

2025 Annual Performance Report

Little River Pollution Control Plant

Amended Environmental Compliance Approval No. 4681-BT3L39



Submitted to the Ministry of Environment, Conservation and Parks March 31, 2026

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Executive Summary

The Little River Pollution Control Plant (LRPCP; Plant) is one of two sewage treatment facilities operated by The Corporation of the City of Windsor (City; Owner). The LRPCP is located at 9400 Little River Road in Windsor, Ontario, has a rated capacity of 72,800 cubic metres per day (m³/d) (72.8 megalitres per day [ML/d]) and receives wastewater from the Windsor-Tecumseh Trunk Sanitary Sewer which services the eastern portion of the City of Windsor and the Town of Tecumseh. The Plant operates under Amended Environmental Compliance Approval (ECA) Number 4681-BT3L39 dated January 29, 2021. This report is a summary of Plant operations and performance from January 1, 2025, through December 31, 2025, and is being submitted to the Ministry of the Environment, Conservation and Parks (MECP) to fulfil Section 11.4 of the ECA.

The following is a summary of Plant operations and performance for the current reporting year:

- The LRPCP met the Design Objective for influent flow in 2025, with an annual average daily influent flow of 38 ML/d (52% of the rated capacity of 72.8 ML/d).
- A scheduled monitoring program was carried out at the LRPCP in 2025 in accordance with Section 9 of the ECA for the sample points, frequencies, sample types and analyses listed in Schedule D of the ECA, with minor deviations.
- The final effluent met the single sample result Design Objectives in 2025 for dissolved oxygen (DO) at Plant 1 and Plant 2, with the exception of five days at Plant 1 and seven days at Plant 2, which were caused by high flows, probe fouling and/or calibration and maintenance activities.
- The final effluent met the monthly average concentration Compliance Limits in 2025 for carbonaceous biological oxygen demand (CBOD₅), total suspended solids (TSS), total phosphorus (TP), total ammonia nitrogen (TAN) and *E. Coli*.
- The final effluent met the single sample result Compliance Limits for CBOD, TSS, TP, TAN and *E. Coli*, with the following exceptions:
 - TAN exceeded the single sample result Compliance Limit of 8 mg/L at Plant 1 on Nov 4, 2025 (8.7 mg/L).
 - *E. Coli* exceeded the single sample result Compliance Limit of 1000 CFU/100 mL at Plant 1 on May 1, 2025 (1090 CFU/100 mL), June 5, 2025 (2000 CFU/100 mL), July 31, 2025 (1700 CFU/100 mL) and Sept 4, 2025 (8500 CFU/100 mL), and at Plant 2 on June 5, 2025 (2000 CFU/100 mL) and Oct 30, 2025 (5600 CFU/100 mL).

- Select days in 2025 saw pH below the acceptable range as measured by the effluent field pH probes. However, the corresponding lab pH was within the acceptable range the entire year. The variance between the field pH probe and the lab pH probe measurements is being investigated.
- The final effluent was observed to be free from floating and settleable solids, and was not observed to contain films, sheens, foams or be discoloured during all sampling events in 2025.
- The Plant was operated and maintained such that the final effluent was disinfected between May 1 and October 31 in 2025.
- The Plant continued to operate effectively in 2025, with operational issues managed through timely corrective action and process adjustments. Preventative maintenance and required repairs were also completed at the Plant to support the reliable and continuous operation of the facility. Progress continued on capital projects, contributing to the long-term performance of the facility.
- Effluent quality assurance and quality control measures were implemented at the LRPCP in 2025 including but not limited to the use of accredited laboratories for ECA required samples, use of trained staff for sample collection, operational sample analysis, plant operation and maintenance, implementing equipment calibration, integrating equipment redundancy and utilizing a computerized maintenance management system.
- Routine calibration and maintenance on flow meter devices were preformed at the LRPCP in 2025.
- A total of 131,098,619 L of raw sludge was dewatered in the current reporting year, the resulting biosolids were transported offsite to the Windsor Biosolids Processing Facility (WBPF) to create commercial fertilizer. No biosolids were landfilled in the current reporting year. There are no anticipated changes in biosolids production in the next reporting year, and the volumes are anticipated to be similar to the current reporting year.
- There were four odour complaints received in 2025 related to the LRPCP.
- In 2025, there were six primary overflows, one pumping station overflow and no spills or abnormal discharge events outside of the overflows mentioned. The primary overflow volumes represented approximately 1.3% of the total annual effluent flow.
- There were no modifications to the LRPCP that required a Notice of Modification to Sewage Works form to be submitted in 2025.
- The City continues to implement actions under the 2020 Sewer and Coastal Flooding Protection Master Plan, which over time are anticipated to reduce wet weather flows to the sanitary and combined sewage systems, reduce the

associated peak rate and volume of wet weather flow conveyed to the LRPCP, reduce overflows at the LRPCP and reduce combined sewer overflows in other areas of the sewage system.

Definitions

“Annual Average Daily Influent Flow” means the cumulative total sewage flow of influent to the sewage treatment plant during a calendar year divided by the number of days during which sewage was flowing to the sewage treatment plant that year.

“BOD5” means five-day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands.

“CBOD5” means five-day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample.

“Imported Sewage” means sewage hauled to the sewage treatment plant by licenced waste management system operators of the types and quantities approved for co-treatment in the sewage treatment plant, including hauled sewage and leachate within the meaning of R.R.O. 1990, Regulation 347: General – Waste Management, as amended.

“Monthly Average Effluent Concentration” is the mean of all single sample results of the concentration of a contaminant in the final effluent sampled or measured during a calendar month, calculated and reported as per the methodology specified in Schedule F of the ECA.

“Monthly Geometric Mean Density” is the mean of all single sample results of *E. Coli* measurement in the samples taken during a calendar month, calculated and reported as per the methodology specified in Schedule F of the ECA.

“Rated Capacity” means the annual average daily influent flow for which the sewage treatment plant is designed to handle.

“Sewage Treatment Plant” means all the facilities related to sewage treatment within the sewage treatment plant site excluding the final effluent disposal facilities.

“Single Sample Result” means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required.

“TAN” means total ammonia nitrogen.

“TKN” means total kjeldahl nitrogen.

“TP” means total phosphorus.

“TSS” means total suspended solids.

“UA” means unionized ammonia.

1. Introduction

The Little River Pollution Control Plant (LRPCP; Plant) is one of two sewage treatment facilities operated by The Corporation of the City of Windsor (City; Owner) under the responsibility of the Pollution Control Branch. The LRPCP is located at 9400 Little River Road in Windsor, Ontario on an approximately 7.3-hectare site.

The LRPCP receives wastewater from the Windsor-Tecumseh Trunk Sanitary Sewer which services the eastern portion of the City of Windsor. The LRPCP also provides treatment services for the Town of Tecumseh.

The Plant was first commissioned 1966 and operated as a primary treatment facility. The Plant was expanded in 1974 to treat increased capacity and added phosphorus removal as well as secondary biological treatment. The plant was upgraded and expanded in the early 1990s to treat increased capacity and added nitrification capabilities. The major process units at the Plant include a single inlet works and preliminary treatment consisting of screening and grit removal. The Plant then splits into two process systems, referred to as Plant 1 and Plant 2, which each include primary treatment consisting of clarifiers, secondary treatment consisting of biological aeration followed by final clarifiers and seasonal final disinfection with ultraviolet (UV) lamps. The LRPCP discharges the treated effluent via two outfalls into the Little River, located adjacent west to the Plant and approximately 1 km upstream of the Detroit River. Sludge generated during the treatment process is dewatered in centrifuges and the resulting biosolids are converted to commercial fertilizer at the Windsor Biosolids Processing Facility (WBPF) operated by Synagro Windsor Operating LP (Synagro).

Plant 1 and Plant 2 each have design rated capacities of 36,400 cubic metres per day (m^3/d) or 36.4 megalitres per day (ML/d) and a total rated maximum capacity of 72,800 m^3/d or 72.8 ML/d.

The Ministry of the Environment, Conservation and Parks (MECP) have classified the LRPCP as a Class IV wastewater treatment facility under *Ontario Regulation 129/04: Licensing of Sewage Works Operations*. The Plant operates under Amended Environmental Compliance Approval (ECA) Number 4681-BT3L39 dated January 29, 2021. This report is a summary of Plant operations and performance from January 1, 2025, through December 31, 2025, and is being submitted to the MECP to fulfil Section 11.4 of the ECA.

2. Influent Monitoring Data

This section presents a summary and interpretation of influent monitoring data, and a review of the historical trends of the sewage characteristics and flow rates per Section 11.4(a) of the ECA.

2.1 Influent Monitoring Program and Characteristics

Influent samples consisted of a 24-hour composite sample collected using an automatic sampler at the influent sampling point which was deployed and retrieved by trained City employees. Sample analysis was completed by SGS (Lakefield) Canada Inc. Sample analysis and frequency followed the monitoring program in Schedule D of the ECA and is summarized in **Table 2-1**. Deviations to the monitoring program are discussed in **Section 4**.

Table 2-1: Influent Monitoring Program

Parameter	Sample Type	Minimum Frequency
Biochemical Oxygen Demand (BOD5)	24-hour composite	Weekly
Total Suspended Solids	24-hour composite	Weekly
Total Phosphorus	24-hour composite	Weekly
Total Ammonia Nitrogen	24-hour composite	Weekly
Total Kjeldahl Nitrogen	24-hour composite	Weekly
Alkalinity	24-hour composite	Weekly
pH	Grab/Probe	Daily
Temperature	Grab/Probe	Daily

A summary of the influent monitoring data for the current reporting year is presented in **Table 2-2**, and a summary of the historical influent monitoring data is presented in **Table 2-3**.

Over the last two to three years there has been a slight increasing trend in influent concentrations of biological oxygen demand (BOD5), total suspended solids (TSS), total phosphorus (TP), total Kjeldahl nitrogen (TKN) and alkalinity, however, concentrations generally fell within the range of concentrations over the previous five years. Since 2020, there has been a slight increasing trend in total ammonia nitrogen (TAN). The maximum pH was measured at 8.1 in 2025 which was slightly elevated compared to the maximums in the previous five years which ranged from 7.6 to 7.9.

Table 2-2: 2025 Influent Monitoring Data

Month	BOD5 (mg/L)			TSS (mg/L)			TP (mg/L)			TAN (mg/L)		
	Monthly Avg	Monthly Min	Monthly Max	Monthly Avg	Monthly Min	Monthly Max	Monthly Avg	Monthly Min	Monthly Max	Monthly Avg	Monthly Min	Monthly Max
January 2025	157	129	175	120	76	161	3.92	3.55	4.20	27.8	23.3	31.0
February 2025	137	81	187	117	58	203	3.37	1.78	4.60	26.0	10.5	41.2
March 2025	113	60	138	82	65	102	2.56	1.00	3.38	19.7	7.0	27.5
April 2025	151	66	215	147	40	324	3.40	1.96	4.30	22.3	14.9	32.0
May 2025	153	125	199	115	76	200	3.38	1.68	4.49	22.9	10.6	27.6
June 2025	160	113	193	156	63	312	4.22	3.47	5.42	25.6	23.2	31.1
July 2025	189	131	249	95	3	195	3.51	0.30	4.61	23.8	0.1	32.3
August 2025	174	88	283	206	44	354	5.26	3.88	7.21	29.2	26.9	32.7
September 2025	236	170	310	228	138	310	5.16	4.45	6.88	32.7	28.7	36.2
October 2025	210	152	247	114	38	197	4.44	3.57	6.01	32.5	30.2	35.2
November 2025	161	125	190	97	45	190	4.16	2.82	5.47	30.2	22.5	35.6
December 2025	163	65	313	159	40	349	3.88	1.64	5.50	27.4	13.8	32.4

Month	TKN (mg/L)			Alkalinity (mg/L)			pH (pH units)	
	Monthly Avg	Monthly Min	Monthly Max	Monthly Avg	Monthly Min	Monthly Max	Monthly Min	Monthly Max
January 2025	34.2	28.9	37.1	274	264	292	7.2	7.8
February 2025	30.1	12.9	41.0	241	188	268	7.3	7.7
March 2025	24.4	9.0	33.1	255	215	295	7.4	7.8
April 2025	26.2	17.6	36.6	275	264	290	7.3	8.1
May 2025	27.9	12.5	34.0	273	232	286	7.1	7.6
June 2025	28.6	24.8	32.9	262	246	267	7.0	7.6
July 2025	26.8	0.9	35.8	261	241	284	7.1	7.6
August 2025	32.8	30.3	35.1	240	229	255	7.0	7.5
September 2025	37.6	33.5	39.2	275	264	291	7.1	7.5
October 2025	38.5	35.9	41.5	257	247	267	7.0	7.6
November 2025	34.9	24.7	40.9	251	220	275	7.3	7.5
December 2025	32.6	16.4	38.0	237	174	259	7.1	7.7

Notes:
(1) BOD5 = Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen; TKN = Total Kjeldahl Nitrogen

Table 2-3: Historical Influent Monitoring Data

Year	BOD5 (mg/L)			TSS (mg/L)			TP (mg/L)			TAN (mg/L)		
	Annual Avg	Annual Min	Annual Max	Annual Avg	Annual Min	Annual Max	Annual Avg	Annual Min	Annual Max	Annual Avg	Annual Min	Annual Max
2020	154	32	420	162	14	1312	4.03	1.00	11.60	19.8	3.3	37.8
2021	151	8	569	117	1	233	3.85	0.20	9.90	18.5	0.1	37.2
2022	181	27	340	171	29	354	3.79	1.00	8.40	23.2	6.0	34.2
2023	132	19	272	115	19	320	8.46	0.80	326.00	21.2	5.5	33.6
2024	146	25	314	128	34	404	3.21	0.90	5.26	22.4	6.4	34.0
2025	168	60	313	137	3	354	3.94	0.30	7.21	26.7	0.1	41.2

Month	TKN (mg/L)			Alkalinity (mg/L)			pH (pH units)	
	Annual Avg	Annual Min	Annual Max	Annual Avg	Annual Min	Annual Max	Annual Min	Annual Max
2020	31.4	6.6	152.0	228	158	276	7.1	7.9
2021	27.1	5.7	45.8	253	103	357	7.0	7.8
2022	29.5	9.3	52.5	247	170	309	6.9	7.6
2023	24.9	7.8	38.2	247	190	286	7.0	7.6
2024	26.6	8.8	39.8	257	171	297	6.2	7.6
2025	31.2	0.9	41.5	259	174	295	7.0	8.1

Notes:
(1) BOD5 = Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen; TKN = Total Kjeldahl Nitrogen

2.2 Influent Flow

The rated capacity for the LRPCP is 72,800 m³/d or 72.8 ML/d. Per Section 9.4(a) of the ECA, influent flow was determined by adopting the flow measurements of the final effluent flow volume. This is because the influent flow meter includes the overflow volumes which based on conversations with the MECP should not be included. Additionally, the influent volume and flow are considered to be the same as the final effluent volume and flow at the LRPCP, as the streams are considered not significantly different. Final effluent flow was measured continuously as described in **Section 3.4**.

