Town of Latchford

# LATCHFORD ANNUAL SEWAGE TREATMENT REPORT 2025

Annual Compliance Report 2025
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Jan 8, 2026

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## EXECUTIVE SUMMARY

The Latchford Water Pollution Control Plant (WPCP) was granted an Environmental Compliance Approval (ECA) #1-0140-68-742646 on Oct 16, 1972 for the construction of an extended aeration package sewage treatment plant, the Latchford lift station and a number of sanitary sewers to serve the community of Latchford.

The Ministry of the environment issued a Provincial Officer's Order No. 5744-9YMKWN on July 22, 2015 which required the owner of the system to prepare and submit a performance report to the Ministry's District Manager on an annual basis within 90 days following the end of the period being reported upon.

The Ministry of the environment issued a new Amended Environmental Compliance Approval No. 4756-D6UQ6Q on September 6, 2024. The new ECA requires changes from monthly sampling to weekly sampling, with additional sampling parameters and compliance limits. The new ECA also incorporates the new Ultra Violet Disinfection System which was installed and completed and commissioned in Aug 2024.

The 2025 Annual Performance Report was prepared by the ORO of the Latchford STP on behalf of the Town of Latchford and is based on information kept on record by the town. The report has been completed in accordance with item 11(4) of the license and contains the following information:

- A summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in the license, including an overview of the success and adequacy of the works;
- A description of any operating problems encountered and corrective actions taken;
- A summary of any effluent quality assurance or control measures undertaken in the reporting period;
- A summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the works;
- A summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- A tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed.

| | |
|---|---|
| **Name of Sewage Plant:** | Latchford Water Pollution Control Plant |
| **Address:** | Lot 17, Concession 1, Latchford |
| **MOE Works Number:** | 110001774 |
| **Amended ECA Number:** | 4756-D6UQ6Q (issued September 6, 2024) |
| **Plant Capacity**: | 340.5 $m^3$/day |
| **Report Period:** | January 1, 2025 to December 31, 2025 |

## 1.0 Facility Description

The Latchford Water Pollution Control Plant (WPCP) is A Class 2 wastewater treatment facility that is owned and operated by the Corporation of the Town of Latchford. The treatment facility is located on 1 McLeod Avenue approximately 50 meters west of Highway 11.

The Latchford WPCP is an extended aeration facility which is rated for treating 75,000 imperial gallons per day (IGPD) or 341 $m^3$/day. It is equipped with twin grit channels for removing large debris, one 304,000 IGPD comminutor, a 73,000 IG aeration section, one 15,700 IG settling tank, one 2,440 IG sludge holding tank and one 1,585 IG chlorine contact tank. A V-notch weir is in place to measure sewage effluent. The treated effluent discharges into the Montreal River through a 21-inch outfall.

Amended ECA No. 4756-D6UQ6Q (Issued Sept 6, 2024)
A new Ultra Violet Disinfection System was added between the Sewage Treatment plant Effluent Weir and the 21-inch outfall to the Montreal River. The Sodium Hypo addition was discontinued and removed from service. The Ultra Violet System provides disinfection year-round.

. Bypasses that occur are disinfected, tested, monitored and reported to the Spills Action Center (SAC). Bypass Disinfection is achieved using sodium hypochlorite.

## 2.0 Monitoring Program as Outlined in ECA No. 4756-D6UQ6Q

**Influent Sampling**

| Parameters | Sample type | Minimum Frequency |
|---|---|---|
| BOD5 | 8 hour composite | Weekly |
| Total Suspended Solids | 8 hour composite | Weekly |
| Total Phosphorus | 8 hour composite | Weekly |
| Total Kjeldahl Nitrogen | 8 hour composite | Weekly |

**Effluent Sampling**

| Parameters | Sample type | Minimum Frequency |
|---|---|---|
| CBOD5 | 8 hour composite | Weekly |
| Total Suspended Solids | 8 hour composite | Weekly |
| Total Phosphorus | 8 hour composite | Weekly |
| Total Ammonia Nitrogen | 8 hour composite | Weekly |
| Total Kjeldahl Nitrogen | 8 hour composite | Weekly |
| E. coli | Grab | Weekly |
| Ph | Grab | Weekly |
| Temperature* | Grab | Weekly |
| Un-ionized Ammonia*** | As Caculated | Weekly |

