)
January	1262.82	1799.10	39147.33
February	1289.02	1787.00	37381.66

Month	Average Daily (m^3/day)	Peak Daily (m^3/day)	Total (m^3/day)
March	1462.61	1745.60	45340.90
April	1688.60	2461.90	50658.10
May	1448.61	1843.40	44907.00
June	1092.12	1316.70	32763.50
July	1083.69	1427.10	33594.39
August	1026.61	1350.30	31825.00
September	958.86	1173.00	28765.90
October	965.16	1086.90	29920.10
November	1070.37	1181.20	32111.00
December	1182.70	2269.60	36663.60
2024 Average	**1210.60**	**2461.90**	**443078.48**

Figure 6: 2024 Average Daily and Peak Daily Final Effluent Flow by Month for 2024



During the reporting period, the average annual daily flow for final effluent to outfall (Grand River) was 1,210.60 m^3/day. The maximum peak final effluent daily flow was 2,461.90 m^3/day, which occurred in April 2024 corresponding with the maximum peak daily influent flows in April 2024.

3.5 Overview of Success and Adequacy of the Works

The annual average effluent TSS concentration was <2.60 mg/L with an average removal efficiency of >97.25%. The annual average effluent Total Phosphorus concentration was <0.04 mg/L with an average removal efficiency of >97.66%. The annual average effluent concentration for Total Ammonium Nitrogen was <0.10 mg/L.

The bacteriological quality of the effluent complied with the ECA requirement of <200 organisms per 100 mL of sample. The maximum geometric mean density of organisms for 2024 was 2.00 CFU per 100 mL, indicating extremely effective effluent disinfection.

The total raw sewage volume of wastewater treated in 2024 was 455,520.60 m^3. The annual average daily flow of raw sewage was 1,244.59 m^3/day, which represents 80.04% of the design rated capacity (1,555 m^3/day). The maximum peak flow of 2,331.40 m^3/day occurred in April due to higher precipitation and snowmelt. This represents a peak flow of 1.5 times the rated capacity. The wastewater treatment plant operated within the rated capacity 88.22% of the time (332 out of 365 days of the year).

The sewage treatment operations for 2024 provided effluent quality that met all of the effluent limits and objectives of the ECA. This demonstrates percentages of removal efficiency (>97.25%) for the effluent parameters of the ECA. Based on this evidence, the current sewage treatment program is deemed adequate. OCWA will continue to use best efforts to meet effluent objectives and limits during each reporting period.

4. Operating Problems and Corrective Actions

As per Section 11(4)(c) of ECA 9611-CFVLRG, *a summary of all operating issues encountered and corrective actions taken*;

During the reporting period there were no operating problems encountered or corrective actions required at the Grand Valley Wastewater Plant that affected the quality of the effluent leaving the plant.

5. Major Maintenance Activities

As per Section 11(4)(d) of ECA 9611-CFVLRG, *a summary of all normal and emergency repair and maintenance activities carried out on any major structure, equipment, apparatus, mechanisms forming part of the works* is required;

5.1 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.

5.2 Preventative Maintenance Activities

In 2024, there were a number of preventative maintenance tasks completed throughout the reporting period. They are as follows:

- Annual UV inspection
- Wet well clean out
- Annual pump inspection
- Annual lifting device inspections
- Annual third party generator inspection and load testing
- Annual third party flow meter calibrations
- Annual backflow prevention inspection

5.3 Repairs and Improvement

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

- Carbon Monoxide Sensor
- H2S Gas Sensor
- Digester Level Transducer Replacement
- Replacement Effluent Composite Sampler
- Filter Sand Replacement
- Septage Tank Clean Out
- Impellor Replacements (Septage Pumps)
- Mixing Pump 2 Repairs
- Return Activated Sludge (RAS) VFD Troubleshooting
- Solenoid Replacement
- Spare Travelling Screen Brush
- Travelling Screen Repair
- UV Parts
- Air Conditioner Replacement
- Alum Piping Upgrade

6. Effluent Quality Assurance and Control

As per Section 11(4)(e) of ECA 9611-CFVLRG, *a summary of any effluent quality assurance or control measures undertaken in the reporting period* is required:

Quality assurance and control measures undertaken during the reporting period include adherence to provincial regulations, use of accredited laboratories, and operation of the system by licensed Operators,

scheduled sampling and analysis, in-house laboratory analysis, and calibration and preventative maintenance of equipment. The sections below provide further details of these measures.

6.1 Adherence to Provincial Regulations

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

6.2 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.

6.3 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.

6.4 Sampling and Analysis

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

6.5 In-house Analysis

In-house analysis were conducted by Licensed Operators for monitoring purposes using standard methods. The data generated from these tests is used to determine the treatment efficiency while effectively maintaining process control. All in-house monitoring equipment is calibrated based on the manufacturer's recommendations. Using their expertise, Operators of the facility use best efforts to stay within the ECA Effluent Objectives and Limits.

7. Calibration and Maintenance Procedures

As per Section 11(4)(f) of ECA 9611-CFVLRG, *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 the equipment as required in this Approval or recommended by the manufacturer* is required.

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

SPD Sales Limited was contracted to calibrate flow measuring equipment on August 6, 2024. Copies of the calibration reports can be found in **Appendix C** of this report.

8. Design Objectives

As per Section 11(4)(g) of ECA 9611-CFVLRG *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 occurs and before the compliance limits of Condition 7 are exceeded."*

Best efforts were made to achieve the design objectives as per ECA 9611-CFVLRG. Throughout the reporting period there were no instances where the Grand Valley WWTP exceeded the ECA objective and compliances limits. Based on the data, the final effluent was within the all of the effluent objectives and there appears to be no increased trend in deterioration of final effluent quality.

During the reporting period, operations staff regularly completed visual inspections of final effluent samples and found the effluent to be essentially free of floating and settleable solids. The final effluent did not appear to contain oil and no visible film, sheen, foam or discolouration was observed.

During the reporting period, the annual average daily influent flow did exceed 80% of the rated capacity of the system. The annual average daily flow of raw sewage in 2024 was 80.04% (1,244.59 m^3/day) of the rated capacity (1,555 m^3/day). Increased flows can be attributed to seasonal precipitation and snowmelt during parts of the year. There is also evidence of infiltration and inflow into the new gravity sewers installed on Emma St. and this also contributed to the increased flows, which the Town is proactively working to address.

9. Sludge Generation

As per Section 11(4)(h) of ECA 9611-CFVLRG, *a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed* is required.

Digested sludge produced at the Grand Valley WWTP is land-applied in accordance with the Nutrient Management Act 2002 and Ontario Regulation 267/03.

Grab samples of digested (aerobic) sludge are collected and tested as per these guidelines. In 2024, sludge sample analysis were carried out by SGS (Lakefield) Canada Inc. Sludge analysis showed that the sludge met the quality criteria specified in the Ontario Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land (Guidelines). A summary of sludge sample results is provided in **Appendix B** of this report, as well as total septage received for the reporting year.

Saugeen Agri. Service was contracted to haul and spread sludge from the Grand Valley plant in 2024 under Certificate of Approval - Waste Management System #9566-6HYKC3.