Per Section 6.1(c) of the ECA, the Owner shall design and undertake everything practical to operate the Plant in accordance with the Design Objectives so that the annual average daily influent flow is within the rated capacity. If the annual average daily influent flow reaches 80% of the rated capacity (58,240 m³/d / 58.2 ML/d) the Owner also needs to provide an assessment and recommend pro-active actions.

A summary of the monthly average daily influent flow data for the current reporting year is presented in **Table 2-4** and on **Figure 2-1**, and the annual average daily influent flow data for the previous five years is presented in **Table 2-5** and on **Figure 2-2**. It is noted that leachate imported to the Plant is captured in the average daily influent measurements presented in the below tables.

Table 2-4: 2025 Average Daily Influent Flow

Month	Monthly Average Daily Influent Flow (ML/d)	% of Rated Capacity (72.8 ML/d)	Monthly Peak Daily Influent Flow (ML/d)	Monthly Total Influent Flow (ML)
January 2025	37	51	70	1,142
February 2025	41	56	86	1,146
March 2025	46	63	103	1,422
April 2025	46	63	114	1,375
May 2025	42	58	89	1,305
June 2025	41	56	98	1,217
July 2025	37	51	65	1,144
August 2025	34	46	49	1,039
September 2025	34	46	55	1,008
October 2025	31	42	38	952
November 2025	33	45	51	992
December 2025	38	52	70	1,167

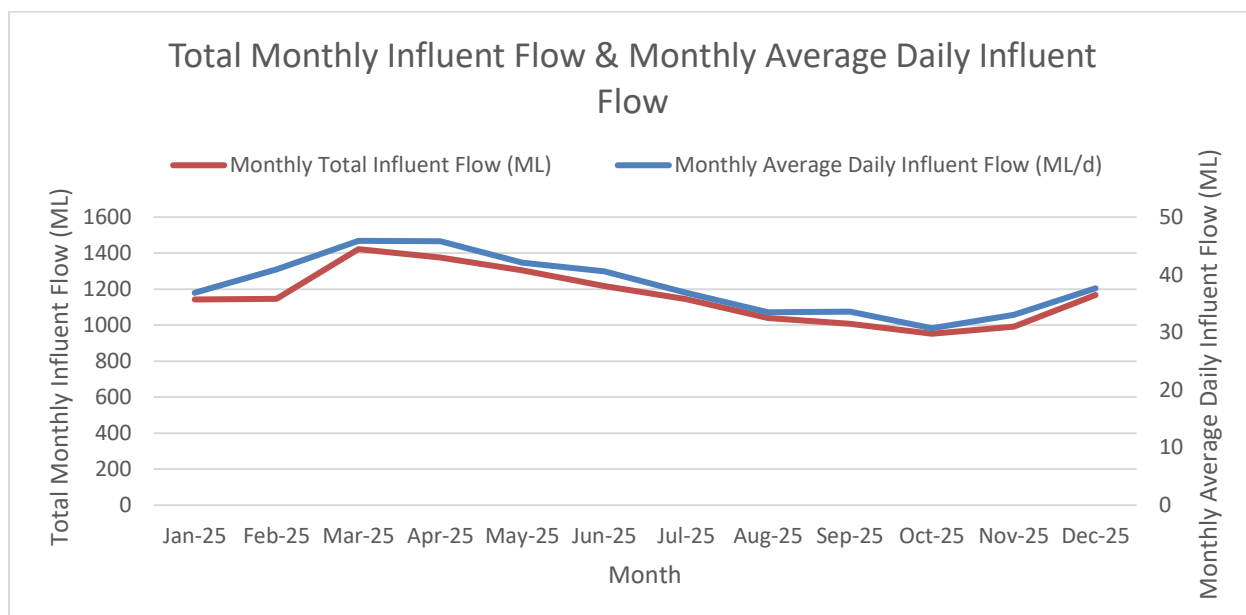


Figure 2-1: 2025 Monthly Influent Flows

Table 2-5: Historical Average Daily Influent Flow

Year	Annual Average Daily Influent Flow (ML/d)	% of Rated Capacity (72.8 ML/d)	Annual Peak Daily Influent Flow (ML/d)	Annual Total Influent Flow (ML)
2020	45	62	113	16,397
2021	42	58	113	15,440
2022	37	51	115	13,601
2023	44	61	121	16,163
2024	44	61	124	16,182
2025	38	52	114	13,908

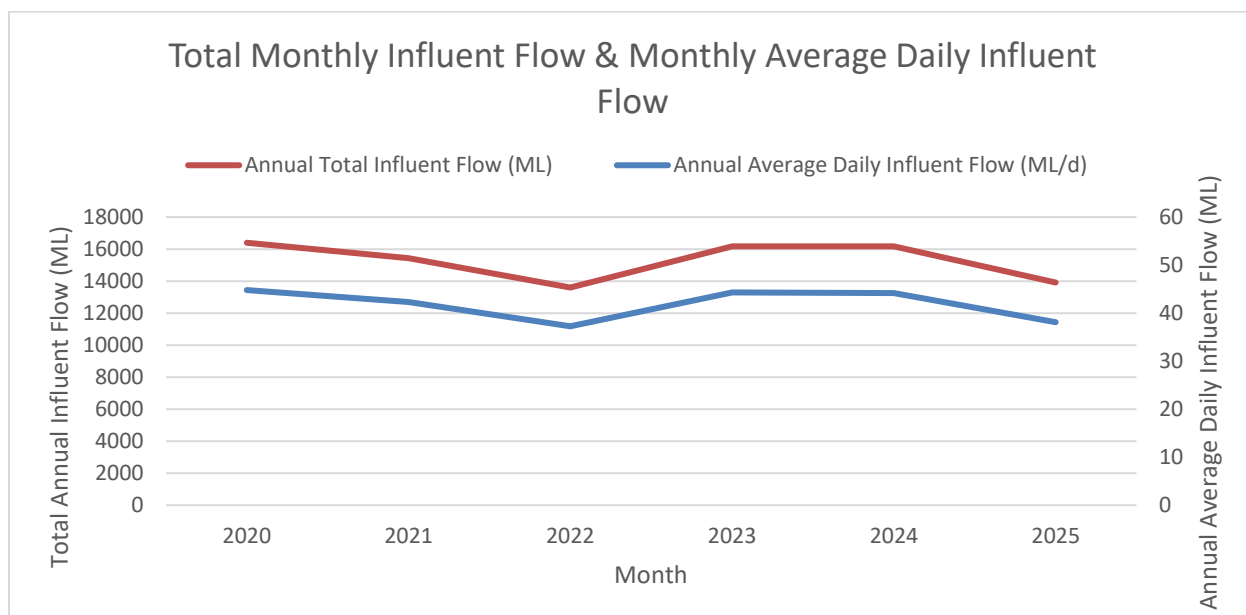


Figure 2-2: Historical Influent Flows

The LRPCP met the Design Objective for influent flow in 2025, with an annual average daily influent flow of 38 ML/d (52% of the rated capacity of 72.8 ML/d). The annual average daily influent flow remained below the 80% rated capacity threshold (58.2 ML/d) established in the ECA, as such no further assessment or actions are required.

The highest annual peak effluent flow of 114 ML/d occurred on April 3, 2025. This high flow event was due to heavy precipitation on April 2, 2025, reported as 40.3 mm at Environment Canada's Windsor A Station.

Overall, the total annual influent flow and annual average daily influent flow has been generally consistent over the last several years.

3. Final Effluent Monitoring Data

This section presents a summary of and interpretation of final effluent monitoring data, including concentration, flow rates and a comparison to the Design Objectives and Compliance Limits, and an overview of the success and adequacy of the Plant per section 11.4(b) of the ECA.

3.1 Final Effluent Monitoring Program

Final effluent samples consisted of either a 24-hour composite sample collected using an automatic sampler or a grab sample, collected by trained City employees at the effluent

sampling points of each Plant 1 and Plant 2. The field pH and field temperature measurements were measured using a field probe for each Plant 1 and Plant 2, and the unionized ammonia concentrations were calculated for each. Sample analysis was completed by SGS (Lakefield) Canada Inc., except for *E. Coli* and lethality, which were completed by Caduceon Environmental Laboratories and Nautilus Environmental, respectfully. Sample analysis and frequency followed the monitoring program in Schedule D of the ECA and are summarized in **Table 3-1**. Deviations to the monitoring program are discussed in **Section 4**.

Table 3-1: Final Effluent Monitoring Program – Regular Parameters

Parameter	Sample Type	Minimum Frequency
Carbonaceous Biochemical Oxygen Demand (CBOD5)	24-hour composite	Weekly
Total Suspended Solids	24-hour composite	Weekly
Total Phosphorus	24-hour composite	Weekly
Total Ammonia Nitrogen	24-hour composite	Weekly
Total Kjeldahl Nitrogen	24-hour composite	Weekly
Nitrate as Nitrogen	24-hour composite	Weekly
Nitrite as Nitrogen	24-hour composite	Weekly
<i>E. Coli</i>	Grab	Weekly (from May 1 to October 31)
Dissolved Oxygen	Grab/Probe	Daily
pH ¹	Grab/Probe	Daily
Temperature ¹	Grab/Probe	Daily
Unionized Ammonia ²	As Calculated	Weekly

Notes:

- (1) pH and temperature shall be determined in the field at the time of sampling for total ammonia nitrogen.
- (2) Unionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

3.2 Final Effluent Design Objectives and Compliance Limits

Design Objectives for the final effluent discharged from the LRPCP are presented in Section 6 and Schedule B of the ECA and are summarized in **Table 3-2**.

The final effluent must also be essentially free of floating and settleable solids and not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving water.

Table 3-2: Final Effluent Design Objectives

Parameter	Averaging Calculator	Design Objective
pH	Single Sample Result	between 6.5 – 9.0 inclusive
Dissolved Oxygen	Single Sample Result	greater than or equal to 4.0 mg/L

Compliance Limits for the final effluent concentrations from the LRPCP are presented in Section 7 and Schedule C of the ECA and summarized in **Table 3-3** and **Table 3-4**.

The Owner must also operate and maintain the Plant such that the final effluent is disinfected between May 1 and October 31.

Table 3-3: Final Effluent Compliance Limits – Monthly Average Effluent Concentrations

Parameter	Averaging Calculator ¹	Compliance Limit
Carbonaceous Biochemical Oxygen Demand (CBOD5)	Monthly Average Effluent Concentration	15 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	1 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	6 mg/L
<i>E. coli</i>	Monthly Geometric Mean Density	200 CFU/100mL (from May 1 to October 31)

Notes:

- (1) The effluent value shall be calculated by using the flow weighted average of Plant 1 and Plant 2 effluent parameters.

Table 3-4: Final Effluent Compliance Limits – Single Sample Result at the Outlet of Plant 1 and Plant 2

Parameter	Averaging Calculator	Compliance Limit
Carbonaceous Biochemical Oxygen Demand (CBOD5)	Single Sample Result	25 mg/L
Total Suspended Solids	Single Sample Result	25 mg/L
Total Phosphorus	Single Sample Result	1.5 mg/L
Total Ammonia Nitrogen	Single Sample Result	8 mg/L
<i>E. coli</i>	Single Geometric Mean Density	1000 CFU/100mL (from May 1 to October 31)
pH	Single Sample Result	between 6.5 – 9.0 inclusive

3.3 Final Effluent Characteristics

Final effluent characteristics are discussed in the following sections.

3.3.1 Final Effluent Characteristics – Regular Data

A summary of the current reporting year final effluent monitoring data is presented in **Table 3-5** and **Table 3-6**. A summary of the historical final effluent monitoring data is presented in **Table 3-7**. The referenced tables also include a comparison to applicable Design Objectives and Compliances Limits.

Table 3-5: 2025 Final Effluent – Plant 1 & Plant 2 Combined

Month	Monthly Average Effluent Concentration						Monthly Geometric Mean Density
	CBOD5 (mg/L)	TSS (mg/L)	TP (mg/L)	TKN (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	<i>E. Coli</i> (CFU/100mL)
Monthly Average Compliance Limit	15	15	1	-	-	-	200 (from May 1 to October 31)
January 2025	5	5	0.28	1.2	9.9	1.01	-
February 2025	4	4	0.41	2.0	8.5	1.24	-
March 2025	4	3	0.13	1.2	7.7	1.46	-
April 2025	4	3	0.24	0.8	10.1	0.12	-
May 2025	4	4	0.26	1.1	9.8	0.36	105
June 2025	4	3	0.44	1.1	10.6	0.20	139
July 2025	4	3	0.59	1.2	10.8	0.05	68
August 2025	4	4	0.63	1.1	11.6	0.04	46
September 2025	4	4	0.31	1.3	10.6	0.05	38
October 2025	4	4	0.33	2.8	10.4	0.37	80
November 2025	4	5	0.24	4.6	7.7	1.12	-
December 2025	4	5	0.22	1.6	10.4	0.10	-

Month	Monthly Average Effluent Concentration		Monthly Minimum	Monthly Maximum	Monthly Minimum	Monthly Maximum
	TAN (mg/L)	UA (mg/L)	pH (pH Units) ^{3,4}		Temperature (° C)	
Monthly Average Compliance Limit	6	-	-	-	-	-
January 2025 ^{3,4}	0.2	0.0003	6.57	6.89	10.7	13.4
February 2025	1.2	0.0015	6.56	6.78	9.6	12.5
March 2025	0.5	0.0008	6.68	7.01	9.3	14.1
April 2025	0.1	0.0002	6.82	6.96	11.3	16.2
May 2025	0.2	0.0004	6.49	6.97	14.4	17.5
June 2025	0.2	0.0005	6.53	6.93	14.8	19.3
July 2025	0.1	0.0002	6.43	6.74	18.9	20.9
August 2025	0.1	0.0002	6.32	6.86	19.4	22.7
September 2025	0.2	0.0005	6.62	6.79	20.9	22.4
October 2025	1.6	0.0028	6.54	6.69	18.0	22.4
November 2025	3.4	0.0058	6.49	7.29	6.7	18.3
December 2025	0.5	0.0004	6.32	6.74	5.4	14.1

Notes:

(1) CBOD5 = Carbonaceous Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus; TKN = Total Kjeldahl Nitrogen; TAN = Total Ammonia Nitrogen; UA = Unionized Ammonia

(2) Red Text = Exceeds Compliance Limit

(3) Value displayed represents the average daily pH for Plant 1 and Plant 2 combined as measured by the field pH probe.

