

**THE TOWN OF RAINY RIVER
2024 ANNUAL SEWAGE REPORT**

For The Period:

January 1, 2024, to December 31, 2024

Prepared For:

**Ms. Shara Lavallee
Chief Administrative Officer
The Town of Rainy River
Box 488
201 Atwood Ave.
Rainy River, Ontario
POW 1LO
Tel. (807) 852-3244**

MOE

**Mr. Aaron Causyn
Provincial Water Wastewater Inspector
Kenora Area Office**

**Leroy Hancharyk
Town Foreman
The Town of Rainy River**

Prepared February 2025 by:

**Leroy Hancharyk
ORO
Rainy River Sewage System
Rainy River, Ontario
POW 1LO
Tel. (807) 852-4485**

**2024 Annual Sewage Report
Town of Rainy River**

Certificate of Approval # 9581-7EVR3S – Dated June 26, 2008.

January 2024 One sample is taken at the beginning of each month.

Total Flow	12,443	m ³
Average Daily Flow	401	m ³
Max Daily Flow	624	m ³
BOD Carbonaceous	58.9	mg/L
BOD's	59.8	mg/L
Suspended Solids	38.2	mg/L
Total Phosphorus	2.92	mg/L
TKN	28.7	mg/L

February 2024 One sample is taken at the beginning of each month.

Total Flow	14,219	m ³
Average Daily Flow	490	m ³
Max Daily Flow	1,421	m ³
BOD Carbonaceous	79.7	mg/L
BOD's	77.0	mg/L
Suspended Solids	83.5	mg/L
Total Phosphorus	3.16	mg/L
TKN	30.5	mg/L

March 2024 One sample is taken at the beginning of each month.

Total Flow	12,983	m ³
Average Daily Flow	418	m ³
Max Daily Flow	579	m ³
BOD Carbonaceous	42.4	mg/L
BOD's	46.4	mg/L
Suspended Solids	74.5	mg/L
Total Phosphorus	3.03	mg/L
TKN	22.8	mg/L

April 2024 One sample is taken at the beginning of each month.

Total Flow	18,473	m ³
Average Daily Flow	615	m ³
Max Daily Flow	927	m ³
BOD Carbonaceous	62.5	mg/L
BOD's	57.3	mg/L
Suspended Solids	56.6	mg/L
Total Phosphorus	3.57	mg/L
TKN	33.1	mg/L

<u>May 2024</u>		One sample is taken at the beginning of each month.
Total Flow	27,561 m ³	
Average Daily Flow	889 m ³	
Max Daily Flow	1,626 m ³	
BOD Carbonaceous	30.6 mg/L	
BOD's	37.8 mg/L	
Suspended Solids	37.9 mg/L	
Total Phosphorus	2.01 mg/L	
TKN	18.2 mg/L	

<u>June 2024</u>		One sample is taken at the beginning of each month.
Total Flow	21,405 m ³	
Average Daily Flow	713 m ³	
Max Daily Flow	1,467 m ³	
BOD Carbonaceous	37.5 mg/L	
BOD's	36.1 mg/L	
Suspended Solids	33.9 mg/L	
Total Phosphorus	2.36 mg/L	
TKN	25.8 mg/L	

<u>July 2024</u>		One sample is taken at the beginning of each month.
Total Flow	21,916 m ³	
Average Daily Flow	706 m ³	
Max Daily Flow	2,749 m ³	
BOD Carbonaceous	6.1 mg/L	
BOD's	8.5 mg/L	
Suspended Solids	14.3 mg/L	
Total Phosphorus	0.885 mg/L	
TKN	4.73 mg/L	

<u>August 2024</u>		One sample is taken at the beginning of each month.
Total Flow	12,656 m ³	
Average Daily Flow	408 m ³	
Max Daily Flow	900 m ³	
BOD Carbonaceous	25.3 mg/L	
BOD's	33.9 mg/L	
Suspended Solids	38.9 mg/L	
Total Phosphorus	1.88 mg/L	
TKN	15.4 mg/L	

<u>September 2024</u>		One sample is taken at the beginning of each month.
Total Flow	16,161 m ³	
Average Daily Flow	538 m ³	
Max Daily Flow	2,309 m ³	
BOD Carbonaceous	55.9 mg/L	
BOD's	69.3 mg/L	
Suspended Solids	54.1 mg/L	

Total Phosphorus	3.17	mg/L
TKN	31.4	mg/L

October 2024

One sample is taken at the beginning of each month.

