

February 19<sup>th</sup>, 2026

Ministry of the Environment  
70 Foster Drive, Suite 110  
Sault Ste. Marie, ON P6A 6V4



ATTENTION: Safe Drinking Water Branch

**RE: Elliot Lake Wastewater Treatment Plant Annual Performance Report - 2025**

Please find attached the 2025 Annual Report for the Elliot Lake Wastewater Treatment Plant. This report has been prepared in accordance to the guidelines set out in Condition 10<sub>(5)</sub> of Facility Certificate of Approval Number 5239-5GXSMK.

This report covers the period from January 1, 2025 to December 31, 2025.

Please direct any questions or concerns to the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read "Taylor Irving", is written over a large, faint watermark of the City of Elliot Lake logo.

Taylor Irving  
*Manager or Environmental Services*  
City of Elliot Lake

## Elliot Lake Wastewater Treatment Plant 2025 Annual Report

The purpose of this report is to provide performance and compliance records pertaining to the Elliot Lake wastewater treatment plant to the Ministry of the Environment. This report is prepared in accordance with Condition 10<sup>(5)</sup> of the Certificate of Approval and covers the reporting period from January 1, 2025 to December 31, 2025.

This report contains the following information:

- a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the *Works*;
- b) a description of any operating problems encountered and corrective actions taken;
- c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works*;
- d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;
- g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- i) a summary of all *By-pass*, spill or abnormal discharge events;

a) Effluent Limits – Condition 7:

Month	CBOD (25 mg/L)	Total Suspended Solids (25 mg/L)	Total Phosphorus (1.00 mg/L)	Total Flow	CBOD Loading	Total Suspended Solids Loading	Total Phosphorus Loading
	Monthly Average mg/l	Monthly Average mg/l	Monthly Average mg/l	Cubic Meters / month	Kilograms / day	Kilograms / day	Kilograms / day
January	6	15	0.45	172,721	33.4	83.6	2.51
February	12	13	0.36	130,140	55.8	60.4	1.67
March	8	14	0.34	209,671	54.1	94.7	2.30
April	8	16	0.30	332,800	88.7	177.5	3.33
May	4	14	0.34	216,818	28.0	97.9	2.38
June	4	9	0.30	167,047	22.3	50.1	1.67
July	4	5	0.27	188,853	24.4	30.5	1.64
August	4	8.3	0.36	142,195	18.3	38.1	1.65
September	6	14.7	0.86	157,745	31.5	77.3	4.52
October	5	7.7	0.67	182,392	29.4	45.3	3.94
November	7	12	0.74	160,337	37.4	64.1	3.95
December	8	11	0.86	192,596	49.7	68.3	5.34
Annual Average	6.33	11.64	0.49	187776	39.4	74.0	2.91

The Total Effluent Flow for the facility during the 2025 operating year was 2,253,315 m<sup>3</sup>

b) Operating Problems or Issues Encountered:

Operating problems associated with the equipment and infrastructure of the facilities that occurred during this reporting period includes the following:

- The Secondary Digester Floating Roof continues to remain problematic and is planned to be replaced in 2027.
- A chemical holding tank is beginning to fail and requires structural repairs. The tank was emptied, isolated and is planned to be repaired in 2025.

c) Summary of Facility Maintenance:

The City of Elliot Lake Wastewater Treatment Plant has an annual maintenance program for the facility that is scheduled in excel format. The schedule is then followed up with a work order which is submitted to the department head for review and file. Licenced operators perform maintenance on pumps and alarm systems, all in accordance with the manufacturers' guidelines.

Scheduled and unscheduled large maintenance projects performed during this reporting period include:

- Backflow preventers throughout sewage system were tested and inspected by OCWA in December of 2025.
- Calibration of instrumentation and analytical devices was tested and inspected by a Cleartech Technician in July of 2025 for a total cost of \$2,493.
- Fox Drive Lift Station Transducer total cost of \$3,899.55
- Boiler service and installation of HMI for a total cost of \$1,739.75
- Wastewater Treatment Plant Primary Clarifier parts for a total cost of \$1,203.11
- Lakeside Lift Station Diesel Load test for a total cost of \$2,157.17
- Hoist inspections at Porridge, Horne, and Angel Lift Stations for a total cost of \$2,648.94
- Porridge Lift Station pump repairs for a total cost of \$2,307.
- Lakeside Lift Station pump repairs for a total cost of \$11,427.24
- Lakeside Lift Station check valve parts total cost of \$7,864.8
- Horne Lift Station impeller repairs total cost of \$17,250
- Alum tank failure. Concrete repair inspection for a total cost of \$3,167.10
- Gas booster repair for a total cost of \$5,601.69
- North Lift Station pump repair for a total cost of \$9,805.24