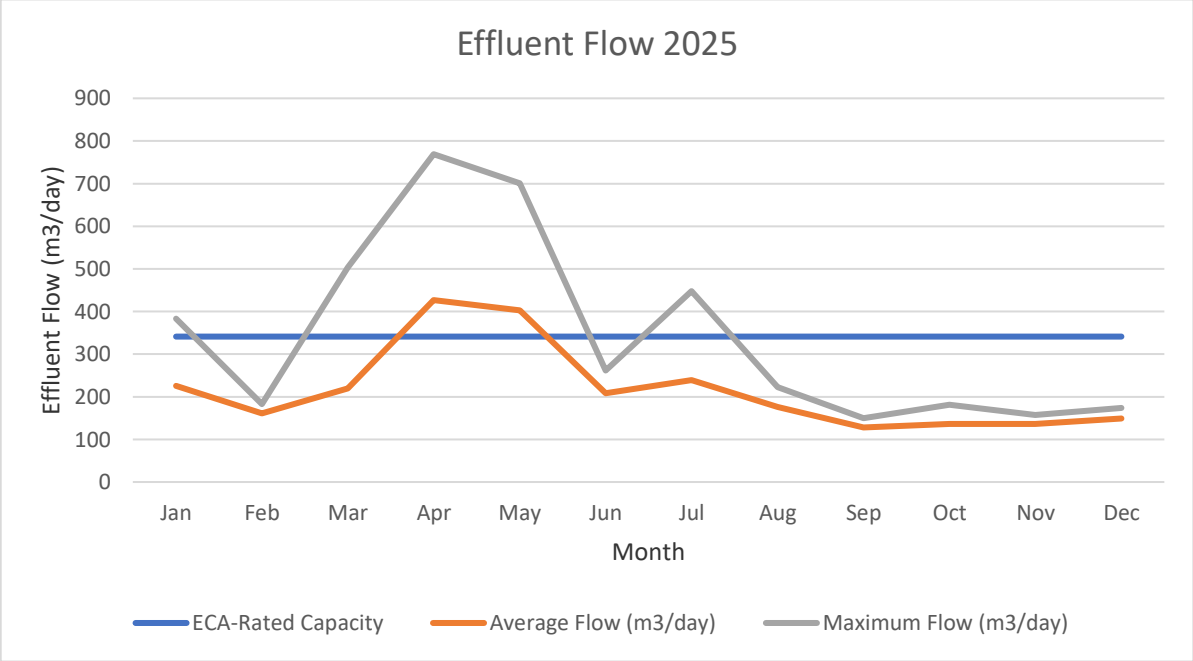
*Ph and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonium Nitrogen.

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

## 2.1 Summary of Effluent Flow 2025

| Month | Average Flow ($m^3$/day) | Maximum Flow ($m^3$/day) | Total ($m^3$) |
|---|---|---|---|
| January | 226 | 383 | 7006 |
| February | 161 | 183 | 4494 |
| March | 220 | 503 | 6805 |
| April | 427 | 769 | 12804 |
| May | 403 | 701 | 12483 |
| June | 208 | 262 | 6232 |
| July | 238 | 448 | 7385 |
| August | 176 | 223 | 5463 |
| September | 128 | 150 | 3833 |
| October | 136 | 181 | 4219 |
| November | 136 | 157 | 4068 |
| December | 149 | 174 | 4633 |

| | |
|---|---|
| 2025 Total Flow | 79,425 $m^3$ |
| 2025 Max Daily Flow: | 769 $m^3$/day |
| 2025 Average Daily Flow: | 217 $m^3$/day |
| Design Capacity | 341 $m^3$/day |
| % of Design Capacity: | 63.6 % |




The Latchford Sewage Treatment System operated within its required capacity throughout 2025. Compliance is achieved when the annual average daily flow does not exceed 341 $m^3$/day. The average daily flow for 2025 was 217 $m^3$/day which represents 63.6% of the design capacity.