(4) Select pH measurements were removed from the dataset in November 2025 due to construction-related field pH probe interference.

Table 3-6: 2025 Final Effluent – Plant 1 & Plant 2 Single Sample Results

Year	CBOD5 (mg/L)		TSS (mg/L)		TP (mg/L)		TAN (mg/L)	
	Plant 1 Monthly Max	Plant 2 Monthly Max	Plant 1 Monthly Max	Plant 2 Monthly Max	Plant 1 Monthly Max	Plant 2 Monthly Max	Plant 1 Monthly Max	Plant 2 Monthly Max
Single Sample Compliance Limit	25		25		1.5		8	
January 2025	10	4	16	8	0.63	0.53	0.6	0.1
February 2025	5	4	5	5	0.56	0.98	6.8	1.9
March 2025	6	4	3	5	0.31	0.31	1.9	0.2
April 2025	4	6	3	7	0.67	0.50	0.3	0.1
May 2025	5	5	8	9	0.70	0.30	0.4	0.1
June 2025	4	4	4	6	1.15	0.66	0.8	0.1
July 2025	4	4	8	4	1.17	0.99	0.1	0.1
August 2025	5	4	4	6	1.09	1.18	0.1	0.1
September 2025	10	5	5	7	0.88	0.59	0.2	0.7
October 2025	5	4	5	7	0.65	0.30	7.0	0.1
November 2025	6	4	6	5	0.44	0.27	8.7	4.5
December 2025	5	4	8	6	0.49	0.43	2.3	2.1

Notes:
(1) CBOD5 = Carbonaceous Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen
(2) Red Text = Exceeds Compliance Limit

Table 3.6: 2025 Final Effluent – Plant 1 & Plant 2 Single Sample Results (Continued)

Year	E. Coli (CFU/100mL)		pH (pH Units) ^{2,3}				DO (mg/L)	
	Plant 1 Monthly Max	Plant 2 Monthly Max	Plant 1 Monthly Min	Plant 1 Monthly Max	Plant 2 Monthly Min	Plant 2 Monthly Max	Plant 1 Monthly Min	Plant 2 Monthly Min
Single Sample Design Objective	-		<u>6.5</u>	<u>9</u>	<u>6.5</u>	<u>9</u>	<u>≥4</u>	
Single Sample Compliance Limit	1000 (from May 1 to October 31)		6.5	9	6.5	9	-	
January 2025	-	-	6.56 / 7.0	6.84 / 7.6	6.57 / 6.9	6.69 / 7.5	4.9	6.7
February 2025	-	-	6.60 / 7.1	6.99 / 7.5	<u>6.32</u> / 7.0	6.68 / 7.4	4.8	6.0
March 2025	-	-	6.74 / 7.1	7.03 / 7.9	6.51 / 6.9	7.03 / 7.6	4.5	5.3
April 2025	-	-	6.85 / 7.0	7.04 / 7.7	6.74 / 6.9	6.96 / 7.5	<u>3.4</u>	<u>0.3</u>
May 2025	1,090	330	6.77 / 7.2	7.01 / 7.6	<u>6.17</u> / 7.0	6.98 / 7.4	5.1	5.0
June 2025	2,000	2,000	6.82 / 7.2	7.10 / 7.7	<u>6.21</u> / 7.0	6.87 / 7.5	<u>3.9</u>	<u>3.8</u>
July 2025	1,700	50	6.75 / 7.3	7.09 / 7.6	<u>6.15</u> / 7.0	6.48 / 7.4	4.3	<u>2.5</u>
August 2025	320	40	6.72 / 7.2	6.99 / 7.6	<u>6.11</u> / 6.9	6.76 / 7.4	<u>3.0</u>	4.7
September 2025	8,500	600	6.60 / 7.2	6.89 / 7.9	6.60 / 7.0	6.77 / 7.5	<u>2.8</u>	<u>3.2</u>
October 2025	100	5,600	6.54 / 7.2	6.82 / 7.7	<u>6.37</u> / 7.0	6.70 / 7.3	5.5	4.4
November 2025	-	-	<u>6.36</u> / 7.3	6.82 / 7.8	6.55 / 7.0	7.77 / 7.6	5.8	4.9
December 2025	-	-	<u>6.42</u> / 7.1	6.71 / 7.6	<u>6.22</u> / 6.9	6.78 / 7.4	4.6	4.7

- Notes:
- (1) Underlined Text = Exceeds Design Objective; Red Text = Exceeds Compliance Limit
 - (2) Field pH Probe / In-House Laboratory pH Probe
 - (3) Select pH measurements were removed from the dataset in November 2025 due to construction-related field pH probe interference.

Table 3-7: Historical Final Effluent – Plant 1 & Plant 2 Combined

Date	CBOD5 (mg/L)			TSS (mg/L)			TP (mg/L)			TAN (mg/L)			E. Coli (CFC/100 ml)
	Annual Avg	Annual Max	Annual Min	Annual Avg	Annual Max	Annual Min	Annual Avg	Annual Max	Annual Min	Annual Avg	Annual Max	Annual Min	Annual Geometric Mean Density
2021	4	81	2	5	11	4	0.23	0.64	0.03	0.12	0.67	0.02	42
2022	3	7	2	4	11	2	0.34	0.91	0.03	0.44	5.00	0.03	24
2023	4	8	2	4	8	2	0.29	1.63	0.03	0.23	2.54	0.10	43
2024	4	10	3	4	8	2	0.27	1.03	0.04	0.37	4.61	0.10	36
2025	4	7	3	4	9	2	0.34	1.14	0.04	0.67	5.66	0.10	73

- Notes:
- (1) CBOD5 = Carbonaceous Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen

A summary of the current reporting year removal rates for select parameters is presented in **Table 3-8**.

Table 3-8: 2025 Removal Rates

Date	TSS (%)	TP (%)	TAN (%)
January 2025	97.2	91.5	98.3
February 2025	96.9	88.0	93.0
March 2025	96.7	91.1	95.8
April 2025	96.9	90.4	98.9
May 2025	97.1	89.0	97.5
June 2025	97.6	88.2	94.9
July 2025	98.4	88.4	97.9
August 2025	97.8	87.4	99.5
September 2025	97.9	93.4	97.9
October 2025	96.2	92.4	92.5
November 2025	95.7	94.3	92.3
December 2025	96.1	93.1	92.3

Notes:

(1) TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen

A summary of the historical removal rates for select parameters is presented in **Table 3-9**.

Table 3-9: Historical Removal Rates

Date	TSS (%)	TP (%)	TAN (%)
2020	98.0	90.0	97.0
2021	97.5	93.8	99.8
2022	97.7	93.8	99.7
2023	98.0	91.0	99.4
2024	97.5	90.7	99.1
2025	97.1	90.5	95.7

Notes:

(1) TSS = Total Suspended Solids; TP = Total Phosphorus; TAN = Total Ammonia Nitrogen

In the current reporting year, the final effluent was observed to be free from floating and settleable solids, and was not observed to contain films, sheens, foams or be discoloured during all sampling events.

The Plant was operated and maintained such that the final effluent was disinfected between May 1 and October 31 in 2025. As detailed in **Section 12**, primary overflows between May 1 and October 31 in 2025 received disinfection with sodium hypochlorite.

In the current reporting year, the final effluent met the single sample result Design Objectives for dissolved oxygen (DO) at Plant 1 and Plant 2, with the exceptions noted in **Table 3-10**. Dissolved oxygen below the single sample Design Objective of 4 mg/L was caused by high flows, probe fouling and/or calibration and maintenance activities in 2025.

Table 3-10: Dissolved Oxygen - Plant 1 and Plant 2 Single Sample Results

Plant	Date	DO (mg/L)	Reason
Plant 1	Apr 9, 2025	3.4	Annual Calibration/Maintenance
	Jun 5, 2025	3.9	High Flow/Probe Fouling
	Aug 27, 2025	3.9	Probe Fouling
	Aug 28, 2025	3.0	Probe Fouling
	Sept 18, 2025	2.8	Probe Fouling
Plant 2	Apr 3, 2025	1.9	Probe Fouling
	Apr 9, 2025	0.3	Annual Calibration/Maintenance
	Jun 4, 2025	3.8	High Flow/Probe Fouling
	Jun 16, 2025	3.8	Probe Fouling
	Jul 2, 2025	3.2	Probe Fouling
	Jul 3, 2025	2.5	Probe Fouling
	Sept 11, 2025	3.2	Probe Fouling

Notes:

(1) DO = Dissolved Oxygen

In the current reporting year, the final effluent met the monthly average concentration Compliance Limits for CBOD₅, TSS, TP, TAN and *E. Coli*.

In the current reporting year, the final effluent met the single sample result Compliance Limits for CBOD₅, TSS, TP, TAN and *E. Coli*, with the following exceptions:

- TAN exceeded the single sample result Compliance Limit of 8 mg/L at Plant 1 on Nov 4, 2025 (8.7 mg/L).
- *E. Coli* exceeded the single sample result Compliance Limit of 1000 CFU/100 mL at Plant 1 on May 1, 2025 (1090 CFU/100 mL), June 5, 2025 (2000 CFU/100 mL), July 31, 2025 (1700 CFU/100 mL) and Sept 4, 2025 (8500 CFU/100 mL), and at Plant 2 on June 5, 2025 (2000 CFU/100 mL) and Oct 30, 2025 (5600 CFU/100 mL).

The single sample *E. Coli* exceedances were primarily due to the UV system being at end of life and the ongoing UV replacement project, at times resulting in the system operating

below the minimum intensity required for disinfection. Installation of the new system was completed in December 2025 and is anticipated to be in service starting May 2026.

The single sample result Design Objectives and single sample result Compliance Limits for pH are between 6.5 and 9 inclusive. The pH of the effluent discharging from both Plant 1 and Plant 2 is continuously measured by field pH probes, recorded each minute and the recorded values are averaged to calculate a daily value for each Plant for reporting purposes.

Additionally, 24-hour composite samples are collected from the effluent discharging from both Plant 1 and Plant 2. The composite samples are measured at the Lou Romano Water Reclamation Plant in-house laboratory by trained City staff for pH using a laboratory pH probe for operational purposes.

As displayed in **Table 3-6**, select days in two months at Plant 1 and seven months at Plant 2 had pH measurements which were below the acceptable range as measured by the effluent field pH probes. However, all the corresponding 24-hour effluent composite sample results analyzed using the lab pH probe during the same period were within the acceptable range.

The observed variance between the field pH probes and lab pH probe measurements is being investigated. When field probe readings indicated lower pH values that were inconsistent with laboratory results, the probes were recalibrated. The field pH probes were also replaced in 2025 when calibration was ineffective. Planned activities associated with the UV system replacement project resulted in temporary disruptions to the Programmable Logic Controller (PLC), power, and flow, which may have contributed to some of the observed variability in field pH measurements.

Overall, effluent monitoring parameters in 2025 were measured at concentrations generally consistent with data measured in the last five years, with the exception of TAN and E. Coli which saw slightly higher annual averages in 2025 compared to the previous five years. The removal rates continue to be high for total suspended solids, total phosphorus and total ammonia nitrogen.

3.3.2 Final Effluent Characteristics – Toxicity Data

Although not a requirement of the ECA, monitoring for acute lethality to Rainbow Trout and *Daphnia magna* was completed at the Plant.

A summary of the toxicity testing in 2025 is presented in **Table 3-11**.

Table 3-11: 2025 Final Effluent – Toxicity

Date	Daphnia magna Mean Mortality (%)	Rainbow Trout Mean Mortality (%)
June 17, 2025	0	0

A summary of the historical toxicity testing for the previous 4 years is presented in **Table 3-12**.

Table 3-12: Historical Final Effluent – Toxicity Data

Year	Maximum Annual Daphnia magna Mean Mortality (%)	Maximum Annual Rainbow Trout Mean Mortality (%)
2021	0	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0

3.4 Final Effluent Flow

The final effluent volume and flow at the LRPCP were calculated from the effluent flow meters located in the Plant 1 and Plant 2 effluent discharge channels which recorded continuously. This value represents the volume of final treated effluent flow; the final total effluent flow is determined by adding the primary overflow volumes which are not captured by the final effluent flow meters. Overflow volumes are discussed in **Section 12**, however are displayed in the below tables and graphs below for comparison.

A summary of the effluent flow data for the current reporting year is presented in **Table 3-13** and on **Figure 3-1**.

Table 3-13: 2025 Monthly Effluent Flow and Overflows

Month	Plant 1 Treated Monthly Effluent Flow (ML)	Plant 2 Treated Monthly Effluent Flow (ML)	Treated Monthly Effluent Flow (ML)	Total Monthly Effluent Flow (ML)	Monthly Primary Overflow (ML)	Precipitation (mm)
January 2025	520	623	1142	1152	9.984	25
February 2025	506	640	1146	1146	0	18
March 2025	611	811	1422	1456	33.632	47
April 2025	597	778	1375	1479	103.447	56
May 2025	573	732	1305	1317	11.575	66
June 2025	564	653	1217	1235	17.465	87
July 2025	508	636	1144	1144	0	89
August 2025	437	602	1039	1039	0	27
September 2025	402	606	1008	1008	0	38
October 2025	481	472	952	952	0	23
November 2025	501	490	992	992	0	34
December 2025	526	640	1167	1170	3.068	47

Notes:

- (1) Precipitation data from Environment Canada's Windsor A Station.