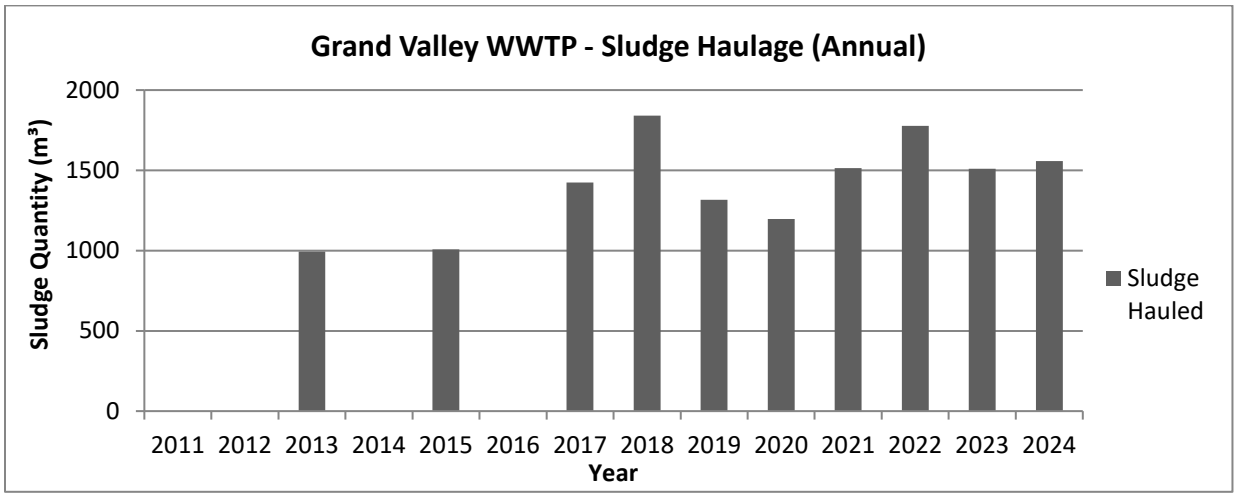
The following certified sites were utilized in 2024 with a total of 1,558.70m^3 of sludge hauled from the Grand Valley Wastewater Treatment Plant:

Table 19. Volume of Sludge Generated from Grand Valley Wastewater Treatment Plant in 2024

Site	Site Location	Volume of Biosolids (m^3)	Hauler
NASM Submission ID: 25079	LeRoy May Farm	1,558.70	Saugeen Agri Service

Based on the design flow and average wastewater quantity, the anticipated volume of sludge generated for 2025 would be similar to previous years where sludge was hauled. In previous years, the hauled sludge volume has ranged between ~1,000 to ~1,800 m^3.

Figure 7. Grand Valley Wastewater Treatment Plant Haulage Volumes (2011 to 2024)



10. Community Complaints

As per Section 11(4)(i) of ECA 9611-CFVLRG, *a summary of any complaints received and any steps taken to address the complaints* is required.

A standard operating procedure (SOP) is in place for addressing complaints received from the community. All complaints are addressed and documented in the facility logbook. Community complaint information is entered in OCWA's electronic WMS database system (Maximo). This system contains all the required information and history of complaints received by OCWA staff.

There were no complaints received during the reporting period.

11. By-pass, Spill or Abnormal Discharge Events

As per Section 11(4)(j) of ECA 9611-CFVLRG, *a summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events* is required.

There were no bypass, spill or abnormal discharge events that occurred during the reporting period.

ECA 9611-CFVLRG requires that Quarterly bypass/overflow reports be submitted to the Water Supervisor. All 2024 quarterly reports were submitted to the Water Supervisor by the deadlines specified in the ECA.

12. Notice of Modifications

As per Section 11(4)(k) of ECA 9611-CFVLRG, *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 modifications* is required.

There were no modifications made within the works that required notice of modifications for the reporting period.

13. Conformance with Procedure F-5-1

As per Section 11(4)(l) ECA 9611-CFVLRG, *a summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted* is required.

The Grand Valley Wastewater Treatment Plant had no bypass/overflow occurrences during the reporting period, therefore projects/expenditures to eliminate bypass/overflows is not required at this time.

14. Changes/Updates to Scheduled Construction/Commissioning

As per Section 11(4)(m) ECA 9611-CFVLRG, *any changes or updated to the schedule for the completion of the construction and commissioning operation of major process(es)/equipment groups in the Proposed Works.*

There are no changes or updates for the reporting period.

15. Monitoring Schedule

As per Section 11(4)(n) ECA 9611-CFVLRG, *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 9(1) "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.

Where, Section 9(1) requires:

- (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 follows.

- (c) at a frequency where (i) Weekly means once every week; (ii) Monthly means once every month; and (iii) Quarterly means once every three months.".
- (d) and that a schedule of the day of the week/month for the scheduled sampling shall be created and that be schedule be revised and updated every year through the rotation of the week/month for the sampling program.

During the reporting year, the Grand Valley WWTP did not deviated from the 2024 sampling plan.

Date	Reason for Deviation
N/A	N/A

Refer to **Appendix E** for the 2025 sampling schedule. The sampling calendar was issued on December 12, 2024 to operations staff and was designed to meet the monitoring program (see Table 2, 3 and 6), frequency and schedule rotation requirements of the current ECA as described above.

16. Additional Information

There were no requests from the District Manager for any other information during the reporting period.

17. Municipal Sewage Collection System - Annual Performance Report

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

Municipal Sewage Collection System ECA #	101-W601, Issue 1
Sewage Works	Grand Valley Sewage Collection System
Collection System Owner	The Corporation of the Town of Grand Valley
Reporting Period	January 1, 2024 to December 31, 2024

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

Yes

Note: As per Schedule E, Section 4.7.1 of CLI-ECA #101-W601, the annual performance report must be made available, on request and without charge, to members of the public who are served by the Authorized System; and 4.7.2 must be made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

Location where Annual Performance Report required under CLI-ECA #101-W601, Schedule E will be available for inspection. *(CLI-ECA #101-W601, Schedule E, Section 4.6.1 & 4.7.1):*

- Town of Grand Valley Town Office, 5 Main Street, Grand Valley, Ontario, L9W 5S6
- https://www.townofgrandvalley.ca/

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

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

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

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

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

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

f) Include a summary of all Collection System Overflow(s) and Spill(s) of Sewage.
   i. Dates;
   ii. Volumes and durations;

iii. If applicable, loadings for total suspended solids, BOD, total phosphorus, and total kjeldahl nitrogen and sampling results for E.Coli;
iv. Disinfection, if any; and
v. Any adverse impacts(s) and any corrective actions, if applicable

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

i. A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted.
ii. Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines.
iii. An assessment of the effectiveness of each action taken.
iv. An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.
v. Public reporting approach including proactive efforts.