Total Flow	10,869	m ³
Average Daily Flow	350	m ³
Max Daily Flow	464	m ³
BOD Carbonaceous	80.5	mg/L
BOD's	74.9	mg/L
Suspended Solids	74.4	mg/L
Total Phosphorus	3.95	mg/L
TKN	44.6	mg/L

November 2024

One sample is taken at the beginning of each month.

Total Flow	15,219	m ³
Average Daily Flow	507	m ³
Max Daily Flow	1,409	m ³
BOD Carbonaceous	88.1	mg/L
BOD's	77.1	mg/L
Suspended Solids	65.3	mg/L
Total Phosphorus	3.46	mg/L
TKN	40.3	mg/L

December 2024

One sample is taken at the beginning of each month.

Total Flow	13,655	m ³
Average Daily Flow	440	m ³
Max Daily Flow	532	m ³
BOD Carbonaceous	75.3	mg/L
BOD's	80.8	mg/L
Suspended Solids	71.6	mg/L
Total Phosphorus	3.38	mg/L
TKN	33.6	mg/L

Yearly Average 2024

Total Flow	197,560	m ³	Total Flow for 2024	171,749	m³
Average Daily Flow	540	m ³			
Max Daily Flow	2,749	m ³			
BOD Carbonaceous	54.0	mg/L			
BOD's	55.0	mg/L			
Suspended Solids	51.0	mg/L			
Total Phosphorus	3.0	mg/L			
TKN	32.0	mg/L			

2024 Final Effluent

June 2024

Effluent Limits

Total EFFL Volume to Watercourse	104,755 m ³	CBO5	30.0 mg/L
Flow Duration	600 hours	Total Suspended Solid	40.0
Cell Depth	1.6 m	pH	6.0 – 9.5
BOD's	2.46 mg/L		
Suspended Solids	3.28 mg/L		
Ammonia and Ammonium	0.057 mg/L		
Total Phosphorus	0.174 mg/L		
Number of Samples During Flow Duration	5		
BOD Carbonaceous	2.48 mg/L		
Average pH	8.46		

Final Effluent

November 2024

Total EFFL Volume to Watercourse	66,994 m ³
Flow Duration	432 hours
Cell Depth	1.6 m
BOD's	2.33 mg/L
Suspended Solids	3.0 mg/L
Ammonia and Ammonium	0.245 mg/L
Total Phosphorus	0.116 mg/L
Number of Samples During Flow Duration	3
BOD Carbonaceous	2.33 mg/L
Average pH	7.7

Yearly Average 2024

BOD's	2.39 mg/L	Total Final Effluent	171,749 m³
Suspended Solids	3.14 mg/L		
Ammonia and Ammonium	0.151 mg/L		
Total Phosphorus	0.145 mg/L		
CBOD	2.40 mg/L		
pH	8.08		

(b) Operating Problems Encountered and Corrective Actions Taken;

- New policy – change UPS every two years.

(c) Summary of All Maintenance Carried Out on Any Major Structure, Equipment, Apparatus, Mechanism or Thing Forming Part of The *Works*;

- Alarm and generator set and tested weekly.
 - Calibrated influent flow meters.
- (d) A Summary of Any Effluent Quality Assurance or Control Measures Undertaken in the Reporting Period;**
- Content sample taken before discharge.
- (e) Summary of the Calibration and Maintenance Carried Out on All Effluent Monitoring Equipment;**
- pH meter calibrated by Lakeside August 2024.
- (f) A Description of Efforts Made and Results Achieved in Meeting the Effluent Objectives of Condition 5;**
- 6 month holding time – content sample before discharge.
- (g) 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;**
- Not Applicable.
- (h) A Tabulation of the Quantity of Septage Deposited to the Sewage Lagoon for Co-Treatment During the Reporting Period;**
- 30.0 m³ was deposited in 2024.
- (i) A Summary of Any Complaints Received During the Reporting Period and Any Steps Taken to Address the Complaints;**
- (j) A Summary of All By-Pass, Overflow, Spill or Abnormal Discharge Events;**
- No bypass.