The maximum flow occurred in April when heavy precipitation and snow melt contributed to a maximum flow of 769 $m^3$/day.

### *2.2 Raw Sewage data (Influent) 2025*

A summary of the annual average and maximum influent parameter concentrations is listed below. A Process Data Report is presented in Appendix A which provides a monthly summary of the 2025 influent data.

| Parameter (mg/L) | Annual Minimum | Annual Maximum | Annual Average |
|---|---|---|---|
| $BOD_5$ | 1.7 | 190.0 | 40.48 |
| TSS | 12.7 | 147 | 40.34 |
| TP | 0.185 | 2.59 | 1.39 |
| TKN | 1.7 | 28 | 15.1 |

### *2.3 Effluent data 2025*

In 2025, the Latchford wastewater treatment system produced high quality effluent which surpassed the effluent design limits. Annual summaries of the final effluent parameter concentrations are presented below. Refer to Appendix A for the Monthly Process Data Report which summarizes the effluent data for the reporting period.

**Effluent Data 2025**

| Parameter (mg/L) | Annual Minimum | Annual Maximum | Annual Average | Compliance |
|---|---|---|---|---|
| Total Suspended Solids | 0 | 46 | 8.58 | *25 (monthly ave.)* |
| Total Phosphorus | 0.032 | 1 | 0.247 | 1.0 *(monthly ave.)* |
| Total Ammonia Nitrogen | 0 | 4.60 | 0.689 | 2.0/3.0 (monthly ave.) |
| pH (units) | 6.59 | 7.85 | 7.50 | Between 6.0 and 9.5 |
| *E. coli* | 0 | 415 | 10.33 | >200 (monthly ave.) |
| Temp C | 5.6 | 17.1 | 8.28 | N/A |
| CBOD5 | 0 | 11.5 | 1.88 | *25 (monthly ave.)* |
| Total Kjeldahl Nitrogen TKN | 1.20 | 20.2 | 3.17 | N/A |
| Un-ionized Ammonia | <0.002 | 0.001 | <0.14 | N/A |

"<" means values include results that were less than the laboratory's method detection limit

## 2.4 Sewage Treatment Program Success and Adequacy

Table *2.3.1 Performance Summary* presents the system's efficiency through pollutant removal rates from raw sewage concentrations through to final effluent for $BOD_5$, suspended solids and total phosphorus.

## *2.5 Performance Summary*

| Parameter (mg/L) | Influent *(annual average)* | Effluent *(annual average)* | % Removal |
|---|---|---|---|
| $BOD_5$ / $CBOD_5$ | 40.48 | 1.88 | 95.4% |
| TSS | 40.34 | 8.58 | 78.7% |
| TP | 1.39 | 0.247 | 82.2% |
| TKN | 15.1 | 3.17 | 79.0% |

"<" means values include results that were less than the laboratory's method detection limit

As indicated by the effluent concentrations and performance summary, the Latchford WPCP continues to experience a high degree of removal efficiency, and as a result, is operating well within the Ministry limits.

## 3.0 Operating Problems and Corrective Actions

- Jan 8 2025 – Transfer Valve between digester & holding cell frozen shut. Purchased new tiger torch and thawed valve – verified ok.
- UV System receptacles trip out occasionally causing alarms – Operational trends assist with trouble shooting.
- Jan 14 2025 – STP return solenoid frozen shut – Thawed solenoid with propane torch – verified operation ok.
- April 26 2025 – Extreme high flows causing operational issues.
- April 2025 – TSS Monthly average exceedance.
- May 2025 – Total Ammonia Nitrogen monthly average exceedance.
- June 2025 - Total Ammonia Nitrogen monthly average exceedance.
- July 16 2025 – Relocated STP Composite sampling point to try to obtain a cleaner sample. Installed heat trace on sample line to prevent freezing up.
- Blower 2 (installed in 2019) is leaking oil, and getting worse. May require more frequent replacement of belts and shives due to oil contamination. Suspect main shaft seal. Suggest contacting the manufacturer for support on repair. Although blower is still operatable, the leak will have to be addressed eventually. Low priority