17.1 Description of the Works

The Grand Valley Sewage Collection System consists of works for the collection and transmission of sewage, consisting of approximately 17 km of separate sanitary sewers, forcemains and three sewage pumping stations. The system ultimately discharges to the Grand Valley Wastewater Treatment Plant. The sewage pumping stations in the Authorized system include:

- Emma St. SPS – located on Emma St. South in Grand Valley, the SPS consist of a wet well type SPS with two submersible pumps, isolation check, air, pressure and relief valves, flowmeter, level transducer, floats, an emergency overflow pipe, all of which convey sewage to the Grand Valley WWTP via a forcemain. The SPS is equipped with a stand-by diesel generator in case of power failure.
- Southeast SPS – is not currently constructed but will be located on Watson Road in Grand Valley and consist of a wet well type SPS with two submersible pumps with VFDs, isolation and check valves, flowmeter, hydrostatic level transducer and floats, all of which convey sewage to the Grand Valley WWTP via a forcemain. The SPS is equipped with a stand-by diesel generator in case of power failure.
- Amaranth St. SPS – located on Amaranth St. in Grand Valley, the SPS is a small pumping station that serves approximately five house and consist of a wet well, two submersible pumps, and a emergency overflow pipe and floats, all of which convey sewage to MH3052 (manhole) via a forcemain.

The Grand Valley Municipal Collection System contains no combined sewage pumping stations, no combined sewage storage structures or combined storage tanks. The authorized collection system also

contains no authorized combined sewer collection system overflow points and two authorized sanitary sewer overflow points for use in emergency situation, which are listed below.

- Emma Street SPS Overflow Location - discharging to a ditch, which is in close proximity to Grand River
- Amaranth St. SPS Overflow Location – discharging to Grand River

17.2 Summary of Monitoring Data and Interpretation

No monitoring data is required within the municipal sewage collection system.

17.3 Summary of Operating Problems Encountered and Corrective Actions Taken

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

17.4 Summary of Calibration, Maintenance, and Repairs

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

SPD Sales Limited was contracted to calibrate flow measuring equipment within the Sewage Pump Stations on August 6, 2024. Copies of the calibration reports can be found in **Appendix C** of this report.

As summary of any major maintenance, preventative maintenance activities and repairs can be found below.

Emma Street Sewage Pumping Station:

- Annual pump inspections and life cycle replacements
- 3rd Party generator inspection and load testing
- Annual wet well inspection and clean out
- Collection system flushing CCTV

Amaranth Street Sewage Pumping Station:

- Annual pump inspections and life cycle replacements
- Annual wet well inspection and clean out
- Collection system flushing CCTV

Southeast Sewage Pumping Station:

- N/A- not currently constructed

17.5 Community Complaints Received in Relation to the Sewage Works

A standard operating procedure (SOP) is in place for addressing complaints received from the community. All complaints are addressed and documented in the facility logbook. Community complaint information is entered in OCWA's WMS database system (Maximo). This system contains all the required information and history of all complaints.

There was one complaint received during the reporting period, which occurred on December 18, 2024. A sewer back-up occurred at 74 Amaranth Street in Grand Valley. The Town of Grand Valley procured a contractor to complete the investigation (caused by a break) and complete the required repairs. For further details see **Appendix F** for the OCWA WMS work order.

17.6 Alterations to the Authorized System

There were no alterations to the authorized system occurred during the reporting period.

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

There were no collection system overflow(s) or spill(s) events that occurred during the reporting period

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

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

- Annual pump inspections and life cycle replacements
- Emma Street SPS - 3rd Party generator inspection and load testing
- Annual wet well inspections and clean out

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix A

Performance Assessment Report

2024

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Performance Assessment Report

From 1/1/2024 to 12/31/2024 11:59:59 PM

5762 GRAND VALLEY WASTEWATER TREATMENT FACILITY 110000301

	1 / 2024	2/ 2024	3/ 2024	4/ 2024	5/ 2024	6/ 2024	7/ 2024	8/ 2024	9/ 2024	10/ 2024	11/ 2024	12/ 2024	<--Total-->	<--Avg-->	<--Max-->	<-Criteria->
Flows																
Raw Flow: Total - Raw Sewage m³/d	38,285.20	37,671.00	44,669.00	49,699.20	42,324.40	33,304.40	37,125.20	35,457.60	32,301.80	32,851.30	33,181.90	38,649.60	455,520.60			0.00
Raw Flow: Avg - Raw Sewage m³/d	1,235.01	1,299.00	1,440.94	1,656.64	1,365.30	1,110.15	1,197.59	1,143.79	1,076.73	1,059.72	1,106.06	1,246.76		1,244.59		1,555.00
Raw Flow: Max - Raw Sewage m³/d	1,701.30	1,710.90	1,745.00	2,331.40	1,744.80	1,274.50	1,515.80	1,458.10	1,256.80	1,159.70	1,196.30	2,080.30			2,331.40	0.00
Raw Flow: Count - Raw Sewage m³/d	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	366.00			0.00
Eff. Flow: Total - Final Effluent m³/d	39,147.33	37,381.66	45,340.90	50,658.10	44,907.00	32,763.50	33,594.39	31,825.00	28,765.90	29,920.10	32,111.00	36,663.60	443,078.48			0.00
Eff. Flow: Avg - Final Effluent m³/d	1,262.82	1,289.02	1,462.61	1,688.60	1,448.61	1,092.12	1,083.69	1,026.61	958.86	965.16	1,070.37	1,182.70		1,210.60		
Eff. Flow: Max - Final Effluent m³/d	1,799.10	1,787.00	1,745.60	2,461.90	1,843.40	1,316.70	1,427.10	1,350.30	1,173.00	1,086.90	1,181.20	2,269.60			2,461.90	0.00
Eff Flow: Count - Final Effluent m³/d	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	366.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Final Effluent mg/L	< 2.20	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.50	< 2.40		< 2.09	< 2.50	10.00
Eff: # of samples of cBOD5 - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Loading: cBOD5 - Final Effluent kg/d	< 2.778	< 2.578	< 2.925	< 3.377	< 2.897	< 2.184	< 2.167	< 2.053	< 1.918	< 1.930	< 2.676	< 2.838		< 2.54	< 3.38	
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw Sewage mg/L	127.00	147.50	90.25	128.00	117.80	129.00	208.00	120.00	178.00	138.40	152.50	178.80		142.94	208.00	0.00
Raw: # of samples of BOD5 - Raw Sewage	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw Sewage mg/L	122.60	157.75	127.50	137.75	132.80	171.75	250.80	152.75	192.25	136.60	111.25	142.00		152.98	250.80	0.00
Raw: # of samples of TSS - Raw Sewage	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Eff: Avg TSS - Final Effluent mg/L	< 2.20	< 2.50	< 3.50	< 3.50	3.00	3.25	< 2.20	< 2.50	< 2.00	< 2.20	< 2.25	< 2.40		< 2.60	<	10.00
Eff: # of samples of TSS - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Loading: TSS - Final Effluent kg/d	< 2.778	< 3.223	< 5.119	< 5.910	4.346	3.549	< 2.384	< 2.567	< 1.918	< 2.123	< 2.408	< 2.838		< 3.15	< 5.91	
Percent Removal: TSS - Final Effluent %	98.21	98.42	97.25	97.46	97.74	98.11	99.12	98.36	98.96	98.39	97.98	98.31			99.12	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw Sewage mg/L	1.94	2.20	1.71	2.00	1.62	2.28	4.60	2.39	2.71	2.60	2.37	2.15		2.38	4.60	0.00
Raw: # of samples of TP - Raw Sewage	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Eff: Avg TP - Final Effluent mg/L	< 0.03	< 0.03	< 0.04	< 0.03	< 0.04	< 0.04	< 0.03	< 0.04	< 0.03	< 0.03	< 0.03	< 0.04		< 0.04	< 0.04	0.15
Eff: # of samples of TP - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Loading: TP - Final Effluent kg/d	< 0.043	< 0.042	< 0.055	< 0.051	< 0.055	< 0.044	< 0.037	< 0.044	< 0.029	< 0.031	< 0.035	< 0.045		< 0.04	< 0.06	
Percent Removal: TP - Final Effluent %	98.24	98.52	97.80	98.50	97.66	98.24	99.26	98.22	98.89	98.77	98.63	98.23			99.26	0.00