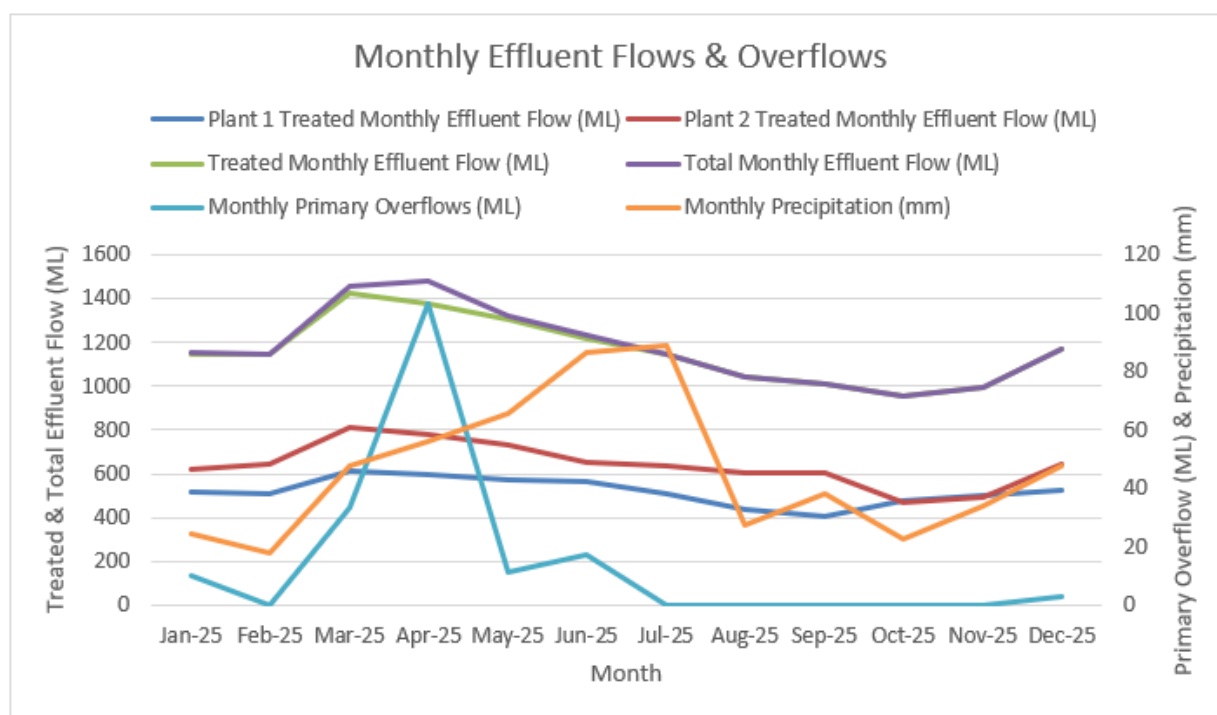


Figure 3-1: 2025 Monthly Effluent Flows and Overflows

A summary of the historical effluent flow and overflows over the last five years is presented in **Table 3-14** and on **Figure 3-2**.

Table 3-14: Historical Average Daily Effluent Flow

Year	Treated Annual Effluent Flow (ML)	Total Annual Effluent Flow (ML)	Annual Primary Overflows (ML)	Annual Precipitation (mm)
2020	16,397	17,175	777	814
2021	15,440	16,519	1,080	816
2022	13,601	13,740	139	596
2023	16,163	16,859	696	917
2024	16,182	16,706	524	857
2025	13,908	14,087	179	557

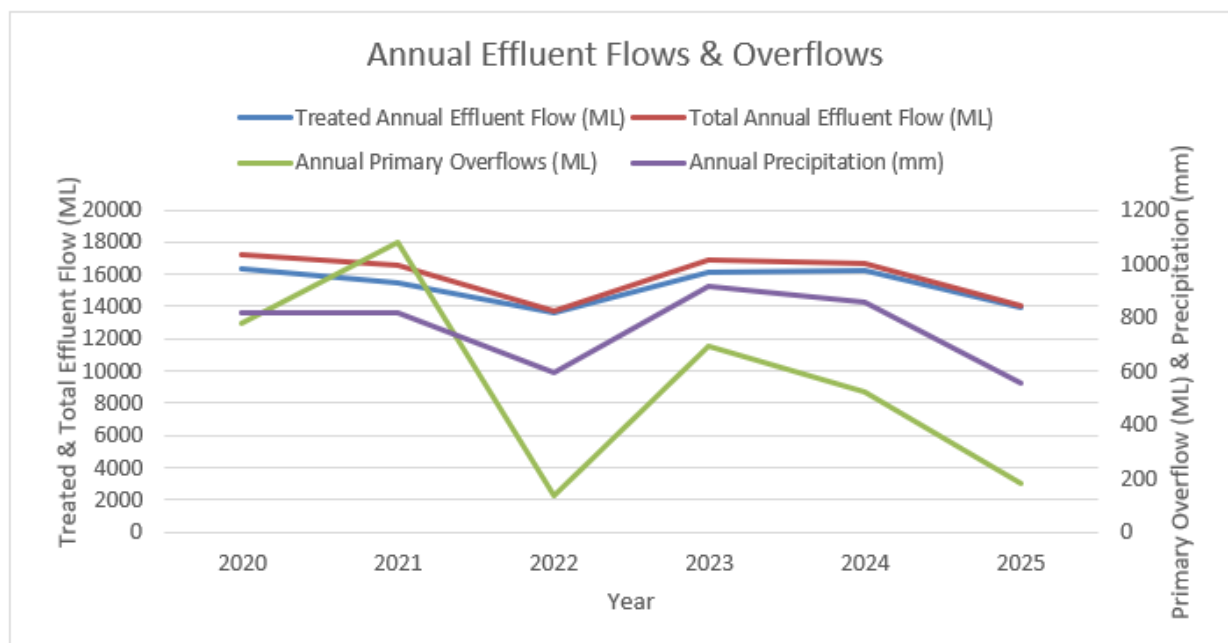


Figure 3-2: Historical Effluent Flows and Overflows

In 2025, the total and treated effluent flows fell within the range of flows over the last five years. There also appears to be a correlation between the annual precipitation amount and the volume of primary overflows at the Plant.

4. Monitoring Schedule and Deviations

This section presents the current reporting year monitoring schedule, schedule deviations and reasons for the current reporting year, and the schedule for the next reporting year per Section 11.4(m) of the ECA.

In 2025, the LRPCP carried out a scheduled monitoring program in accordance with Section 9 of the ECA for the sample points, frequencies, sample types and analyses listed in Schedule D of the ECA. The current reporting year monitoring schedule is presented in **Appendix A: Current Year and Next Year Monitoring Schedules**. It is noted that the schedule presented also includes additional sampling required by other agencies. Deviations from the current year monitoring schedule are summarized in **Table 4-1**. The observed deviations pertained only to the timing of collection, and all required samples were collected. The deviations are not expected to impact data reliability. Monitoring was

also completed during situations which were outside of normal operating conditions as detailed in **Section 12**.

Table 4-1: Monitoring Schedule Deviation Summary

Date	Deviation and Reason
February 18, 2025	LRPCP Weekly Influent and Effluent samples were scheduled to be collected on February 18, 2025, but were collected on February 19, 2025. This occurred because incorrect sample bottles were used, resulting in insufficient sample volume for the required analyses on the original date.
March 4, 2025	LRPCP Weekly Influent and Effluent samples were scheduled to be collected on March 4, 2025, but were collected on March 5, 2025. This occurred because incorrect sample bottles were used, resulting in insufficient sample volume for the required analyses on the original date.
May 4, 2025	LRPCP Chamber Sampling Point composite sample for a primary overflow should have been collected on May 4, 2025, but was collected on May 5, 2025, due to a scheduling oversight. It is noted that the <i>E. Coli</i> sample was collected on May 4, 2025.
June 18, 2025	LRPCP Annual Influent and Effluent samples were scheduled to be collected on June 18, 2025, but were collected on June 26, 2025. This occurred because insufficient sample volume was collected on the original date.
July 1, 2025	LRPCP Weekly Influent and Effluent samples were scheduled to be collected on July 1, 2025, but were collected on July 2, 2025. This occurred because insufficient sample volume was collected on the original date.
October 14, 2025	LRPCP Weekly Influent and Effluent samples were scheduled to be collected on October 14, 2025, but were collected on October 15, 2025. This occurred because incorrect sample bottles were used, resulting in insufficient sample volume for the required analyses on the original date.
December 23, 2025	LRPCP Weekly Influent and Effluent samples were scheduled to be collected on December 23, 2025, but were collected on December 21, 2025, to accommodate the laboratory and courier's holiday schedule.

The City also maintained a separate monitoring program for plant operations to monitor treatment efficiency where analyses were complete in-house by licenced operators in accordance with standardized methods.

The current monitoring schedule was revised and updated for the next reporting year. The revisions include a rotation of the day of the week/month for the scheduled monitoring

program, except where the actual scheduled monitoring frequency was three or more times per week. The monitoring schedule for the next reporting year is presented in **Appendix A: Current Year and Next Year Monitoring Schedules**. It is noted that the schedule presented also includes additional sampling required by other agencies.

5. Operating Issues and Corrective Actions

This section presents a summary of operating issues encountered and corrective actions taken in the current reporting year per Section 11.4(c) of the ECA.

The Plant continued to operate effectively in 2025, with operational issues managed through timely corrective action and process adjustments. The following is a summary of operating issues identified, and corrective actions employed to maintain Plant performance in the current reporting year:

- New UV system installation required numerous planned partial and full shutdowns of Plant 1 and Plant 2 during construction. Interruptions varied in length, shutdowns consisted of PLC, power interruptions and/or flow interruptions. The operating issues were mitigated by redirecting Plant flows through available UV channels, UV disinfection was fully maintained from May 1 to October 31 as required in ECA.
- Select days in 2025 saw pH below the acceptable range as measured by the effluent field pH probes. However, the corresponding lab pH was within the acceptable range the entire year. Field pH probes were replaced in both Plants in 2025 and were calibrated regularly. Planned disruptions associated with the UV system replacement project may have contributed to some of the observed variability. The variance between the field pH probe and the lab pH probe measurements is being investigated.
- Aeration Plants 1 & 2 filamentous bacteria proliferation was controlled with addition of Poly Aluminum Chloride to RAS stream during cold weather months.
- MCRT Adjusted between 8 to 11 days for plant nitrification.
- All FST weir brushes cleaned of algae accumulation monthly in summer season.
- Overflow chamber cleaned of sediment after each overflow.
- DO probes annual calibration performed in all aeration tanks and effluent channels.
- PSTs and primary channels cleaned of “fog” after wet weather events.
- Aeration channels cleaned of filamentous bacteria foam mat.

6. Capital Projects, Repairs and Maintenance

This section presents a summary of normal and emergency repairs and maintenance activities carried out on major structures, equipment, apparatuses and mechanisms at the Plant per Section 11.4(d) of the ECA. This section also presents a summary of capital improvement projects carried out in the current reporting year.

Routine preventative maintenance is performed on equipment at the Plant. The Antero Equipment Maintenance (by AllMax Software Inc.) is used to maintain an inventory of plant equipment and allows for the development and tracking of work orders and provides a record of maintenance and repairs that have been carried out. Preventative maintenance is performed to ensure that necessary equipment is available to the Plant during normal operations and during emergency.

The following repair and maintenance activities were completed in the current reporting year at the Plant:

- Generator Building
 - Repaired louver control circuit
 - Replaced fuel level circuit board
 - Replaced I-Guard module
 - Replaced block heater Genset #2
- Administration Building
 - Replaced inlet gas detection controller
 - Replaced inlet H₂S sensor
 - Replaced inlet camera
 - Disconnected/reconnected RSP3 motor/clutch
 - Adjusted RASP7 PID controller
 - Raw sewage pump 3, bearings replaced and drive shaft balanced
 - Alum pump tubing replaced as needed
 - Coarse bar screen 1 & 2 repaired
 - Sodium hypochlorite storage tank repaired
- Plant 1
 - Replaced pH probe
 - Repaired BSI_C1 indicator
 - Disconnected/reconnected FST2 motor
 - Replaced mixer 2
 - Repaired BI_C3
 - FST 2 drive motor bearings replaced
 - Primary sludge pump #3 replaced
 - PST 4 scum box heater replaced

- PSP 3 speed control replaced
 - AB 3 repaired
- Plant 2
 - Replaced pH probe
 - Repaired BSI_C1 indicator
 - Disconnected/reconnected FST2 motor
 - Replaced mixer 2
 - Repaired BI_C3
 - Aeration blower 6 VFD repaired
 - Aeration blower 5 check valve repaired
 - Aeration mixer 13 replaced
- Dewatering
 - Replaced scrubber 2 H2O solenoid
 - Replaced polymer B3 motor
 - Installed H2O2 PLC panel
 - MAU 1 & 2 VFD drives replaced
 - Sludge feed pump 3 replaced
- UV
 - Replaced many GFCI receptacles
 - Numerous UV racks and bulbs replaced
 - Numerous ballasts replaced

The following capital improvement projects were initiated or completed in the current reporting year:

- Administration building/staff facilities renovation commenced in November 2022 and completed in December 2025.
- New replacement overhead crane replaced in Spring 2025.
- Ultraviolet disinfection system upgrades completed December 2025. Two new MV Transformers installed in 2025.
- New PLC in Blower Building #2. New Ammonia Based Control Aeration installed for Plant #2 Aeration system.
- New hydrogen peroxide storage and dosing system installed for dewatering building odour control for replacing Potassium Permanganate based system. Put in service July 2025.
- Inlet bypass gate repaired in 2025.
- FST6 drive repaired in 2025.

7. Effluent Quality Assurance and Control

This section presents a summary of effluent quality assurance or control measures undertaken per Section 11.4(e) of the ECA.