## 4.0 Maintenance Performed on the Works

- Effluent flow calibration verified April 3, 2025
- Instrumentation and electrical equipment inspected and repaired as required.
- SPS wet well cleaned, STP Digester and Sludge holding tank cleaned, cleaned grit channels, Waste Pit Cleanout, cleaned cl2 contact chamber, Sludge hauls as required
- Chlorine Pump Maintenance, Seasonal maintenance on chlorine dosage system
- Cleaned and flushed out collection system – annual maintenance.
- Adjusted clarifier scraper drive chain, oiled, replaced gearbox oil, greased motor
- Blowers greased & Oil changed, cleaned air filters, adjusted belts – started new 6 month maintenance program on blowers.
- Pressure washed STP, Painting STP, General Maintenance.
- Collection system camera inspection was completed in 2025
- Drying Beds maintenance was performed in 2025

## 5.0 Effluent Quality Assurance and Control Measures

The following activities are included in regular operator and supervisory activities to assure the quality of the sewage treatment operations including effluent quality and flow monitoring data:

- The facility is inspected by certified operators on a regular basis
- Certified operators conduct regular tests and monitor data from certain equipment at the plant and record this information on facility spreadsheets
- Certified operators monitor the process and make adjustments as required.
- Operation and Compliance staff review process data and laboratory reports to keep track of routine operation of the treatment plant to ensure compliance with the Ministry Guidelines.
- All laboratory results and selected operational data are logged in a process data management system, as well as on spreadsheets located at the WTP.
- All effluent quality data is reviewed by the Operations and Compliance staff to identify any changes in concentrations and/or emerging trends.
- All instrumentation is tested and maintained as per manufacturer's recommendations.
- All routine maintenance has been scheduled in Plant Workplace Maintenance System (WMS) and was completed in 2025.
- A program is being developed in order to determine possible infiltration points. We are trying to lower the high flows encountered during spring melts.
  -Collection System Camera Inspection was performed in 2025.
  -Town Office Sump pump was rerouted to ditch from sewage drain
  -Program to identify additional sumps in residents connected to municipal drains.

Quality Control elements of the monitoring program include the following:

- Samples are collected as required and analyzed by Testmark Laboratories located in Kirkland Lake, Ontario. Analyses are conducted in accordance with the Standard Council of Canada (SCC), in cooperation with the Canadian Association for Laboratory Accreditation Inc. (CALA).
- Quality control procedures are method specific and include laboratory duplicate samples, spiked blanks and spiked duplicates.
- Any bypass or upset events that occur at the pumping stations or plant site are tested, monitored and reported to the local Health Unit and Spills Action Center (SAC).

## 6.0 Calibration and Maintenance of All Monitoring Equipment

Plant maintenance is conducted as per plant Preventative Maintenance Schedules. Monitoring equipment is calibrated based on the manufacturer's recommendations. All routine and preventative maintenance measures were conducted as scheduled in 2025. Refer to Table 6.1 for a summary of calibrations conducted in 2025.

### *6.1 Calibration Summary*

| Date | Instrument | % Accuracy |
|---|---|---|
| April 3 2025 | Effluent Flow Meter | 99.79% |

Note: The flow is metered with a V-notch weir and flow readings are confirmed at various levels at the weir plate and compared to manufacturer's standards. The % value above is an average of the accuracy at each level.

## 7.0 Efforts made to Meet Effluent Limits

Latchford staff use a number of best efforts to achieve the *Effluent Limits*.

Operational staff has the required certification to operate the facility and they continue to learn and gain knowledge with respect to the process and equipment. Staff also has a high level of regulatory competence.

The mechanical elements in the facility are regularly inspected, well maintained and kept in good repair. Latchford Staff use a maintenance management system which ensures maintenance of equipment is proactively performed.

Raw wastewater and effluent samples are collected as required and analyzed by Testmark Laboratories, an accredited laboratory. Latchford staff reviews these results on a regular basis to ensure compliance with regulatory limits.

In-house sampling and testing for operational parameters provide real time results which are used to enhance process and operational performance.

Operations, maintenance and emergency procedures are available to ensure facilities are operated in compliance with applicable legal instruments. Facility staff has access to a network of operational compliance and support experts at the region and corporate levels.