Nitrogen Series

Raw: Avg TKN - Raw Sewage mg/L	21.80	20.63	18.03	16.65	15.76	20.83	25.84	21.48	23.20	25.44	22.35	21.12		21.09	25.84	0.00
Raw: # of samples of TKN - Raw Sewage	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Eff: Avg TAN - Final Effluent mg/L	< 0.10	< 0.10	< 0.10	< 0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		< 0.10	< 0.13	4.00
Eff: # of samples of TAN - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Loading: TAN - Final Effluent kg/d	< 0.126	< 0.129	< 0.146	< 0.211	< 0.145	< 0.109	< 0.108	< 0.103	< 0.096	< 0.097	< 0.107	< 0.118		< 0.12	< 0.21	
Eff: Avg NO3-N - Final Effluent mg/L	18.74	18.35	15.63	16.65	17.86	22.63	23.36	23.28	24.75	24.46	22.88	21.32		20.82	24.75	0.00
Eff: # of samples of NO3-N - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00
Eff: Avg NO2-N - Final Effluent mg/L	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03		< 0.03	< 0.03	0.00
Eff: # of samples of NO2-N - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00

Disinfection

Eff: GMD E. Coli - Final Effluent cfu/100mL	2.00	1.68	2.00	2.00	2.00	1.68	2.00	1.68	1.68	1.52	1.68	1.52				200.00
Eff: # of samples of E. Coli - Final Effluent	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	53.00			0.00

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix B

Sludge Haulage Summary, Sludge Quality & Septage Receiving

2024

Grand Valley WWTP - Daily Haulage Summary			
Date	**Site**	**NASM #**	**Sludge Hauled (m^3)**
August			
28-Aug-24	Leroy May	25079	560.90
29-Aug-24	Leroy May	25079	585.50
September			
3-Sep-24	Leroy May	25079	412.30
		Total	**1558.70**

Biosolids Quality Report

Facility: GRAND VALLEY WASTEWATER TREATMENT FACILITY

Solids & Nutrients **Period: 01/01/2024 to 12/31/2024** **Works: 5762 / Digestor Type: Aerobic**

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Solids & Nutrients **Metals & Criteria** **Last 4 Samples**

Facility Works Number:	110000301	Receiver:	Grand River
Facility Owner:	Municipality: Township of East Luther Grand Valley	Service Population:	2390
Facility Classification:	Class 2 Wastewater Treatment	Total Design Capacity:	1244 m3/day

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

Month	Hauled Vol. (m^3)	Total 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**	**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**	**- no T/S**	**Lab Published Month Mean**
Jan		39,700.00	1,200.00	370.00	3.00	3.00	2,200.00	186.50	100.00
Feb		38,300.00	1,200.00	391.00	3.00	3.00	1,840.00	197.00	120.00
Mar		34,700.00	1,000.00	299.00	3.00	3.00	1,730.00	151.00	110.00
Apr		22,300.00	1,100.00	360.00	3.00	3.00	1,780.00	181.50	130.00
May		30,700.00	370.00	343.00	3.00	3.00	1,300.00	173.00	95.00
Jun		27,200.00	630.00	361.00	3.00	3.00	886.00	182.00	89.00
Jul		22,800.00	530.00	418.00	3.00	3.00	1,120.00	210.50	83.00
Aug	1,146.40	23,400.00	680.00	478.00	3.00	3.00	1,220.00	240.50	100.00
Sep	412.30								
Oct		38,200.00	1,200.00	268.00	3.00	3.00	1,090.00	135.50	105.00
Nov		44,000.00	1,600.00	452.00	3.00	3.00	888.00	227.50	120.00
Dec		45,500.00	1,850.00	394.00	3.00	3.00	2,120.00	198.50	138.00
Average	779.35	33,345.45	1,032.73	375.82	3.00	3.00	1,470.36	189.41	108.18
Total	1,558.70	366,800.00	11,360.00	4,134.00	33.00	33.00	16,174.00	2,083.50	1,190.00

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	0.03	0.08	0.55	13.00	0.03	0.22	0.45	0.50	0.20	22.00
Feb	0.20	0.03	0.10	0.65	15.00	0.04	0.25	0.55	0.60	0.20	27.00
Mar	0.10	0.03	0.07	0.52	12.00	0.02	0.21	0.44	0.50	0.10	22.00
Apr	0.20	0.03	0.08	0.55	13.00	0.02	0.21	0.50	0.50	0.10	23.00
May	0.10	0.01	0.03	0.18	4.20	0.01	0.07	0.17	0.20	0.10	7.00
Jun	0.10	0.02	0.04	0.29	6.30	0.02	0.11	0.26	0.30	0.10	12.00
Jul	0.10	0.01	0.04	0.26	5.50	0.01	0.10	0.22	0.20	0.10	10.00
Aug	0.10	0.02	0.05	0.36	7.10	0.01	0.13	0.29	0.30	0.10	13.00
Oct	0.20	0.03	0.07	0.62	14.00	0.03	0.24	0.47	0.50	0.20	27.00
Nov	0.20	0.04	0.09	0.75	17.00	0.04	0.30	0.62	0.60	0.20	32.00
Dec	0.20	0.04	0.10	0.84	19.00	0.04	0.36	0.69	0.70	0.20	37.00
Average	0.15	0.03	0.07	0.51	11.46	0.02	0.20	0.42	0.45	0.15	21.09
Max. Permissible Metal Concentrations (mg/kg of Solids)	170.00	34.00	340.00	2,800.00	1,700.00	11.00	94.00	420.00	1,100.00	34.00	4,200.00
Metal Concentrations in Sludge (mg/kg)	4.36	0.80	2.04	15.19	343.78	0.74	6.00	12.70	13.36	4.36	632.50