The following effluent quality assurance and control measures were undertaken during the reporting period:

- Samples were collected by trained City employees following the established schedule and standard operating procedures;
- ECA required sample analyses were completed by SGS (Lakefield) Canada Inc., Caduceon Environmental Laboratories and Nautilus Environmental which are accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for the analyses completed and meet the requirements of ISO/IEC 17025;
- Operational sample analyses were completed in-house to monitor treatment efficiency by licenced operators in accordance with standardized methods;
- Sample analytical results were monitored by the operators, and informed adjustments required in the treatment process;
- Flow measurement devices, auto samplers, in-house laboratory equipment, and various other plant equipment were calibrated in accordance with standard operating procedures and manufacturer recommendations;
- Equipment redundancy has been strategically integrated into the Plant to support equipment cycling, accommodate scheduled downtime, and facilitate preventative maintenance and repairs;
- A computerized maintenance management system was used to schedule and log preventative maintenance and repairs; and
- The LRPCP was operated and maintained by licenced wastewater treatment operators.

8. Calibration and Maintenance Procedures

This section presents a summary of calibration and maintenance carried out on influent, imported sewage and final effluent monitoring equipment per Section 11.4(f) of the ECA.

The flow meter devices utilized at the LRPCP underwent annual inspection, verification and calibration in September and October 2025. This included the Plant 1 and Plant 2 effluent discharge channel flow meters, the Plant overflow flow meter and the influent flow meters in channels #1 and #2.

The LRPCP does not receive imported sewage but does receive landfill leachate. The volume of leachate which can be received is determined by measuring leachate holding tank levels using a Milltronics level sensor and holding tank volumes. The calculated volume is entered on the manifests received from the haulers. A flowmeter is used to measure the volume introduced to the treatment process.

Flow meter devices were calibrated to an accuracy within plus or minus 15 percent (+/- 15%) of the actual flow rate. Calibration certificates are included in **Appendix B: Calibration Certificates**.

Routine inspections and calibrations following standard operating procedures and manufacturer recommendations were also performed on effluent monitoring equipment, auto samplers and in-house laboratory equipment.

9. Design Objectives

This section discusses Plant performance as it relates to the Design Objectives per Section 11.4(g) of the ECA.

As discussed in **Sections 3.3**, the single sample Design Objectives were achieved for more than 50% of the time in the current reporting year for DO and pH. Additionally, there were no obvious trends in effluent deterioration throughout the current reporting year.

In the current reporting year, the final effluent was observed to be free from floating and settleable solids, and was not observed to contain films, sheens, foams or be discoloured during all sampling events.

As discussed in **Section 2.2**, the annual average daily influent flow was below the 80% rated capacity threshold established in the ECA, as such no further assessment or actions are required.

10. Sludge

This section presents a summary of the volume of sludge generated this reporting year, where the sludge was disposed of, and anticipated sludge volumes in the next reporting year per Section 11.4(h) of the ECA.

10.1 Sludge Production and Management

The LRPCP generates raw sludge during primary treatment, which is dewatered in centrifuges to create wet cake, also called biosolids. A total of 131,098,619 L of raw sludge (average 3.52% solids) was dewatered in the current reporting year. Dewatering generated 9,713 tonnes of wet sludge cake (average 27.74% solids). A summary of sludge generated is presented in **Table 10-1**.

The biosolids were transported offsite to the Windsor Biosolids Processing Facility (WBPF) which is owned by the City and operated by Synagro Windsor Operating LP (Synagro). The biosolids were heat dried and pelletized at the WBPF with the finished pellets used as commercial fertilizer. Synagro reports on this facility under a separate cover for Amended Environmental Compliance Approval Number A010112 dated February 10, 2016. No biosolids were landfilled in the current reporting year.

There are no anticipated changes in biosolid production in the next reporting year. The quantities of raw sludge and biosolid are expected to be similar to the current reporting year.

Table 10-1: 2025 Sludge Summary

Month	Monthly Total Raw Sludge Pumped (L)	Monthly Average Raw Sludge Solids (%)	Monthly Total Wet Cake/ Biosolids (Tonnes)	Monthly Total Landfilled (Tonnes)	Monthly Total Processed (Tonnes)	Monthly Average Cake Solids (%)
January 2025	11,356,568	3.32	899	0	899	26.60
February 2025	8,984,105	3.66	731	0	731	27.87
March 2025	9,633,070	3.76	797	0	797	27.86
April 2025	10,381,783	3.94	838	0	838	28.72
May 2025	10,990,313	3.66	856	0	856	27.85
June 2025	9,233,779	4.53	783	0	783	29.69
July 2025	10,297,103	3.72	782	0	782	28.91
August 2025	9,902,100	3.48	691	0	691	29.08
September 2025	11,876,305	2.98	753	0	753	27.58
October 2025	15,675,401	2.85	976	0	976	25.61
November 2025	10,666,536	3.14	733	0	733	26.20
December 2025	12,101,554	3.18	873	0	873	26.94
Annual Total / Average	131,098,619 (total)	3.52 (average)	9,713 (total)	0 (total)	9,713 (total)	27.74 (average)

10.2 Sludge Monitoring Program

Sludge samples consisted of grab samples collected from the sludge holding tank feed line by trained City employees. Sample analysis was completed by SGS (Lakefield) Canada Inc. Sample analysis and frequency followed the monitoring program in Schedule D of the ECA and is summarized in **Table 10-2**. Deviations to the monitoring program are discussed in **Section 4**.

Table 10-2: Sludge Monitoring Program

Parameter	Sample Type	Minimum Frequency
Total Solids	Grab	Quarterly
Total Phosphorus	Grab	Quarterly
Total Ammonia Nitrogen	Grab	Quarterly
Nitrate as Nitrogen	Grab	Quarterly
Metals Scan (Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium, Selenium, Zinc)	Grab	Quarterly

A summary of the sludge monitoring data for the current reporting year is presented in **Table 10-3**.

Table 10-3: 2025 Sludge Monitoring Data

Parameter	6-Jan-25	7-Apr-25	7-Jul-25	6-Oct-25
Total Solids (%)	3.06	4.63	3.39	1.96
Total Phosphorus (mg/kg)	24000	16000	19000	21000
Ammonia as N ¹ (mg/kg)	3290	1770	2180	5750
Nitrate (µg/g)	<3	<3	<3	<3
Arsenic (mg/kg)	<3	4	5	<5
Cadmium (mg/kg)	0.8	0.67	0.58	0.4
Chromium (mg/kg)	16	13	33	7
Cobalt (mg/kg)	2	2	3	1
Copper (mg/kg)	200	190	270	160
Lead (mg/kg)	8	11	20	6
Mercury (mg/kg)	0.23	0.24	0.26	0.15
Molybdenum (mg/kg)	10	7	8	7
Nickel (mg/kg)	12	11	35	7
Potassium (mg/kg)	3700	2200	1900	2900
Selenium (mg/kg)	4	3	3	<5
Zinc (mg/kg)	410	300	490	280

Notes:

- (1) Ammonia as N in sludge is not an accredited laboratory analysis. Reporting of results approved by Sean Morrison, District Manager Sarnia/Windsor Region, MECP in email dated February 4, 2020.

11. Complaints and Responses

This section presents a summary of complaints received and any steps taken to address the complaints per Section 11.4(i) of the ECA.

The City of Windsor's 311 call centre logs public complaints, including any follow up action taken.

Four odour complaints were received from the public. Complainants were contacted and advised of factors propagating Plant odours such as extended dry weather, extreme heat and/or low flows leading to extended retention times and nitrification in the PSTs. Residents were encouraged to notify the City of any further issues.

12. Bypasses, Overflows, Spills and Abnormal Discharge Events

This section presents a summary of bypasses, overflows, spills and abnormal discharge events per Section 11.4(j) of the ECA.

12.1 Bypasses

When the sewage flow exceeds the Plant's capacity it is diverted to the Pontiac Pumping Station prior to entering the Plant and is reported to the MECP as a pumping station overflow. In this scenario, the effluent does not receive treatment or disinfection and is discharged to the Little River.

The MECP's Spills Action Centre (SAC) and the local Medical Officer of Health were notified at the beginning and end of each pumping station overflow, and the overflows were reported upon monthly.

A summary of the pumping station overflows for the current reporting period are presented in **Table 12-1**. In 2025, the LRPCP had 1 pumping station overflow.

Table 12-1: Pumping Station Overflow Summary

SAC #	Event Summary	Event Type	Date Occurred	Reason
1-N7NG2J	Pontiac Pump Station	Emergency bypass	Apr 3, 2025	Heavy precipitation

12.2 Overflows

In a primary overflow, influent goes through preliminary treatment including screening and grit removal and seasonal disinfection with sodium hypochlorite. The primary overflow discharges from the storm overflow outlet into the Little River.

In accordance with Section 5 of the ECA, the MECP's SAC and the local Medical Officer of Health were notified at the beginning and end of each overflow, additional sampling of the overflow was completed, and the overflows were reported upon monthly.

A summary of the overflows for the current reporting period are presented in **Table 12-2**, and a summary of historical overflows are presented in **Table 12-3**.

In 2025, the LRPCP had six primary overflows. The primary overflows in 2025 were caused by heavy precipitation. In total, 179 ML of preliminary effluent, which went through screening and grit removal, bypassed primary treatment, secondary treatment and UV

disinfection, which is approximately 1.3% of the total annual effluent flow. The primary overflow effluent received seasonal disinfection with sodium hypochlorite. The volume of primary overflows in 2025 saw a decrease compared to the 2023 and 2024 primary overflow volumes.

Table 12-2: 2025 Overflow Summary

Month	Primary Overflow			Precipitation (mm)
	Volume (ML)	# of Events	Duration (Hours)	
January	9.984	1	5.3	24.7
February	0	0	0	18.0
March	33.632	1	17	47.4
April	103.447	1	37.9	55.9
May	11.575	1	6.8	65.6
June	17.465	1	12.4	86.5
July	0	0	0	88.9
August	0	0	0	27.4
September	0	0	0	38.4
October	0	0	0	22.6
November	0	0	0	34.2
December	3.068	1	4.1	47.4

Notes:

- (1) Precipitation data from Environment Canada's Windsor A Station.

Table 12-3: Historical Overflow Summary

Year	Primary Overflow			Precipitation (mm)
	Volume (ML)	# of Events	Duration (Hours)	
2020	777	18	317	814
2021	1080	23	416	816
2022	139	8	74	596
2023	696	15	356	917
2024	524	14	265	857
2025	179	6	84	557

In accordance with Section 5.5(a) of the ECA, samples were collected of the overflow effluent near the beginning of the overflow event and subsequently at mid-night during multiday events, with the exception of *E. Coli* which is sampled once at the beginning of the event. A summary of primary overflow monitoring data is presented in **Table 12-4**.

Table 12-4: 2025 Primary Overflow Monitoring Data

Date	Time	BOD5 (mg/L)	TSS (mg/L)	TP (mg/L)	<i>E. Coli</i> (CFU/100mL)
31-Jan-25	16:15	243	411	4.0	3100000
5-Mar-25	7:40	244	386	1.92	800000
6-Mar-25	0:00	41	48	0.66	-
2-Apr-25	13:22	91	250	2.56	2000000
3-Apr-25	0:00	53	104	0.55	-
4-Apr-25	0:00	51	88	0.55	-
4-May-25	23:15	96	250	1.31	700000
5-Jun-25	2:45	251	202	1.63	2700000
28-Dec-25	17:37	573	681	6.5	2000000

Notes:

(1) BOD5 = Biochemical Oxygen Demand; TSS = Total Suspended Solids; TP = Total Phosphorus

12.3 Spills and Abnormal Discharge Events

A spill is defined as a pollutant discharged into the natural environment, from or out of a structure, vehicle or other container, and that is abnormal in quality or quantity per the Environmental Protection Act, R.S.O, 1990, c. E.19. An abnormal discharge is defined as a discharge of a pollutant designated by the regulations at a location designated by the regulations in a quantity or with a quality abnormal at the location per the Environmental Protection Act, R.S.O, 1990, c. E.19.

In 2025, the LRPCP had no spills or abnormal discharge events outside of those events discussed above.

13. Notice of Modifications to Sewage Works

This section presents a summary of Notice of Modification to Sewage Works completed under Section 10.1(d), including a report on the status of implementation of all modifications per Section 11.4(k) in the ECA.

There were no modifications to the LRPCP that required a Notice of Modification to the Sewage Works form to be submitted in 2025.

14. Efforts Made to Conform with Procedures F-5-1

This section presents a summary of efforts made to achieve conformance with Procedures F-5-1: Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works (Procedure F-5-1) per Section 11.4(l) of the ECA.

As discussed in **Section 1**, the LRPCP includes secondary treatment consisting of biological aeration. The Final Effluent Design Objectives and Compliance Limits listed in the ECA are equal to or more stringent compared to the concentrations listed in Table 1 of Procedure F-5-1. A comparison of the final effluent discharge to the Final Effluent Design Objectives and Compliance Limits is presented in **Section 3**. Overflows at the LRPCP for the current reporting year are discussed in **Section 12**.

The City completed the 2020 Sewer and Coastal Flooding Protection Master Plan (Sewer Master Plan), which took a system-wide approach to identify existing flood-prone areas for surface, basement and coastal flooding, and recommended solutions to address and reduce the risk of flooding during extreme rainfalls. The Sewer Master Plan included short and long-term actions proposed to be implemented over the next 50 plus years at a cost of approximately \$5,000,000,000. Implementation of these recommendations are anticipated reduce wet weather flows to the sanitary and combined sewage systems, reduce the associated peak rate and volume of wet weather flow conveyed to the LRPCP, reduce bypasses and overflows at the LRPCP and reduce combined sewer overflows in other areas of the sewage system. Sewer separation works continue during construction improvement projects which will continue to reduce combined sewer overflows (CSOs).