**The facility operated efficiently and met the monthly effluent limits for cBOD5 (25.0 mg/L), TSS (25.0 mg/L), TP (1.0 mg/L), E. coli (200), TAN (2.0/3.0) and a pH range of 6.0 to 9.5 as outlined in New ECA No. 4756-D6UQ6Q with the exception of the following:**

**High Flows in the spring of 2025 contributed to monthly average compliance limit exceedances in April, May & June.**

- **April 2025 Total Suspended Solids 25.55 mg/L (limit 20.0 mg/L)**
- **May 2025 Total Ammonia Nitrogen 2.83 mg/L (limit 2.0 mg/L)**
- **June 2025 Total Ammonia Nitrogen 3.05 mg/L (limit 2.0 mg/L)**

A program is being developed in order to determine possible infiltration points. We are trying to lower the high flows encountered during spring melts.

-Collection System Camera Inspection was performed in 2025.

-Town Office Sump pump was rerouted to ditch from sewage drain

-Program to identify additional sumps in residents connected to municipal drains.

## 8.0 Sludge Generation and Disposal

Sludge is hauled by Ray & Son's Industrial Services to approved sites at the Latchford Landfill. The landfill is approved to accept the sludge under Certificate of Approval number: S504LM10-01.

| Date Sludge Hauled | Volume of Sludge Hauled $m^3$ |
|---|---|
| Jan 15, 2025 | 38.0 m3 |
| Sept 12, 2025 | 64.2 m3 |
| Nov 25, 2025 | 69.0 m3 |
| **Total Hauled** | **171.2 m3** |

According to the Ministry's procedure F-10-1; sludge is required to be sampled and tested annually. For a summary of sludge sampling results please refer to Appendix B for the Monthly Process Data Report for Sludge.

## 9.0 Complaints

According to records maintained by Latchford staff, no complaints were received during the 2025 reporting period.

## 10.0 Bypass, Spill and Abnormal Discharge Events

- Abnormally high flows in April 2025 due to heavy spring melt.
- There were no bypasses during the 2025 reporting period.

# APPENDIX A

## Monthly Process Data Report 2025

**Latchford Sewage Treatment Plant**
**2025 Monthly Process Data Report**

| **Influent (Raw) Parameters** | 01/2025 | 02/2025 | 03/2025 | 04/205 | 05/2025 | 06/2025 | 07/2025 | 08/2025 | 09/2025 | 10/2025 | 11/2025 | 12/2025 | Total | Avg | Max | Min |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Influent / Biochemical Oxygen Demand: BOD5 - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 61.4 | 49 | 47 | 29 | 33 | 33 | 26 | 52 | 50 | 190 | 60.6 | 61.4 | | | 190 | |
| Mean Lab | 50.48 | 33.38 | 36 | 24.5 | 25 | 28 | 17.74 | 43.25 | 46.6 | 81 | 49.4 | 50.48 | | 40.48583 | | |
| Min Lab | 42 | 4.5 | 22 | 14 | 14 | 24 | 1.7 | 35 | 43 | 35 | 41 | 42 | | | | 1.7 |
| Influent / Total Suspended Solids: TSS - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 92 | 29.5 | 147 | 27 | 47.5 | 31 | 44.5 | 42 | 57 | 87 | 50 | 92 | | | 147 | |
| Mean Lab | 45.5 | 28.5 | 83.1 | 22 | 36.25 | 28.18 | 24.96 | 36.38 | 42.5 | 55.25 | 36 | 45.5 | | 40.34 | | |
| Min Lab | 29 | 26.3 | 42 | 12.7 | 23 | 23.7 | 18 | 30 | 34.5 | 35 | 28 | 29 | | | | 12.7 |
| Influent / Total Phosphorus: TP - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 2.33 | 1.5 | 0.186 | 1.13 | 1.04 | 1.35 | 1.46 | 2.02 | 2.29 | 2.59 | 2 | 2.33 | | | 2.59 | |
| Mean Lab | 1.94 | 1.39 | 0.186 | 0.711 | 0.754 | 1.14 | 1.2 | 1.92 | 1.49 | 2.01 | 1.95 | 1.942 | | 1.386083 | | |
| Min Lab | 1.62 | 1.21 | 0.186 | 0.279 | 0.359 | 0.987 | 0.636 | 1.78 | 0.195 | 1.45 | 1.85 | 1.62 | | | | 0.185 |
| Influent / Total Kjeldahl Nitrogen: TKN - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 21.4 | 18 | 28 | 9.5 | 11.3 | 14.2 | 15.91 | 20.6 | 21.4 | 24 | 24.1 | 21.4 | | | 28 | |
| Mean Lab | 19.14 | 15.83 | 14.72 | 7.325 | 7.975 | 12.13 | 11.32 | 17.55 | 15.12 | 19.43 | 21.48 | 19.14 | | 15.09667 | | |
| Min Lab | 17.5 | 12.6 | 7.4 | 5.1 | 4 | 10.1 | 9.5 | 13 | 1.7 | 14 | 19.3 | 17.5 | | | | 1.7 |