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

Parameter Short Name	Time Series	08/07/2024	10/16/2024	11/06/2024	12/04/2024	Average	Metal Concentrations in Sludge (mg/kg)	Max. Permissible Metal Concentrations (mg/kg of Solids)
As (mg/L)	Lab Published	0.10	0.20	0.20	0.20	0.18	4.63	170
Cd (mg/L)	Lab Published	0.02	0.03	0.04	0.04	0.03	0.85	34
Co (mg/L)	Lab Published	0.05	0.07	0.09	0.10	0.08	2.05	340
Cr (mg/L)	Lab Published	0.36	0.62	0.75	0.84	0.64	17.01	2800
Cu (mg/L)	Lab Published	7.10	14.00	17.00	19.00	14.28	377.90	1700
Hg (mg/L)	Lab Published	0.01	0.03	0.04	0.04	0.03	0.77	11
Mo (mg/L)	Lab Published	0.13	0.24	0.30	0.36	0.26	6.82	94
Ni (mg/L)	Lab Published	0.29	0.47	0.62	0.69	0.52	13.70	420
Pb (mg/L)	Lab Published	0.30	0.50	0.60	0.70	0.53	13.90	1100
Se (mg/L)	Lab Published	0.10	0.20	0.20	0.20	0.18	4.63	34
Zn (mg/L)	Lab Published	13.00	27.00	32.00	37.00	27.25	721.38	4200
E.Coli Dry Wt (cfu/g)	Lab Published	426.00	26,178.00	12,500.00	5,275.00	5,207.38	E. Coli average is the GMD	
TS (mg/L)	Lab Published	23,400.00	38,200.00	44,000.00	45,500.00	37,775.00		
TP (mg/L)	Lab Published	680.00	1,200.00	1,600.00	1,850.00	1,332.50		
NO2-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		
TKN (mg/L)	Lab Published	1,220.00	1,090.00	888.00	2,120.00	1,329.50		
K (mg/L)	Lab Published	100.00	105.00	120.00	138.00	115.75		
NH3p_NH4p_N (mg/L)	Lab Published	478.00	268.00	452.00	394.00	398.00		
NO3-N (mg/L)	Lab Published	3.00	3.00	3.00	3.00	3.00		

Customized Monthly Vertical Report

From 01/01/2024 to 12/31/2024

Facility Name: GRAND VALLEY WASTEWATER TREATMENT FACILITY
Receiver: Grand River

Facility Org Number: 5762
Facility Owner: Municipality: Township of East Luther Grand Valley
Service Population: 2390

Works: 110000301
Facility Classification: Class 2 Wastewater Treatment
Total Design Capacity: 1244 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

	Septage		
	Septage Received - m³		
	IH Edited Count	IH Mon.Max	IH Mon.Mean	IH Mon.Min
Jan 2024	3.00	10.50	7.13	3.80
Feb 2024	2.00	11.40	10.80	10.20
Mar 2024	31.00	9.10	1.22	0.00
Apr 2024	2.00	11.50	10.05	8.60
May 2024	5.00	30.90	15.56	7.10
Jun 2024	4.00	12.00	7.19	3.50
Jul 2024	10.00	21.40	9.50	4.00
Aug 2024	2.00	9.10	7.90	6.70
Sep 2024	8.00	27.30	10.26	4.20
Oct 2024	5.00	19.80	10.70	2.20
Nov 2024	2.00	14.30	10.65	7.00
Dec 2024	1.00	10.50	10.50	10.50
Total	75.00			
Avg			6.48	
Max		30.90		
Min				0.00

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix C

Calibration Reports

2024

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275513
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	IFC 100W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	C10 1318	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-70 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-3102				
Electrical Inspection:	OK	**Description:**	RAS Flow				
As found Display information:	OK	**Process/Location Descrpition:**	Basement				

Instrument Information:	
GK/GKL Value:	6.4029
GK=1 or GKL=2	1
Flow Tube Diameter in mm:	150
Flow rate at 20 mA/100%:	70
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	89.2

Input m/s	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.00	0.00%	4.00	0.00%
0.5	**24.63%**	**17.24**	**7.94**	7.95	0.13%	7.95	0.13%
1	**49.25%**	**34.48**	**11.88**	11.89	0.08%	11.89	0.08%
2	**98.56%**	**68.99**	**19.77**	19.89	0.61%	19.89	0.61%
3							
5							
10							
20							
30							

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Verified successfully using krohne GS8 simulator		Krohne GS 8 Simulator		
		Fluke Digital Multimeter	53600167	May-24
Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**	
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex	

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275516
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	UFC 300W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	A1072355	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-250 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-3105				
Electrical Inspection:	OK	**Description:**	Clamp on meter - Mixing pump cir. Flow				
As found Display information:	OK	**Process/Location Descrpition:**	Basement				

Instrument Information:	
GK/GKL Value:	-
GK=1 or GKL=2	-
Flow Tube Diameter in mm:	300
Flow rate at 20 mA/100%:	250
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	-

Input	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.00	0.00%	3.99	-0.25%
50	**50.00%**	**125.00**	**12.00**	11.95	-0.42%	11.98	-0.17%
75	**75.00%**	**187.50**	**16.00**	15.95	-0.31%	15.96	-0.25%
100	**100.00%**	**250.00**	**20.00**	19.89	-0.55%	19.91	-0.45%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Internal verification was done using internal simulation.			
Analog output tested during internal verification.	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275511
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	IFC 100W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	C10 1314	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-50 L/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-3101				
Electrical Inspection:	OK	**Description:**	WAS Flow				
As found Display information:	OK	**Process/Location Descrpition:**	Basement				

Instrument Information:	
GK/GKL Value:	6.4987
GK=1 or GKL=2	1
Flow Tube Diameter in mm:	150
Flow rate at 20 mA/100%:	50
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	-

Input m/s	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.00	0.00%	4.00	0.00%
0.5	**35.00%**	**17.50**	**9.60**	9.65	0.52%	9.65	0.52%
1	**70.00%**	**35.00**	**15.20**	15.30	0.66%	15.30	0.66%
2							
3							
5							
10							
20							
30							

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Verified successfully using krohne GS8 simulator		Krohne GS 8 Simulator		
		Fluke Digital Multimeter	53600167	May-24
Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**	
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex	

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275508
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	IFC 100W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	C10 1339	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-50 L/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-3103				
Electrical Inspection:	OK	**Description:**	TRUCK Loading Flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
GK/GKL Value:	6.4732
GK=1 or GKL=2	1
Flow Tube Diameter in mm:	150
Flow rate at 20 mA/100%:	50
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	-

Input m/s	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.00	0.00%	4.00	0.00%
0.5	**34.88%**	**17.44**	**9.58**	9.50	-0.84%	9.50	-0.84%
1	**69.75%**	**34.88**	**15.16**	15.40	1.58%	15.40	1.58%
2							
3							
5							
10							
20							
30							

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Verified successfully using krohne GS8 simulator		Krohne GS 8 Simulator		
		Fluke Digital Multimeter	53600167	May-24
Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**	
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex	

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275507
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	IFC 100W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	C10 2716	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-60 L/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-3104				
Electrical Inspection:	OK	**Description:**	Bio Solids Fill/Draw Flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
GK/GKL Value:	6.3618
GK=1 or GKL=2	2
Flow Tube Diameter in mm:	150
Flow rate at 20 mA/100%:	60
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	-