Appendix A: Current Year and Next Year Monitoring Schedules

2025 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Jan-25	Feb-25	Mar-25
Wednesday, 1 January 2025	Saturday, 1 February 2025	Saturday, 1 March 2025
Thursday, 2 January 2025	Sunday, 2 February 2025	Sunday, 2 March 2025
Friday, 3 January 2025	Monday, 3 February 2025	Monday, 3 March 2025
Saturday, 4 January 2025	Tuesday, 4 February 2025	Tuesday, 4 March 2025
Sunday, 5 January 2025	Wednesday, 5 February 2025	Wednesday, 5 March 2025
Monday, 6 January 2025	Thursday, 6 February 2025	Thursday, 6 March 2025
Tuesday, 7 January 2025	Friday, 7 February 2025	Friday, 7 March 2025
Wednesday, 8 January 2025	Saturday, 8 February 2025	Saturday, 8 March 2025
Thursday, 9 January 2025	Sunday, 9 February 2025	Sunday, 9 March 2025
Friday, 10 January 2025	Monday, 10 February 2025	Monday, 10 March 2025
Saturday, 11 January 2025	Tuesday, 11 February 2025	Tuesday, 11 March 2025
Sunday, 12 January 2025	Wednesday, 12 February 2025	Wednesday, 12 March 2025
Monday, 13 January 2025	Thursday, 13 February 2025	Thursday, 13 March 2025
Tuesday, 14 January 2025	Friday, 14 February 2025	Friday, 14 March 2025
Wednesday, 15 January 2025	Saturday, 15 February 2025	Saturday, 15 March 2025
Thursday, 16 January 2025	Sunday, 16 February 2025	Sunday, 16 March 2025
Friday, 17 January 2025	Monday, 17 February 2025	Monday, 17 March 2025
Saturday, 18 January 2025	Tuesday, 18 February 2025	Tuesday, 18 March 2025
Sunday, 19 January 2025	Wednesday, 19 February 2025	Wednesday, 19 March 2025
Monday, 20 January 2025	Thursday, 20 February 2025	Thursday, 20 March 2025
Tuesday, 21 January 2025	Friday, 21 February 2025	Friday, 21 March 2025
Wednesday, 22 January 2025	Saturday, 22 February 2025	Saturday, 22 March 2025
Thursday, 23 January 2025	Sunday, 23 February 2025	Sunday, 23 March 2025
Friday, 24 January 2025	Monday, 24 February 2025	Monday, 24 March 2025
Saturday, 25 January 2025	Tuesday, 25 February 2025	Tuesday, 25 March 2025
Sunday, 26 January 2025	Wednesday, 26 February 2025	Wednesday, 26 March 2025
Monday, 27 January 2025	Thursday, 27 February 2025	Thursday, 27 March 2025
Tuesday, 28 January 2025	Friday, 28 February 2025	Friday, 28 March 2025
Wednesday, 29 January 2025	Saturday, 1 March 2025	Saturday, 29 March 2025
Thursday, 30 January 2025		Sunday, 30 March 2025
Friday, 31 January 2025		Monday, 31 March 2025

1 - Holiday

2A - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2B - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

9 - Grab - Quarterly - LRWRP Effluent Leachate Related

10 - Grab - Annual - LRWRP/LRPCP Sludge & Influent/Effluent (Trace Organics)

** LRWRP - WSER Acute Lethality RT testing is quarterly unless of test failure (>50% mortality), then testing reverts to monthly as per WSER (federal regulation)

** LRWRP - ECA Acute Lethality RT & DM testing is annually unless of test failure (>50% mortality), then testing reverts to quarterly as per MECP ECA (provincial regulation), see LRWRP ECA Condition 9(4) & Schedule D for details)

**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

Note: In the event of a holiday or a missed sample, the scheduled sampling date shall be moved to the next available date

LRWRP - Plant operations outside of Normal Operating Conditions - occurs when primary or secondary daily flow exceeds the available capacity for the day

Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow
BOD TSS TP TKN

LRPCP - Primary Overflow
BOD TSS TP E. Coli

2025 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Apr-25		May-25		Jun-25	
Tuesday, 1 April 2025	3	Thursday, 1 May 2025	4 5	Sunday, 1 June 2025	
Wednesday, 2 April 2025		Friday, 2 May 2025		Monday, 2 June 2025	
Thursday, 3 April 2025	4 5	Saturday, 3 May 2025		Tuesday, 3 June 2025	3
Friday, 4 April 2025		Sunday, 4 May 2025		Wednesday, 4 June 2025	
Saturday, 5 April 2025		Monday, 5 May 2025		Thursday, 5 June 2025	4 5
Sunday, 6 April 2025		Tuesday, 6 May 2025	3	Friday, 6 June 2025	
Monday, 7 April 2025	2A 2B 7	Wednesday, 7 May 2025		Saturday, 7 June 2025	
Tuesday, 8 April 2025	3	Thursday, 8 May 2025	4 5	Sunday, 8 June 2025	
Wednesday, 9 April 2025		Friday, 9 May 2025		Monday, 9 June 2025	2A 2B 7
Thursday, 10 April 2025	4 5	Saturday, 10 May 2025		Tuesday, 10 June 2025	3
Friday, 11 April 2025		Sunday, 11 May 2025		Wednesday, 11 June 2025	
Saturday, 12 April 2025		Monday, 12 May 2025	2A 2B 7	Thursday, 12 June 2025	4 5
Sunday, 13 April 2025		Tuesday, 13 May 2025	3	Friday, 13 June 2025	
Monday, 14 April 2025	8 9	Wednesday, 14 May 2025		Saturday, 14 June 2025	
Tuesday, 15 April 2025	3	Thursday, 15 May 2025	4 5	Sunday, 15 June 2025	
Wednesday, 16 April 2025		Friday, 16 May 2025		Monday, 16 June 2025	
Thursday, 17 April 2025	4 5	Saturday, 17 May 2025		Tuesday, 17 June 2025	3 6
Friday, 18 April 2025	1	Sunday, 18 May 2025		Wednesday, 18 June 2025	10
Saturday, 19 April 2025		Monday, 19 May 2025	1	Thursday, 19 June 2025	4 5
Sunday, 20 April 2025		Tuesday, 20 May 2025	3	Friday, 20 June 2025	
Monday, 21 April 2025	1	Wednesday, 21 May 2025		Saturday, 21 June 2025	
Tuesday, 22 April 2025	3	Thursday, 22 May 2025	4 5	Sunday, 22 June 2025	
Wednesday, 23 April 2025		Friday, 23 May 2025		Monday, 23 June 2025	
Thursday, 24 April 2025	4 5	Saturday, 24 May 2025		Tuesday, 24 June 2025	3
Friday, 25 April 2025		Sunday, 25 May 2025		Wednesday, 25 June 2025	
Saturday, 26 April 2025		Monday, 26 May 2025		Thursday, 26 June 2025	4 5
Sunday, 27 April 2025		Tuesday, 27 May 2025	3	Friday, 27 June 2025	
Monday, 28 April 2025		Wednesday, 28 May 2025		Saturday, 28 June 2025	
Tuesday, 29 April 2025	3	Thursday, 29 May 2025	4 5	Sunday, 29 June 2025	
Wednesday, 30 April 2025		Friday, 30 May 2025		Monday, 30 June 2025	
		Saturday, 31 May 2025			

1 - Holiday

2A - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2B - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

9 - Grab - Quarterly - LRWRP Effluent Leachate Related

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** LRWRP - WSER Acute Lethality RT testing is quarterly unless of test failure (>50% mortality), then testing reverts to monthly as per WSER (federal regulation)

** LRWRP - ECA Acute Lethality RT & DM testing is annually unless of test failure (>50% mortality), then testing reverts to quarterly as per MECP ECA (provincial regulation, see LRWRP ECA Condition 9(4) & Schedule D for details)

**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

Note: In the event of a holiday or a missed sample, the scheduled sampling date shall be moved to the next available date

LRWRP - Plant operations outside of Normal Operating Conditions - occurs when primary or secondary daily flow exceeds the available capacity for the day

Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow

BOD TSS TP TKN

LRPCP - Primary Overflow

BOD TSS TP E. Coli



2025 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Jul-25			Aug-25			Sep-25		
Tuesday, 1 July 2025	1	3	Friday, 1 August 2025			Monday, 1 September 2025	1	
Wednesday, 2 July 2025			Saturday, 2 August 2025			Tuesday, 2 September 2025	3	
Thursday, 3 July 2025	4	5	Sunday, 3 August 2025			Wednesday, 3 September 2025		
Friday, 4 July 2025			Monday, 4 August 2025	1		Thursday, 4 September 2025	4	5
Saturday, 5 July 2025			Tuesday, 5 August 2025	3		Friday, 5 September 2025		
Sunday, 6 July 2025			Wednesday, 6 August 2025			Saturday, 6 September 2025		
Monday, 7 July 2025	2A	2B 7	Thursday, 7 August 2025	4	5	Sunday, 7 September 2025		
Tuesday, 8 July 2025	3		Friday, 8 August 2025			Monday, 8 September 2025	2A	2B 7
Wednesday, 9 July 2025			Saturday, 9 August 2025			Tuesday, 9 September 2025	3	
Thursday, 10 July 2025	4	5	Sunday, 10 August 2025			Wednesday, 10 September 2025		
Friday, 11 July 2025			Monday, 11 August 2025	2A	2B 7	Thursday, 11 September 2025	4	5
Saturday, 12 July 2025			Tuesday, 12 August 2025	3		Friday, 12 September 2025		
Sunday, 13 July 2025			Wednesday, 13 August 2025			Saturday, 13 September 2025		
Monday, 14 July 2025			Thursday, 14 August 2025	4	5	Sunday, 14 September 2025		
Tuesday, 15 July 2025	3		Friday, 15 August 2025			Monday, 15 September 2025		
Wednesday, 16 July 2025			Saturday, 16 August 2025			Tuesday, 16 September 2025	3	
Thursday, 17 July 2025	4	5	Sunday, 17 August 2025			Wednesday, 17 September 2025		
Friday, 18 July 2025			Monday, 18 August 2025			Thursday, 18 September 2025	4	5
Saturday, 19 July 2025			Tuesday, 19 August 2025	3		Friday, 19 September 2025		
Sunday, 20 July 2025			Wednesday, 20 August 2025			Saturday, 20 September 2025		
Monday, 21 July 2025	8	9	Thursday, 21 August 2025	4	5	Sunday, 21 September 2025		
Tuesday, 22 July 2025	3		Friday, 22 August 2025			Monday, 22 September 2025		
Wednesday, 23 July 2025			Saturday, 23 August 2025			Tuesday, 23 September 2025	3	
Thursday, 24 July 2025	4	5	Sunday, 24 August 2025			Wednesday, 24 September 2025		
Friday, 25 July 2025			Monday, 25 August 2025			Thursday, 25 September 2025	4	5
Saturday, 26 July 2025			Tuesday, 26 August 2025	3		Friday, 26 September 2025		
Sunday, 27 July 2025			Wednesday, 27 August 2025			Saturday, 27 September 2025		
Monday, 28 July 2025			Thursday, 28 August 2025	4	5	Sunday, 28 September 2025		
Tuesday, 29 July 2025	3		Friday, 29 August 2025			Monday, 29 September 2025		
Wednesday, 30 July 2025			Saturday, 30 August 2025			Tuesday, 30 September 2025	1	3
Thursday, 31 July 2025	4	5	Sunday, 31 August 2025					

1 - Holiday

2A - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2B - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

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10 - Grab - Annual - LRWRP/LRPCP Sludge & Influent/Effluent (Trace Organics)

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**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

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LRWRP - Raw Sewage or Primary Overflow

BOD TSS TP TKN

LRPCP - Primary Overflow

BOD TSS TP E. Coli

2025 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

ONTARIO, CANADA

Oct-25			Nov-25			Dec-25		
Wednesday, 1 October 2025			Saturday, 1 November 2025			Monday, 1 December 2025		
Thursday, 2 October 2025	4	5	Sunday, 2 November 2025			Tuesday, 2 December 2025		
Friday, 3 October 2025			Monday, 3 November 2025			2A	2B	7
Saturday, 4 October 2025			Tuesday, 4 November 2025			3		
Sunday, 5 October 2025			Wednesday, 5 November 2025			Wednesday, 3 December 2025		
Monday, 6 October 2025	2A	2B	7	Thursday, 6 November 2025			4	5
Tuesday, 7 October 2025			Friday, 7 November 2025			Thursday, 4 December 2025		
Wednesday, 8 October 2025			Saturday, 8 November 2025			Friday, 5 December 2025		
Thursday, 9 October 2025	4	5	Sunday, 9 November 2025			Saturday, 6 December 2025		
Friday, 10 October 2025			Monday, 10 November 2025			Sunday, 7 December 2025		
Saturday, 11 October 2025			Tuesday, 11 November 2025			1	3	
Sunday, 12 October 2025			Wednesday, 12 November 2025			Monday, 8 December 2025		
Monday, 13 October 2025	1			Thursday, 13 November 2025			4	5
Tuesday, 14 October 2025			Friday, 14 November 2025			Tuesday, 9 December 2025		
Wednesday, 15 October 2025			Saturday, 15 November 2025			Wednesday, 10 December 2025		
Thursday, 16 October 2025	4	5	Sunday, 16 November 2025			Thursday, 11 December 2025		
Friday, 17 October 2025			Monday, 17 November 2025			Friday, 12 December 2025		
Saturday, 18 October 2025			Tuesday, 18 November 2025			3		
Sunday, 19 October 2025			Wednesday, 19 November 2025			Saturday, 13 December 2025		
Monday, 20 October 2025	8	9	Thursday, 20 November 2025			4	5	
Tuesday, 21 October 2025			Friday, 21 November 2025			Sunday, 14 December 2025		
Wednesday, 22 October 2025			Saturday, 22 November 2025			Monday, 15 December 2025		
Thursday, 23 October 2025	4	5	Sunday, 23 November 2025			Tuesday, 16 December 2025		
Friday, 24 October 2025			Monday, 24 November 2025			Wednesday, 17 December 2025		
Saturday, 25 October 2025			Tuesday, 25 November 2025			3		
Sunday, 26 October 2025			Wednesday, 26 November 2025			Thursday, 18 December 2025		
Monday, 27 October 2025			Thursday, 27 November 2025			4	5	
Tuesday, 28 October 2025			Friday, 28 November 2025			Friday, 19 December 2025		
Wednesday, 29 October 2025			Saturday, 29 November 2025			Saturday, 20 December 2025		
Thursday, 30 October 2025	4	5	Sunday, 30 November 2025			Sunday, 21 December 2025		
Friday, 31 October 2025						Monday, 22 December 2025		
						Tuesday, 23 December 2025		
						Wednesday, 24 December 2025		
						Thursday, 25 December 2025		
						Friday, 26 December 2025		
						Saturday, 27 December 2025		
						Sunday, 28 December 2025		
						Monday, 29 December 2025		
						Tuesday, 30 December 2025		
						Wednesday, 31 December 2025		

1 - Holiday

2A - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2B - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

9 - Grab - Quarterly - LRWRP Effluent Leachate Related

10 - Grab - Annual - LRWRP/LRPCP Sludge & Influent/Effluent (Trace Organics)