| Effluent Parameters | 01/2025 | 02/2025 | 03/2025 | 04/2025 | 05/2025 | 06/2025 | 07/2025 | 08/2025 | 09/2025 | 10/2025 | 11/2025 | 12/2025 | Total | Avg | Max | Min |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent / Total Suspended Solids: TSS - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 16.7 | 29.5 | 40 | 46 | 11.5 | 17 | 5.5 | 4.7 | 2.7 | 4.5 | 4 | 4.5 | | | 46 | |
| Mean Lab | 10.59 | 16.41 | 18.24 | 25.55 | 7.55 | 6.875 | 3.34 | 1.55 | 1.78 | 3.55 | 4.93 | 2.574 | | 8.58 | | |
| Min Lab | 1.3 | 9.33 | 10.7 | 6 | 3.5 | 1.5 | 1 | <1 | 1.5 | 2.7 | <1 | 0.67 | | | | 0 |
| Effluent / Total Phosphorus: TP - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 0.902 | 0.717 | 0.895 | 1 | 0.321 | 0.427 | 0.128 | 0.141 | 0.096 | 0.139 | 0.082 | 0.365 | | | 1 | |
| Mean Lab | 0.508 | 0.401 | 0.453 | 0.604 | 0.255 | 0.187 | 0.099 | 0.105 | 0.078 | 0.094 | 0.065 | 0.111 | | 0.246667 | | |
| Min Lab | 0.203 | 0.244 | 0.295 | 0.208 | 0.163 | 0.053 | 0.065 | 0.075 | 0.06 | 0.04 | 0.049 | 0.032 | | | | 0.032 |
| Effluent / Total Ammonia Nitrogen: NH3 + NH4+ as N - mg/L | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 2.38 | 0.41 | 1.95 | 0.68 | 4.01 | 4.6 | 0.05 | 0.06 | 0.04 | 0.03 | 0.082 | 0.11 | | | 4.6 | |
| Mean Lab | 0.857 | 0.155 | 0.952 | <0.01 | 2.83 | 3.05 | 0.03 | 0.047 | 0.03 | 0.23 | 0.025 | 0.065 | | 0.689 | | |
| Min Lab | <0.001 | 0.01 | 0.02 | 0.55 | 1.43 | 0.03 | <0.01 | <0.01 | <0.01 | 0.01 | 0.02 | <0.01 | | | | 0 |
| Effluent / pH - --- | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 7.62 | 7.33 | 7.54 | 7.59 | 7.86 | 7.75 | 7.85 | 7.78 | 7.66 | 7.46 | 7.81 | 7.81 | | | 7.85 | |
| Mean Lab | 7.53 | 7.26 | 7.38 | 7.31 | 7.77 | 7.69 | 7.6 | 7.55 | 7.42 | 7.2 | 7.73 | 7.61 | | 7.504167 | | |
| Min Lab | 7.48 | 7.22 | 7.19 | 6.6 | 7.64 | 7.6 | 7.37 | 7.34 | 7.32 | 6.59 | 7.64 | 7.5 | | | | 6.59 |
| Effluent / E. Coli: EC - cfu/100mL | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 23 | 23 | 415 | 79 | 56 | 19 | 151 | 5 | 120 | 3 | 3 | 1 | | | 415 | |
| Mean Lab | 14.93 | 4.69 | 10.45 | 14.85 | 11.27 | 6.03 | 54.26 | 1.5 | 2.81 | 0.75 | 1.5 | 1 | | 10.33 | | |
| Min Lab | 6 | 1 | 1 | 2 | 1 | 2 | 13 | 0 | 0 | 0 | 0 | 0 | | | | 0 |
| Effluent / CBOD | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 1.8 | 4.7 | 11.5 | 6.5 | 6.1 | 2.9 | 1.5 | 1.3 | 1.1 | 0.8 | 1.1 | 0.8 | | | 11.5 | |
| Mean Lab | 1.5 | 2.475 | 4.08 | 4.825 | 4.325 | 2.15 | <0.5 | 0.97 | 0.6 | 0.475 | 0.55 | 0.65 | | 1.88 | | |
| Min Lab | 1.2 | 1.8 | 1.7 | 1.9 | 2.2 | 1.5 | 1.03 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | | | | 0 |
| Effluent / Total Kjeldahl Nitrogen: TKN | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 5.1 | 2.8 | 5.6 | 4.1 | 6.8 | 7.4 | 9.7 | 2.5 | 20.2 | 0.8 | 3.2 | 5.2 | | | 20.2 | |