Input m/s	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.00	0.00%	4.00	0.00%
0.5	**14.25%**	**8.55**	**6.28**	6.24	-0.64%	6.24	-0.64%
1	**28.56%**	**17.14**	**8.57**	8.54	-0.35%	8.54	-0.35%
2	**57.13%**	**34.28**	**13.14**	13.10	-0.30%	13.10	-0.30%
3	**85.69%**	**51.41**	**17.71**	17.80	0.51%	17.80	0.51%
5					-100.00%		-100.00%
10					-100.00%		-100.00%
20					-100.00%		-100.00%
30					-100.00%		-100.00%

Comments		**Test Equipment Used**		
		Name / Type	**Serial No.**	**Due Date**
Verified successfully using krohne GS8 simulator		Krohne GS 8 Simulator		
		Fluke Digital Multimeter	53600167	May-24
Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**	
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex	

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley (Pumping Station)						
Service Date:	6-Aug-24	**Instrument Type:**	**FI/FIT**	**W.O. Number:**	240741-0001	**Asset#:**	275431
Due Date:	6-Aug-24	**Manufacturer:**	KROHNE				
Follow-Up Required:	No	**Model:**	**Transmitter:**	IFC 100W	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	C093304	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-100l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Infomration:**	FIT-4201				
Electrical Inspection:	OK	**Description:**	Force main flow.				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
GK/GKL Value:	8.286
GK=1 or GKL=2	2
Flow Tube Diameter in mm:	250
Flow rate at 20 mA/100%:	100
Select Volume Fow Unit below:	l/s
l/s, use 4177.3	4177.3
mA at 0% flow:	4
mA at 100% flow:	20
Coil Resistance:	93

Input m/s	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	4.02	0.50%	4.02	0.50%
0.5	**31.00%**	**31.00**	**8.96**	8.98	0.22%	8.98	0.22%
1	**62.00%**	**62.00**	**13.92**	13.94	0.14%	13.94	0.14%
2							
3							
5							
10							
20							
30							

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Verified successfully using krohne GS8 simulator	Krohne GS 8 Simulator		
	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not Tested	**Technician Name**	**Witness Name**
Loop Check Performed:	Not Tested	Vaibhav Patel	Alex

Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	FIT	**W.O. Number:**	240741-0001	**Asset#:**	NA
Due Date:	6-Aug-24	**Manufacturer:**	Elster				
Follow-Up Required:	No	**Model:**	T4000 Mechanical				
As Left Status:	Initial Condt	**Serial #:**	18438919				
Instrument Visual Inspection:		**Range:**	NA	**Output:**	NA		
Mechanical Inspection:	OK	**Tag Infomration:**	NA				
Electrical Inspection:	OK	**Description:**	NA				
As found Display information:	OK	**Process/Location Descrpition:**	Portable water meter				

Instrument Information:	
Pipe Material:	Carbon Steel
Outer Diameter:	8"
Wall Thickness:	0.22 "
Lining Material:	NO
Kind of Fluid:	Water
Sensor Spacing:	-
Flow unit:	m^3
Flow rate at 20 mA:	NA
Sensor Installation Type:	V Profile

Readings	**Portable Unit m^3**	**Process Meter m^3**
1	**0.280**	**0.300**

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due**
Run the water for 4 minutes and verified total volume in m^3.	Nivus Clamp On Flow meter	2238NFM2620	
Other Outputs Tested: Not Tested	**Technician Name**	**Witness Name**	

Loop Check Performed:	Not Tested	Vaibhav Patel		Alex	
Within Specification:	Yes	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275347
Due Date:	6-Aug-24	**Manufacturer:**	Miltronics				
Follow-Up Required:	No	**Model:**	**Transmitter:**	OCM III	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	PBD/A0271005	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-157 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	LIT-1203				
Electrical Inspection:	OK	**Description:**	Primary Splitter flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Span:	0.15
Empty Distance:	0.439
Crest Width U0:	1.5
Max Head: (20 mA)	0.15
Max Flow: (20 mA)	157
Height Unit:	m
Flow Unit:	l/s

Input Level	Calculated Flow	Measured Flow	mA Out	As Found	Deviation	As Left	Deviation
0.000	**0.000**	**0.000**	**4.00**	3.99	-0.25%	3.99	-0.25%
0.038	**19.625**	**19.400**	**6.00**	5.98	-0.33%	5.98	-0.33%
0.075	**55.508**	**55.429**	**9.66**	9.64	-0.17%	9.64	-0.17%
0.113	**101.974**	**101.870**	**14.39**	14.38	-0.09%	14.38	-0.09%
0.150	**157.000**	**156.920**	**20.00**	19.98	-0.10%	19.98	-0.10%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Internal verification was done using level simulation.			
Analog output tested during internal verification.	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275357
Due Date:	6-Aug-24	**Manufacturer:**	Miltronics				
Follow-Up Required:	No	**Model:**	**Transmitter:**	OCM III	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	PBD/A0180523	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-68.95 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	LIT-3001				
Electrical Inspection:	OK	**Description:**	Storm tank flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Span:	0.13
Empty Distance:	-
Exponent:	1.5
Max Head: (20 mA)	0.13
Max Flow: (20 mA)	68.95
Height Unit:	m
Flow Unit:	l/s

Input Level	Calculated Flow	Measured Flow	mA Out	As Found	Deviation	As Left	Deviation
0.000	**0.000**	**0.000**	**4.00**	3.99	-0.25%	3.99	-0.25%
0.033	**8.619**	**8.600**	**6.00**	5.98	-0.33%	5.98	-0.33%
0.065	**24.378**	**24.275**	**9.66**	9.65	-0.07%	9.65	-0.07%
0.098	**44.784**	**44.675**	**14.39**	14.37	-0.15%	14.37	-0.15%
0.130	**68.950**	**68.700**	**20.00**	19.98	-0.10%	19.98	-0.10%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Internal verification was done using level simulation.			
Analog output tested during internal verification.	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275531
Due Date:	6-Aug-24	**Manufacturer:**	Miltronics				
Follow-Up Required:	No	**Model:**	**Transmitter:**	OCM III	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	PBD/A0271006	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-124.8 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	LIT-1102				
Electrical Inspection:	OK	**Description:**	Final effluent flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Span:	0.38
Empty Distance:	1.14
Exponent:	2.5
Max Head: (20 mA)	0.38
Max Flow: (20 mA)	124.8
Height Unit:	m
Flow Unit:	l/s

Input Level	Calculated Flow	Measured Flow	mA Out	As Found	Deviation	As Left	Deviation
0.000	**0.000**	**0.000**	**4.00**	3.99	-0.25%	3.99	-0.25%
0.095	**3.900**	**8.600**	**4.50**	4.49	-0.22%	4.49	-0.22%
0.190	**22.062**	**24.275**	**6.83**	9.81	43.66%	9.81	43.66%
0.285	**60.795**	**44.675**	**11.79**	11.76	-0.29%	11.76	-0.29%
0.380	**124.800**	**68.700**	**20.00**	19.97	-0.15%	19.97	-0.15%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Internal verification was done using level simulation.			
Analog output tested during internal verification.	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275543
Due Date:	6-Aug-24	**Manufacturer:**	Miltronics				
Follow-Up Required:	No	**Model:**	**Transmitter:**	OCM III	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	PBD/A0271006	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-14.23 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	LIT-1101				
Electrical Inspection:	OK	**Description:**	Filter Influent Flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Span:	0.055
Empty Distance:	0.354
Exponent:	1.5
Max Head: (20 mA)	0.055
Max Flow: (20 mA)	14.23
Height Unit:	m
Flow Unit:	l/s