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** LRWRP - ECA Acute Lethality RT & DM testing is annually unless of test failure (>50% mortality), then testing reverts to quarterly as per MECP ECA (provincial regulation), see LRWRP ECA Condition 9(4) & Schedule D for details

**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

Note: In the event of a holiday or a missed sample, the scheduled sampling date shall be moved to the next available date

LRWRP - Plant operations outside of Normal Operating Conditions - occurs when primary or secondary daily flow exceeds the available capacity for the day

Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow

BOD TSS TP TKN

LRPCP - Primary Overflow

BOD TSS TP E. Coli

2026 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Jan-26	Feb-26	Mar-26
Thursday, 1 January 2026 1	Sunday, 1 February 2026	Sunday, 1 March 2026
Friday, 2 January 2026	Monday, 2 February 2026 3 5	Monday, 2 March 2026 3 5
Saturday, 3 January 2026	Tuesday, 3 February 2026 2A 7	Tuesday, 3 March 2026 2A 7
Sunday, 4 January 2026	Wednesday, 4 February 2026 4 2B	Wednesday, 4 March 2026 4 2B
Monday, 5 January 2026 3 5	Thursday, 5 February 2026	Thursday, 5 March 2026
Tuesday, 6 January 2026 2A 7	Friday, 6 February 2026	Friday, 6 March 2026
Wednesday, 7 January 2026 4 2B	Saturday, 7 February 2026	Saturday, 7 March 2026
Thursday, 8 January 2026	Sunday, 8 February 2026	Sunday, 8 March 2026
Friday, 9 January 2026	Monday, 9 February 2026 3 5	Monday, 9 March 2026 3 5
Saturday, 10 January 2026	Tuesday, 10 February 2026 8 9	Tuesday, 10 March 2026
Sunday, 11 January 2026	Wednesday, 11 February 2026 4	Wednesday, 11 March 2026 4
Monday, 12 January 2026 3 5	Thursday, 12 February 2026	Thursday, 12 March 2026
Tuesday, 13 January 2026	Friday, 13 February 2026	Friday, 13 March 2026
Wednesday, 14 January 2026 4	Saturday, 14 February 2026	Saturday, 14 March 2026
Thursday, 15 January 2026	Sunday, 15 February 2026	Sunday, 15 March 2026
Friday, 16 January 2026	Monday, 16 February 2026 3	Monday, 16 March 2026 3 5
Saturday, 17 January 2026	Tuesday, 17 February 2026 5	Tuesday, 17 March 2026
Sunday, 18 January 2026	Wednesday, 18 February 2026 4	Wednesday, 18 March 2026 4
Monday, 19 January 2026 3 5	Thursday, 19 February 2026	Thursday, 19 March 2026
Tuesday, 20 January 2026	Friday, 20 February 2026	Friday, 20 March 2026
Wednesday, 21 January 2026 4	Saturday, 21 February 2026	Saturday, 21 March 2026
Thursday, 22 January 2026	Sunday, 22 February 2026	Sunday, 22 March 2026
Friday, 23 January 2026	Monday, 23 February 2026 3 5	Monday, 23 March 2026 3 5
Saturday, 24 January 2026	Tuesday, 24 February 2026	Tuesday, 24 March 2026
Sunday, 25 January 2026	Wednesday, 25 February 2026 4	Wednesday, 25 March 2026 4
Monday, 26 January 2026 3 5	Thursday, 26 February 2026	Thursday, 26 March 2026
Tuesday, 27 January 2026	Friday, 27 February 2026	Friday, 27 March 2026
Wednesday, 28 January 2026 4	Saturday, 28 February 2026	Saturday, 28 March 2026
Thursday, 29 January 2026		Sunday, 29 March 2026
Friday, 30 January 2026		Monday, 30 March 2026 3 5
Saturday, 31 January 2026		Tuesday, 31 March 2026

1 - Holiday

2A - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2B - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

9 - Grab - Quarterly - LRWRP Effluent Leachate Related

10 - Grab - Annual - LRWRP/LRPCP Sludge & Influent/Effluent (Trace Organics)

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** LRWRP - ECA Acute Lethality RT & DM testing is annually unless of test failure (>50% mortality), then testing reverts to quarterly as per MECP ECA (provincial regulation), see LRWRP ECA Condition 9(4) & Schedule D for details

**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

Note: In the event of a holiday or a missed sample, the scheduled sampling date shall be moved to the next available date

LRWRP - Plant operations outside of Normal Operating Conditions - occurs when primary or secondary daily flow exceeds the available capacity for the day

Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow
BOD TSS TP TKN

LRPCP - Primary Overflow
BOD TSS TP E. Coli

2026 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Apr-26		May-26		Jun-26	
Wednesday, 1 April 2026	4	Friday, 1 May 2026		Monday, 1 June 2026	3 5
Thursday, 2 April 2026		Saturday, 2 May 2026		Tuesday, 2 June 2026	2A 7
Friday, 3 April 2026	1	Sunday, 3 May 2026		Wednesday, 3 June 2026	4 2B
Saturday, 4 April 2026		Monday, 4 May 2026	3 5	Thursday, 4 June 2026	
Sunday, 5 April 2026		Tuesday, 5 May 2026	2A 7	Friday, 5 June 2026	
Monday, 6 April 2026	3	Wednesday, 6 May 2026	4 2B	Saturday, 6 June 2026	
Tuesday, 7 April 2026	5 2A 7	Thursday, 7 May 2026		Sunday, 7 June 2026	
Wednesday, 8 April 2026	4 2B	Friday, 8 May 2026		Monday, 8 June 2026	3 5
Thursday, 9 April 2026		Saturday, 9 May 2026		Tuesday, 9 June 2026	
Friday, 10 April 2026		Sunday, 10 May 2026		Wednesday, 10 June 2026	4
Saturday, 11 April 2026		Monday, 11 May 2026	3 5	Thursday, 11 June 2026	
Sunday, 12 April 2026		Tuesday, 12 May 2026	8 9	Friday, 12 June 2026	
Monday, 13 April 2026	3 5	Wednesday, 13 May 2026	4	Saturday, 13 June 2026	
Tuesday, 14 April 2026	6	Thursday, 14 May 2026		Sunday, 14 June 2026	
Wednesday, 15 April 2026	4	Friday, 15 May 2026		Monday, 15 June 2026	3 5
Thursday, 16 April 2026		Saturday, 16 May 2026		Tuesday, 16 June 2026	
Friday, 17 April 2026		Sunday, 17 May 2026		Wednesday, 17 June 2026	4
Saturday, 18 April 2026		Monday, 18 May 2026	3	Thursday, 18 June 2026	
Sunday, 19 April 2026		Tuesday, 19 May 2026	5	Friday, 19 June 2026	
Monday, 20 April 2026	3 5	Wednesday, 20 May 2026	4	Saturday, 20 June 2026	
Tuesday, 21 April 2026		Thursday, 21 May 2026		Sunday, 21 June 2026	
Wednesday, 22 April 2026	4	Friday, 22 May 2026		Monday, 22 June 2026	3 5
Thursday, 23 April 2026		Saturday, 23 May 2026		Tuesday, 23 June 2026	
Friday, 24 April 2026		Sunday, 24 May 2026		Wednesday, 24 June 2026	4
Saturday, 25 April 2026		Monday, 25 May 2026	3 5	Thursday, 25 June 2026	
Sunday, 26 April 2026		Tuesday, 26 May 2026		Friday, 26 June 2026	
Monday, 27 April 2026	3 5	Wednesday, 27 May 2026	4	Saturday, 27 June 2026	
Tuesday, 28 April 2026		Thursday, 28 May 2026		Sunday, 28 June 2026	
Wednesday, 29 April 2026	4	Friday, 29 May 2026		Monday, 29 June 2026	3 5
		Saturday, 30 May 2026		Tuesday, 30 June 2026	
		Sunday, 31 May 2026			

1 - Holiday

2 - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2 - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

6 - Grab - Annual - LRWRP/LRPCP Effluent Toxicity

7 - Grab - Monthly - LRWRP Imported Sewage

8 - Composite - Quarterly - LRWRP Effluent Industrial Wastewater Related

9 - Grab - Quarterly - LRWRP Effluent Leachate Related

10 - Grab - Annual - LRWRP/LRPCP Sludge & Influent/Effluent (Trace Organics)

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** LRWRP - ECA Acute Lethality RT & DM testing is annually unless of test failure (>50% mortality), then testing reverts to quarterly as per MECP ECA (provincial regulation), see LRWRP ECA Condition 9(4) & Schedule D for details)

**LRPCP - Effluent E. Coli must be monitored during the disinfection period from May 1 through October 31

Note: In the event of a holiday or a missed sample, the scheduled sampling date shall be moved to the next available date

LRWRP - Plant operations outside of Normal Operating Conditions - occurs when primary or secondary daily flow exceeds the available capacity for the day

Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow
BOD TSS TP TKN

LRPCP - Primary Overflow
BOD TSS TP E. Coli



2026 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Jul-26		Aug-26		Sep-26	
Wednesday, 1 July 2026	4	Saturday, 1 August 2026		Tuesday, 1 September 2026	2A 7
Thursday, 2 July 2026		Sunday, 2 August 2026		Wednesday, 2 September 2026	4 2B
Friday, 3 July 2026		Monday, 3 August 2026	3	Thursday, 3 September 2026	
Saturday, 4 July 2026		Tuesday, 4 August 2026	5 2A 7	Friday, 4 September 2026	
Sunday, 5 July 2026		Wednesday, 5 August 2026	4 2B	Saturday, 5 September 2026	
Monday, 6 July 2026	3 5	Thursday, 6 August 2026		Sunday, 6 September 2026	
Tuesday, 7 July 2026	2A 7	Friday, 7 August 2026		Monday, 7 September 2026	3
Wednesday, 8 July 2026	4 2B	Saturday, 8 August 2026		Tuesday, 8 September 2026	5
Thursday, 9 July 2026		Sunday, 9 August 2026		Wednesday, 9 September 2026	4
Friday, 10 July 2026		Monday, 10 August 2026	3 5	Thursday, 10 September 2026	
Saturday, 11 July 2026		Tuesday, 11 August 2026	8 9	Friday, 11 September 2026	
Sunday, 12 July 2026		Wednesday, 12 August 2026	4	Saturday, 12 September 2026	
Monday, 13 July 2026	3 5	Thursday, 13 August 2026		Sunday, 13 September 2026	
Tuesday, 14 July 2026	10	Friday, 14 August 2026		Monday, 14 September 2026	3 5
Wednesday, 15 July 2026	4	Saturday, 15 August 2026		Tuesday, 15 September 2026	
Thursday, 16 July 2026		Sunday, 16 August 2026		Wednesday, 16 September 2026	4
Friday, 17 July 2026		Monday, 17 August 2026	3 5	Thursday, 17 September 2026	
Saturday, 18 July 2026		Tuesday, 18 August 2026		Friday, 18 September 2026	
Sunday, 19 July 2026		Wednesday, 19 August 2026	4	Saturday, 19 September 2026	
Monday, 20 July 2026	3 5	Thursday, 20 August 2026		Sunday, 20 September 2026	
Tuesday, 21 July 2026		Friday, 21 August 2026		Monday, 21 September 2026	3 5
Wednesday, 22 July 2026	4	Saturday, 22 August 2026		Tuesday, 22 September 2026	
Thursday, 23 July 2026		Sunday, 23 August 2026		Wednesday, 23 September 2026	4
Friday, 24 July 2026		Monday, 24 August 2026	3 5	Thursday, 24 September 2026	
Saturday, 25 July 2026		Tuesday, 25 August 2026		Friday, 25 September 2026	
Sunday, 26 July 2026		Wednesday, 26 August 2026	4	Saturday, 26 September 2026	
Monday, 27 July 2026	3 5	Thursday, 27 August 2026		Sunday, 27 September 2026	
Tuesday, 28 July 2026		Friday, 28 August 2026		Monday, 28 September 2026	3 5
Wednesday, 29 July 2026	4	Saturday, 29 August 2026		Tuesday, 29 September 2026	
Thursday, 30 July 2026		Sunday, 30 August 2026		Wednesday, 30 September 2026	4
Friday, 31 July 2026		Monday, 31 August 2026	3 5		

1 - Holiday

2 - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2 - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

5 - Grab - Weekly - LRWRP & LRPCP Effluent - E. Coli **

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Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow

BOD TSS TP TKN

LRPCP - Primary Overflow

BOD TSS TP E. Coli

2026 LRWRP/LRPCP MECP ECA & ECCC WSER Testing Schedule

Oct-26		Nov-26		Dec-26	
Thursday, 1 October 2026		Sunday, 1 November 2026		Tuesday, 1 December 2026	2A 7
Friday, 2 October 2026		Monday, 2 November 2026	3 5	Wednesday, 2 December 2026	4 2B
Saturday, 3 October 2026		Tuesday, 3 November 2026	2A 7	Thursday, 3 December 2026	
Sunday, 4 October 2026		Wednesday, 4 November 2026	4 2B	Friday, 4 December 2026	
Monday, 5 October 2026	3 5	Thursday, 5 November 2026		Saturday, 5 December 2026	
Tuesday, 6 October 2026	2A 7	Friday, 6 November 2026		Sunday, 6 December 2026	
Wednesday, 7 October 2026	4 2B	Saturday, 7 November 2026		Monday, 7 December 2026	3 5
Thursday, 8 October 2026		Sunday, 8 November 2026		Tuesday, 8 December 2026	
Friday, 9 October 2026		Monday, 9 November 2026	3 5	Wednesday, 9 December 2026	4
Saturday, 10 October 2026		Tuesday, 10 November 2026		Thursday, 10 December 2026	
Sunday, 11 October 2026		Wednesday, 11 November 2026	4	Friday, 11 December 2026	
Monday, 12 October 2026	3	Thursday, 12 November 2026		Saturday, 12 December 2026	
Tuesday, 13 October 2026	5	Friday, 13 November 2026		Sunday, 13 December 2026	
Wednesday, 14 October 2026	4	Saturday, 14 November 2026		Monday, 14 December 2026	3 5
Thursday, 15 October 2026		Sunday, 15 November 2026		Tuesday, 15 December 2026	
Friday, 16 October 2026		Monday, 16 November 2026	3 5	Wednesday, 16 December 2026	4
Saturday, 17 October 2026		Tuesday, 17 November 2026	8 9	Thursday, 17 December 2026	
Sunday, 18 October 2026		Wednesday, 18 November 2026	4	Friday, 18 December 2026	
Monday, 19 October 2026	3 5	Thursday, 19 November 2026		Saturday, 19 December 2026	
Tuesday, 20 October 2026		Friday, 20 November 2026		Sunday, 20 December 2026	
Wednesday, 21 October 2026	4	Saturday, 21 November 2026		Monday, 21 December 2026	3 5
Thursday, 22 October 2026		Sunday, 22 November 2026		Tuesday, 22 December 2026	
Friday, 23 October 2026		Monday, 23 November 2026	3 5	Wednesday, 23 December 2026	4
Saturday, 24 October 2026		Tuesday, 24 November 2026		Thursday, 24 December 2026	
Sunday, 25 October 2026		Wednesday, 25 November 2026	4	Friday, 25 December 2026	1
Monday, 26 October 2026	3 5	Thursday, 26 November 2026		Saturday, 26 December 2026	
Tuesday, 27 October 2026		Friday, 27 November 2026		Sunday, 27 December 2026	
Wednesday, 28 October 2026	4	Saturday, 28 November 2026		Monday, 28 December 2026	3
Thursday, 29 October 2026		Sunday, 29 November 2026		Tuesday, 29 December 2026	5
Friday, 30 October 2026		Monday, 30 November 2026	3 5	Wednesday, 30 December 2026	4
Saturday, 31 October 2026				Thursday, 31 December 2026	