| Mean Lab | 2.825 | 2.125 | 3.42 | 3.075 | 5.4 | 5.03 | 2.9 | 2 | 5.88 | 0.475 | 2.15 | 2.8 | | 3.173333 | | |
| Min Lab | 1.5 | 1.5 | 1.9 | 2.2 | 4.2 | 2.4 | 0.6 | 1.3 | 1.2 | <0.5 | 1.5 | 1 | | | | 1.2 |
| Effluent / Temperature - C | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 6.3 | 4.7 | 5.4 | 6.5 | 7 | 9.6 | 14.4 | 17.1 | 17 | 16.5 | 8.1 | 5.4 | | | 17.1 | |
| Mean Lab | 5.53 | 4.175 | 4.98 | 4.825 | 6.2 | 8.35 | 12.16 | 13.05 | 14.24 | 13.98 | 6.95 | 4.94 | | 8.281667 | | |
| Min Lab | 4.1 | 2.9 | 4.5 | 1.9 | 4.4 | 7.3 | 8.4 | 8.1 | 8.1 | 11.1 | 5.9 | 4.31 | | | | 5.6 |
| Effluent / Un-ionized Amonia | | | | | | | | | | | | | | | | |
| Count Lab | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 | | | |
| Max Lab | 0.14 | <0.002 | 0.006 | 0.003 | 0.032 | 0.038 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | | | 0.14 | |
| Mean Lab | 0.004 | <0.002 | 0.004 | 0.0025 | 0.023 | 0.032 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | | 0 | | |
| Min Lab | <0.002 | <0.002 | <0.002 | <0.002 | 0.011 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | | | | 0 |

# Appendix B – Annual Sludge Results 2025

| Work Order # | Sample # | SampleDate | ple Description | Parameter | MDL | Result | Units | ReceivedDate | AnalysisDate |
|---|---|---|---|---|---|---|---|---|---|
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Ammonia (as N) | 0.01 | 0.3 | mg/L | 2025-01-15 | 2025-01-16 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Nitrate (as N) | 0.05 | 0.6 | mg/L | 2025-01-15 | 2025-01-16 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Cadmium | 0.1 | 1.3 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Chromium | 1 | 4 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Cobalt | 0.1 | 2.4 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Copper | 1 | 52 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Lead | 0.1 | 0.2 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Mercury | 0.1 | <0.1 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Molybdenum | 1 | <1 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Nickel | 1 | 10 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Potassium | 1000 | 14200 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Selenium | 0.2 | 0.9 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Zinc | 10 | 866 | ug/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Total Phosphorus (as P) | 0.6 | 107 | mg/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Total Solids | 20 | 5630 | mg/L | 2025-01-15 | 2025-01-17 |
| 563883 | 2100352 | 2025-01-14 | LA S - Sludge | Total Solids (Dup) | 20 | 5710 | mg/L | 2025-01-15 | 2025-01-17 |