Input Level	Calculated Flow	Measured Flow	mA Out	As Found	Deviation	As Left	Deviation
0.000	**0.000**	**0.000**	**4.00**	3.99	-0.25%	3.99	-0.25%
0.014	**1.779**	**8.600**	**6.00**	5.98	-0.33%	5.98	-0.33%
0.028	**5.031**	**24.275**	**9.66**	9.94	2.93%	9.94	2.93%
0.041	**9.243**	**44.675**	**14.39**	14.37	-0.15%	14.37	-0.15%
0.055	**14.230**	**68.700**	**20.00**	19.97	-0.15%	19.97	-0.15%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Internal verification was done using level simulation.			
Analog output tested during internal verification.	Fluke Digital Multimeter	53600167	May-24

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275316
Due Date:	6-Aug-24	**Manufacturer:**	E&H				
Follow-Up Required:	No	**Model:**	**Transmitter:**	Promag 53	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	D70A7219000	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-30 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	FIT-2001				
Electrical Inspection:	OK	**Description:**	Site WW PS Flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Pipe Size:	4"
K/Cal Factor:	1.3028
Zero Point:	14
Flow unit:	l/s
Flow rate at 20 mA/100%:	30
Pulse rate at 100%:	-
Empty Pipe Detection:	ON
Flow Direction:	Forward

Input	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	3.98	-0.50%	3.98	-0.50%
5	**5.00%**	**1.50**	**4.80**	4.79	-0.21%	4.79	-0.21%
50	**50.00%**	**15.00**	**12.00**	11.99	-0.08%	11.99	-0.08%
75	**75.00%**	**22.50**	**16.00**	16.00	0.00%	16.00	0.00%
100	**100.00%**	**30.00**	**20.00**	19.98	-0.10%	19.98	-0.10%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
verification was done using internal simulation.	Fluke Digital Multimeter	53600167	May-24
Analog output tested during internal verification.			

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275317
Due Date:	6-Aug-24	**Manufacturer:**	E&H				
Follow-Up Required:	No	**Model:**	**Transmitter:**	Promag 53	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	D70A7319000	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-30 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	FIT-2002				
Electrical Inspection:	OK	**Description:**	Septage PS Flow				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Pipe Size:	4"
K/Cal Factor:	1.3028
Zero Point:	14
Flow unit:	l/s
Flow rate at 20 mA/100%:	30
Pulse rate at 100%:	-
Empty Pipe Detection:	ON
Flow Direction:	Forward

Input	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	3.98	-0.50%	3.98	-0.50%
5	**5.00%**	**1.50**	**4.80**	4.78	-0.42%	4.78	-0.42%
50	**50.00%**	**15.00**	**12.00**	11.98	-0.17%	11.98	-0.17%
75	**75.00%**	**22.50**	**16.00**	15.99	-0.06%	15.99	-0.06%
100	**100.00%**	**30.00**	**20.00**	19.98	-0.10%	19.98	-0.10%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
verification was done using internal simulation.	Fluke Digital Multimeter	53600167	May-24
Analog output tested during internal verification.			

Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Highlands Hub						
Plant Name and address:	Grand Valley WWTP - 18 Watson Road, Grand Valley						
Service Date:	6-Aug-24	**Instrument Type:**	**FIT**	**W.O. Number:**	**240741-0001**	**Asset#:**	275318
Due Date:	6-Aug-24	**Manufacturer:**	E&H				
Follow-Up Required:	No	**Model:**	**Transmitter:**	Promag 53	**Sensor:**	-	
As Left Status:	Initial Condt	**Serial #:**	**Transmitter:**	D804D516000	**Sensor:**	-	
Instrument Visual Inspection:		**Range:**	0-30 l/s		**Output:**	4-20 mA	
Mechanical Inspection:	OK	**Tag Information:**	FIT-1203				
Electrical Inspection:	OK	**Description:**	Flow Meter				
As found Display information:	OK	**Process/Location Descrpition:**	NA				

Instrument Information:	
Pipe Size:	4"
K/Cal Factor:	1.3518
Zero Point:	14
Flow unit:	l/s
Flow rate at 20 mA/100%:	30
Pulse rate at 100%:	-
Empty Pipe Detection:	ON
Flow Direction:	Forward

Input	Input %	Flow rate	mA Out	As Found	Deviation	As Left	Deviation
0	**0.00%**	**0.00**	**4.00**	3.99	-0.25%	3.99	-0.25%
5	**5.00%**	**1.50**	**4.80**	4.79	-0.21%	4.79	-0.21%
50	**50.00%**	**15.00**	**12.00**	11.98	-0.17%	11.98	-0.17%
75	**75.00%**	**22.50**	**16.00**	15.99	-0.06%	15.99	-0.06%
100	**100.00%**	**30.00**	**20.00**	19.97	-0.15%	19.97	-0.15%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
verification was done using internal simulation.	Fluke Digital Multimeter	53600167	May-24
Analog output tested during internal verification.			