1 - Holiday

2 - Composite - Monthly - LRWRP & LRPCP Influent/Effluent

2 - Composite - Monthly - LRWRP & LRPCP Sludge

3 - Composite - Weekly - LRWRP & LRPCP Influent/Effluent

4 - Composite - 2nd Weekly - LRWRP Effluent (CBOD & TSS)

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Effluent Composite - CBOD TSS TP NH3 TKN NO2 NO3

LRWRP - Raw Sewage or Primary Overflow
BOD TSS TP TKN

LRPCP - Primary Overflow
BOD TSS TP E. Coli

Appendix B: Calibration Certificates

		CALIBRATION REPORT		TAG NO.: LR_GRIT_FM1 REPORT NO.: 251001 DATE: 02-Oct-25	
SITE: Little River WWTP PROCESS AREA: Influent INSTR. TAG: Channel #1 MANUFACTURER: Milltronics MODEL: Multiranger Plus SERIAL No.: 09887914-01 INSTR. RANGE: 0 - 6000 m³/h		DATE: October 2, 2025 TECHNICIAN: Mike Humphries REPORT NO.: 251001			

PRIMARY DEVICE: Modified Parshall Flume			Confidence: 36 Echo Strength: 86 dB Noise Average: 6 dB Empty: 1.310 m Span: 0.762 m Transducer: ST-25											
MAX FLOW:	6000	m³/h												
MAX HEAD:	76.20	cm												
CONSTANT:	9111.5													
EXPONENT:	1.537													
<table border="1"> <tr> <td>Output:</td> <td>mA</td> <td>Flow</td> </tr> <tr> <td>Zero:</td> <td>4</td> <td>0.00</td> </tr> <tr> <td>Max:</td> <td>20</td> <td>6000.0</td> </tr> </table>			Output:	mA	Flow	Zero:	4	0.00	Max:	20	6000.0			
Output:	mA	Flow												
Zero:	4	0.00												
Max:	20	6000.0												

OCM Flow Table								
Head Applied (cm)	Head Displayed (cm)	Error (%)	Calculated Flow (m³/h)	Flow Displayed (m³/h)	Error (%)	Calculated mA Output	Measured mA Output	Error (%)
0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.01	0.25
20.00	19.90	-0.50	767.8	763	-0.63	6.05	6.02	-0.46
40.00	40.10	0.25	2228.2	2230	0.08	9.94	9.95	0.08
60.00	60.20	0.33	4155.4	4178	0.54	15.08	15.08	-0.01
76.20	76.40	0.26	6000.0	6023	0.38	20.00	20.00	0.00

Totalizer As Found	NA	m³	Comments Unable to stop flow at time of service.
Totalizer As Left	NA	m³	
Zero As Found	1.31000	m³	
Zero As Left (including offset)	1.31000	m³	
Change in Zero	0.00000	cm	

		CALIBRATION REPORT		TAG NO.: LR_GRIT_FM2 REPORT NO.: 251001 DATE: 02-Oct-25	
SITE: Little River WWTP PROCESS AREA: Influent INSTR. TAG: Channel #2 MANUFACTURER: Milltronics MODEL: Multiranger Plus SERIAL No.: 09883111-01 INSTR. RANGE: 0 - 7100 m³/h		DATE: October 2, 2025 TECHNICIAN: Mike Humphries REPORT NO.: 251001			

PRIMARY DEVICE: Modified Parshall Flume			Confidence: 40 Echo Strength: 90 dB Noise Average: 1 dB Empty: 1.357 m Span: 0.762 m Transducer: ST-25											
MAX FLOW:	7100	m³/h												
MAX HEAD:	76.20	cm												
CONSTANT:	10802.4													
EXPONENT:	1.544													
<table border="1"> <tr> <td>Output:</td> <td>mA</td> <td>Flow</td> </tr> <tr> <td>Zero:</td> <td>4</td> <td>0.00</td> </tr> <tr> <td>Max:</td> <td>20</td> <td>7100.0</td> </tr> </table>			Output:	mA	Flow	Zero:	4	0.00	Max:	20	7100.0			
Output:	mA	Flow												
Zero:	4	0.00												
Max:	20	7100.0												

OCM Flow Table								
Head Applied (cm)	Head Displayed (cm)	Error (%)	Calculated Flow (m³/h)	Flow Displayed (m³/h)	Error (%)	Calculated mA Output	Measured mA Output	Error (%)
0.00	0.00	0.00	0.00	0.00	0.00	4.00	3.96	-1.01
20.00	20.10	0.50	900.1	906	0.65	6.03	6.00	-0.47
40.00	40.10	0.25	2624.8	2630	0.20	9.92	9.95	0.35
60.00	59.90	-0.17	4908.9	4901	-0.16	15.06	15.02	-0.28
76.20	76.00	-0.26	7100.0	7070	-0.42	20.00	19.98	-0.10

Totalizer As Found NA m³ Totalizer As Left NA m³			Comments Unable to stop flow at time of service.
Zero As Found 1.35700 m³ Zero As Left (including offset) 1.35700 m³ Change in Zero 0.00000 cm			



VERIFICATION

Customer Name:	City of Windsor						
Plant Name and address:	Little River WPCP; 9400 Little River Road, Windsor, ON N8S 4J8						
Service Date:	10-Sep-25	Instrument Type:	FIT	W.O. Number:	250720-0001	Asset#:	NA
Due Date:	10-Sep-26	Manufacturer:	Nivus				
Follow-Up Required:	No	Model:	NF7-5G3E0A001				
As Left Status:	OK	Serial #:	2324NF74286				
Instrument Visual Inspection:		Range:	0 to 260000 m^3/Day	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	FIT-01 (LR_BYPS_FM1)				
Electrical Inspection:	OK	Description:	Storm Water				
As found Display information:	OK	Process/Location Description:	Storm Water				

Instrument Information:	
Channel Profile:	Pipe
Sludge Level:	0.00 m
Flow Unit:	m3/day
Sensor Type:	Fixed
Mounting Height:	0.065 m
Offset:	-0.297 m
Velocity Unit:	m/s

Point	Type	As found		As Left
Internal Simulation	4 mA	4 mA		4 mA
	8 mA	8 mA		8 mA
	12 mA	12 mA		12 mA
	16 mA	16 mA		16 mA
	20 mA	20 mA		20 mA

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
As no flow was availabe, we perfomed internal simulation and verified analog output with SCADA.		Fluke Digital Multimeter			
Pipe ID - 1.2 m					
Other Outputs Tested:	Tested	Technician Name		Witness Name	
Loop Check Performed:	Tested	Vaibhav/Krutik		Curtis	
Within Specification:	Yes	Date:	10-Sep-25	Date:	10-Sep-25



VERIFICATION REPORT

Customer Name:	City of Windsor						
Plant Name and address:	Little River PCP; 9400 Little River Road, Windsor, ON N8S 4J8						
Service Date:	10-Sep-25	Instrument Type:	FIT	W.O. Number:	250720-0001	Asset#:	NA
Due Date:	10-Sep-26	Manufacturer:	Nivus				
Follow-Up Required:	No	Model:	NF7-5M9E0A002				
As Left Status:	OK	Serial #:	2036NF72324				
Instrument Visual Inspection:		Range:	0 to 82000 m3/d	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	FE01 (L1_UVEE_FM1)				
Electrical Inspection:	OK	Description:	Flow Measurement				
As found Display information:	OK	Process/Location Descrpition:	Flow Measurement				

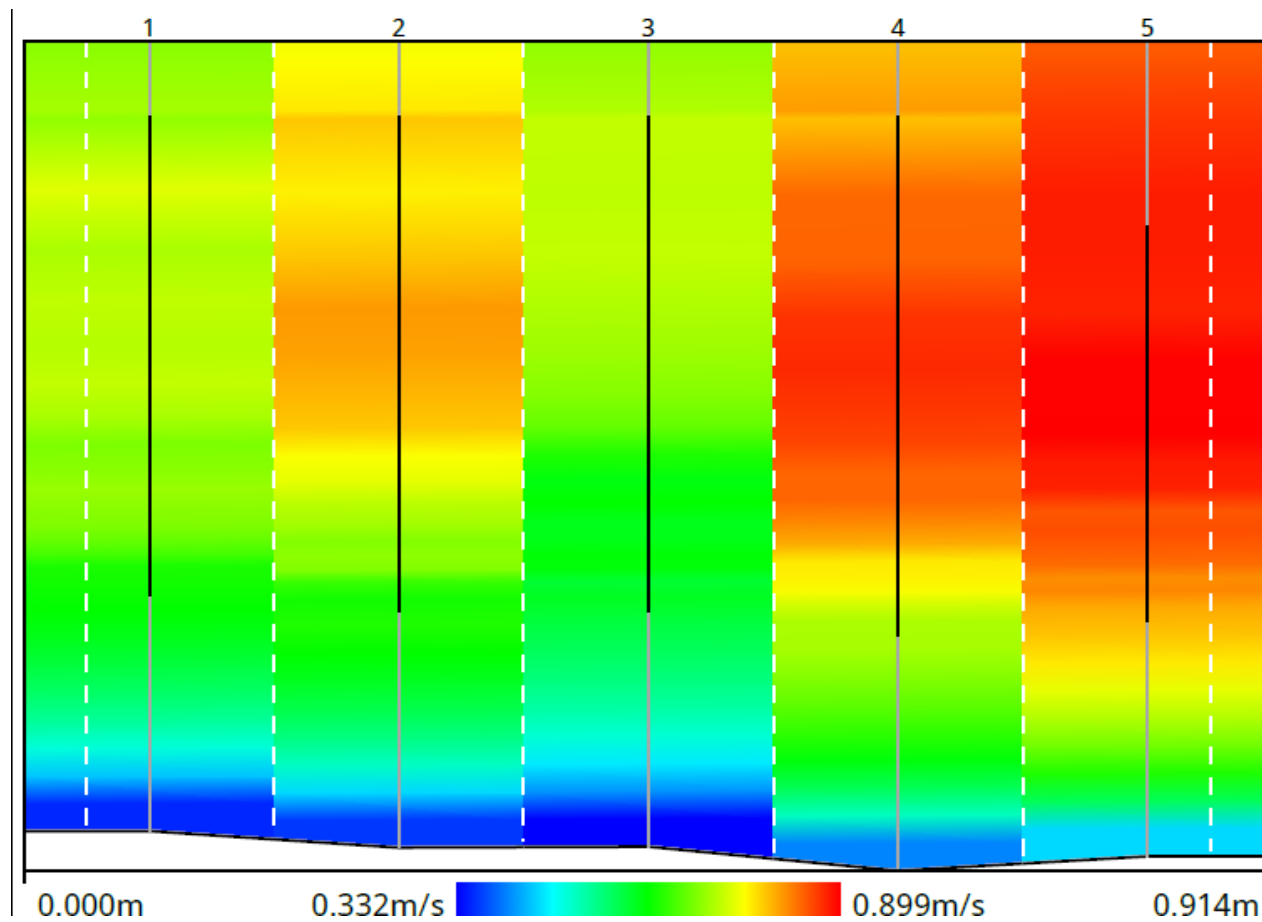
Instrument Information:	
Channel Profile:	Reactangle
Sludge Level:	0.00 m
Flow Unit:	m3/d
Sensor Type:	Wedge
Mounting Height:	0.002 m
Mounting Angle:	0.00°
Offset:	0.00 m
Velocity Unit:	m/s
Level Unit:	m

Point	Channel Width	Portable velocity (m/s)	Process flow meter Average During that Duration velocity reading (m/s)	Deviation (%)
Point 1	0.091	0.651	0.708	-0.37%
Point 2	0.274	0.697		
Point 3	0.457	0.626		
Point 4	0.640	0.764		
Point 5	0.823	0.815		
AVERAGE		0.7106	0.7080	-0.37%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Flow meter verified successfully and it is well within the range.		Nivuflow Nivumobile Stick		2209NFS0094	
Channel Width: 0.914 m					
Channel Height: 2.369 m					
Other Outputs Tested:	Tested	Technician Name		Witness Name	
Loop Check Performed:	Tested	Vaibhav/Krutik		Curtis	
Within Specification:	Yes	Date:	10-Sep-25	Date:	10-Sep-25

MP2@app1_v [m/s]	
Name:	MP2@app1_v [m/s]
Start:	10/09/2025 12:40:30
End:	10/09/2025 12:49:00
Number Measurement Values:	18
Measurement Values Duration:	00:08:30
Average:	0.707 [m/s]
Sum:	NaN []
Minimum Value:	0.611 [m/s]
Minimum Time:	10/09/2025 12:43:00
Maximum Value:	0.748 [m/s]
Maximum Time:	10/09/2025 12:41:30

Fixed Field Flow Meter
L1_UVEE_FM1



Portable Flow Meter