**d) Quality Assurance, Quality Control Measures:**

The majority of the process analysis for the facility is completed in house by the Operations staff using standardized and accepted laboratory techniques. All results are recorded and compared to historical data. In the event that a deviation is detected, repeat analysis is performed to verify the results. Samples such as Total Coliform, E. Coli and CBOD<sub>5</sub> are sent to an accredited laboratory for analysis. Plant process is further tracked through the use of an on-line turbidity analyzer which is monitored daily.

**e) Calibration and Maintenance of Effluent Monitoring Equipment:**

Calibration of the flow meters, lab equipment and analyzers were conducted as per regular annual maintenance. Cleaning of effluent monitoring equipment is performed on a regular routine basis. Accuracy of effluent monitoring equipment operation was confirmed by onsite lab effluent samples analysis and offsite third-party accredited laboratory analysis.

**f) Effluent Objectives:**

As noted in Section a) of this report, the Effluent Objectives for Suspended Solids, CBOD and for Total Phosphorus are being met by the facility.

Plant chlorination values are sent to the Medical Officer of Health with copies sent to various other stakeholders on a monthly basis. The four sample locations reported for the dechlorination project are as follows:

- Location One – Esten Lake at a point near the diversion channel;
- Location Two – Diversion Channel taken at the point where Nordic Creek is introduced to the wastewater effluent stream;

- Location Three – Depot Lake farthest area of lake after diversion channel stream is introduced;
- Final Effluent – last accessible sample point in plant. Note that residuals at this location vary as a result of partial mixing and contact time this is due to location of chlorine injection in relation to the sample port;

#### Final Effluent Results

Month	Geometric Mean - Total Coliform	Geometric Mean - E.Coli	Average Total Chlorine Residual
May	2768.6	32	0.06 mg/L
June	159.1	1.8	0.10 mg/L
July	3451.8	58.5	0.07 mg/L
August	3537	23.8	0.05 mg/L
September	7243.4	89.8	0.06 mg/L
October	18908.4	122.2	0.05 mg/L

Copies of the monthly reports entitled “Esten Lake Dechlorination Project” are appended to this report.

#### g) – Sludge Haulage

Month	Digested Sludge Hauled	Methane Produced	Methane Wasted	Aluminum Sulphate Used
	Cubic Meters	Cubic Meters	Cubic Meters	Tonnes
January	381.9	0	0	10.5
February	541.0	0	0	9.1
March	381.9	0	0	10.4
April	429.6	0	0	8.4
May	318.2	0	0	8.4
June	381.9	0	0	10.1
July	397.8	1637.5	0	9.4
August	334.1	5089.3	0	8.8
September	350.0	9280.6	0	4.6
October	445.5	11989.6	0	5.4
November	381.9	8717	0	3.9
December	477.3	8547	0	2.8
<b>Annual Total</b>	<b>4821.1</b>	<b>45261</b>	<b>0</b>	<b>87.2</b>

All waste sludge is hauled under contract from the Wastewater Treatment facility to Waste Disposal Site No. A560812. The current sludge haulage contractor is GFL Environmental based out of Blind River, Ontario.

The City of Elliot Lake has retained the services of Pinchin Ltd in order to comply with Conditions 22 and 24 of Environmental Compliance Approval No. A560812.

The volumes of sludge generated as well as the disposal areas over the next reporting period are not expected to change.

**h) - Complaints:**

There were no noted complaints with regard to the operation of the wastewater treatment facility in this reporting year.

**i) – Bypasses, Spills, or Abnormal Discharge Events:**

There was no abnormal discharge event within the City of Elliot Lake Sewage Works for the 2025 reporting period.