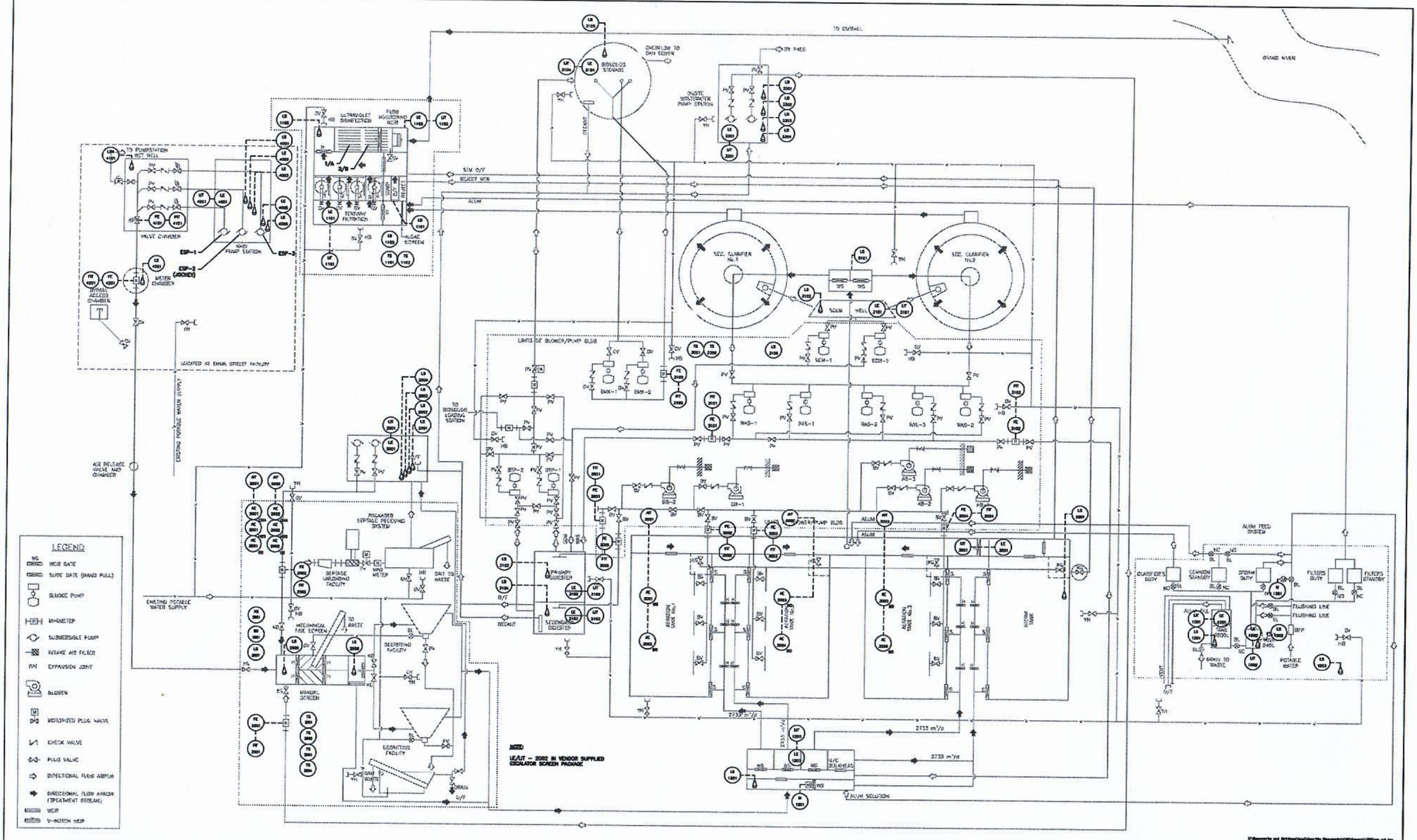
Other Outputs Tested:	Not tested	**Technician Name**		**Witness Name**	
Loop Check Performed:	Not tested	Vaibhav Patel		Alex	
Within Specification:	No	**Date:**	6-Aug-24	**Date:**	6-Aug-24

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix D

Process Flow Schematic

Figure 3.4



1. This drawing is the exclusive property of R. J. Burnside & Associates Limited and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

No.	Issue / Revision	Date
1	ISSUED FOR 75% REVIEW	10/22/2008
2	ISSUED FOR CLIENT REVIEW	10/11/2008
3	PRE-TENDER SUBMISSION	28/11/2008
4	ISSUED FOR TENDER	12/12/2008
5	ISSUED FOR RE-TENDER	OCTOBER 2009
6	ISSUED FOR CONSTRUCTION	JANUARY 2010

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web www.rjburnside.com

TOWNSHIP OF EAST LUTHER GRAND VALLEY
P.O. BOX 249, 5 MAIN STREET NORTH
GRAND VALLEY, ONTARIO
L0N 1G0

Drawing Title: GRAND VALLEY WATER POLLUTION CONTROL PLANT
GENERAL ELECTRICAL P&ID

Drawn	Checked	Designed	Checked	Drawing No.	Rev
K.NAFZIGER	I.LOEACONU	I.LOEACONU	D.CHAMBERLAIN	I-002	0
Scale: N.T.S.		Project No. MSA11544			

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix E

2025 Monitoring Schedule

2025 Sampling Calendar
GRAND VALLEY WWTP (Org #5762)
WWT II, WWC II

JANUARY						
M	T	W	TH	F	St	Su
		1	2	3	4	5
6	**7 - W/BS/SR**	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		

FEBRUARY						
M	T	W	TH	F	St	Su
					1	2
3	**4 - W/BS/SR**	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		

MARCH						
M	T	W	TH	F	St	Su
					1	2
3	**4 - W/BS/SR**	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						

APRIL						
M	T	W	TH	F	St	Su
	1 - W/BS/SR	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				

MAY						
M	T	W	TH	F	St	Su
			1	2	3	4
5	**6 - W/BS/SR**	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	

JUNE						
M	T	W	TH	F	St	Su
						1
2	**3 - W/BS/SR**	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						

Stat Holiday/Weekend

Sample Day

W=Weekly Raw & Effluent; **BS**=Bio-Solids; **SR**=Septage Receiving (monthly as received)

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

S:\WestHighlands\08 GRAND VALLEY (Township of)\01 - Operational\1-1 Sampling Schedule\2025 Sampling Calendar_Grand Valley_Waste_2024.12.02.xlsx

2025 Sampling Calendar
GRAND VALLEY WWTP (Org #5762)
WWT II, WWC II

JULY						
M	T	W	TH	F	St	Su
	1	**2 - W/BS/SR**	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			

AUGUST						
M	T	W	TH	F	St	Su
				1	2	3
4	**5 - W/BS/SR**	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

SEPTEMBER						
M	T	W	TH	F	St	Su
1	**2 - W/BS/SR**	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					

OCTOBER						
M	T	W	TH	F	St	Su
		1 - W/BS/SR	2	3	4	5
6	**7 - 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		

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

DECEMBER						
M	T	W	TH	F	St	Su
1	**2 - W/BS/SR**	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				

Stat Holiday/Weekend

Sample Day

W=Weekly Raw & Effluent; **BS**=Bio-Solids; **SR**=Septage Receiving (monthly as received)

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

S:\WestHighlands\08 GRAND VALLEY (Township of)\01 - Operational\1-1 Sampling Schedule\2025 Sampling Calendar_Grand Valley_Waste_2024.12.02.xlsx

Revision # 8 - Revised 2024-12-02

2024 Annual Performance Report
Grand Valley Wastewater Treatment Plant
ECA 9611-CFVLRG

Appendix F

Consumer Complaints

2024

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Work Order Details

4279736: Sewer Back Up Complaint - 74 Amaranth St Grand Valley 5762

Asset:

Location: 5762 Grand Valley Wastewater Treatment Plant & Collection System

Sched Start:	12/18/24	**Job Plan:**	COMCOM	**Site:**	OCWASITE
Sched Finish:		**Priority:**	2		
Target Start:	12/18/24	**Work Type:**	OPER		
Target Finish:	12/18/24	**Status:**	COMP		
Actual Start:	12/19/24	**Parent:**			
Actual Finish:	12/19/24	**Project:**			
Reported Date:	12/19/24	**Classification:**	INSPECTION		
Reported By:	Melissa Cortes	**Supervisor:**	Jenna Porter		
Lead:	Melissa Cortes	**Vendor:**			

Log

Date	Class	Created By	Subject	Description
12/19/24	WORKORDER	Melissa Cortes		Sewer Back Up Complaint - 74 Amaranth St Grand Valley 5762

The Director of Public works called this afternoon to report a complaint from 74 Amaranth St. West. They have a sewer back-up that appears to be on the Town's side. A plumber camera'd about 30' and his snake started pulling soil back (indicating a break, and a requirement to locate and daylight the area). Contractor was hired to complete the repair and work.

No OCWA involvement, logged for record purposes.