

CITY OF KENORA

Monthly Summary Report Water & Wastewater Systems

November 2024

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1.0 Introduction

This report contains the major maintenance activities and operational events that occurred during the month of November 2024 at the Kenora Area Water Treatment Plant, Kenora Wastewater Treatment Plant, Water Distribution System and Wastewater Collection System. This information report has been prepared for Council to better understand how the systems are operated and maintained.

2.0 Water Treatment Plant

2.1 Monthly Flow and Operating Data – See Schedule “A”

2.2 Weekly Bacteriological Samples

1 Raw, 1 Treated and 6 Distribution for a total of eight (8) samples are taken on a weekly basis.

Sampling was conducted on the following dates:

- Nov 4th
- Nov 12th
- Nov 18th
- Nov 25th

All routine samples tested were within regulated parameters.

2.3 Maintenance

- Installed davit arm bases at boosters and standpipes.
- Removed and cleaned vacuum breaker check valve on west clarifer.
- Greased #3 highlift motor.
- Installed replacement #1 sodium hydroxide pump.
- Rebuilt highlift #3 check valve.

2.4 Training

- No training took place in November.

2.5 Water Quality Complaints

- There were no water quality complaints in November.

2.6 Other Information

- Distribution chlorine residuals were collected on a weekly basis.

3.0 Water Distribution System and Wastewater Collection System

3.1 Maintenance

3.1.1. Water Distribution

- Repaired water leak on Fourth Street North.
- Repaired watermain on Third Street North.
- Repaired main valve on Third Street North.
- Turned on new water main on Railway Street.
- Turned on water bleeders for winter to prevent watermain freezing.
- Cleaned valve chambers and air relief valves on Airport Road.
- Winterizing of fire hydrants.
- Straightening and lowering of various service boxes.
- Fire hydrant repairs from Velocity report.
- Monthly water reads and repairs.
- Eight (8) water off/on for repairs.
- One (1) water on for new construction
- Five (5) water off for the season.
- One (1) water off due to fire.
- Eighty-Two (82) water deliveries.
- Thirty (30) Ontario One Call locates.

3.1.2. Wastewater Collection

- Repaired four-inch sewer on Fourth Street North.
- Dug and repaired sewer service on Second Street South.
- Installed new air relief on Tunnel Island force main.
- Assisted Wastewater Treatment Plant with cleaning of the digester tanks.
- Sewer lift station checks and maintenance.
- Responded to various station alarms.
- Flushing of sewer mains.
- Winterized Anicinabe Park lift station.
- Replaced carbon in filter at 100 Main lift station.
- Replaced four (4) manhole lids.
- Two (2) calls for sewer rodding.
- One (1) service call for a sewer backup.
- Five (5) service calls for grinder pumps.
- Replaced two (2) grinder pumps.
- Thirty (30) Ontario One Call locates.

3.1.3. Water Thaws:

	November 2023	November 2024
City	0	0

Private	0	0
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3.2 Training

- Locating Equipment Training.

3.3 Boil Water Advisory(s) – 2024

In response to the provincial water main disinfection requirements in our license and permit, the City will implement a Precautionary Boil Water Advisory when an airgap cannot be maintained during a watermain repair process. This is to ensure and to maintain acceptable water quality throughout the distribution system. These Precautionary Boil Water Advisories are not an indication of an adverse water quality incident that would normally require the NWHU approval to rescind the advisory.

- There was one (1) boil water advisory to report for November:
 - Third Street North.

3.4 Other Information

- No other information to report for November.

4.0 Wastewater Treatment Plant

4.1 Monthly Flows & Operating Data – See Schedule “B”

4.2 Samples

4.2.1. **Monthly** – Laboratory Results from the Complete Analyses of Treated Effluent and Raw Sewage Samples sent out on November 12, 2024, as per the Certificate of Approval’s (COA’s) monitoring and recording requirements are:

- A. Raw Sewage – Total BOD₅ (biological oxygen demand): 130 [mg/L]
- B. Final Treatment Effluent – Total CBOD₅ (carbonaceous biological oxygen demand): 8.6 [mg/L] – limit is 25 [mg/L].
- C. Raw Sewage – Total Suspended Solids: 361 [mg/L].
- D. Final Treated Effluent – Total Suspended Solids: 19.4 [mg/L] – limit is 25 [mg/L].

4.2.2. **Weekly** – Laboratory Results on the weekly samples of final treated effluent sent on November 4, 12, 18, and 25 for E. Coli are:

- A. Geometric Means of the samples in September was 67.54 organisms/100ml.
- B. Geometric Means Limit as per Certificate of Approval is 200 organisms/100ml.

In summary, raw sewage enters the plant with E Coli count of approximately 3 million organisms/100 mL and effluent leaves the plant with a geometric mean of 26.57 organisms/100 mL, which is within the COA's limit of 200 organisms/100 mL. Plant final effluent CBOD was 4.8 p.p.m., and final effluent T.S.S. was 3.3 p.p.m., both well within the C of A requirements.

4.3 Maintenance

- 4.3.1. Sludge press maintenance (clean and grease) in the 700 building.
- 4.3.2. Unplugged lobe pump for sludge dewatering press #2.
- 4.3.3. Replaced two v-belts on air compressor #2.
- 4.3.4. Greased bar screen, grit cleaning mechanism, and organic return.
- 4.3.5. Greased aeration blower electric motors.
- 4.3.6. UV maintenance Bank B cleaned, greased, and lime away cleaner.
- 4.3.7. Installed drum and oiler on the sludge dewatering press #1.
- 4.3.8. Replaced 4-way valve, one air cylinder, and oiler on sludge dewatering press #2.

4.4 Training

- There was no training to report in November.

4.5 Other Information

- No other information to report for November.

5.0 Electrical Work

The Water /Wastewater Division employs two on staff electricians. Due to the number of sewage pumping stations and grinder pumps that we operate, there are a significant number of electrical repairs and ongoing maintenance that require attention on a daily and weekly basis. In addition, the electricians provide support to other municipal services as time permits. This information is provided to Council to understand the service provided to all departments.

5.1 Wastewater Pumping Stations

- Maintenance, troubleshooting and repairs.
- ESA deficiencies rectified.
- Lift Pump replacements.
- Delta to Wye Electrical Upgrades – Ongoing electrical support.

5.2 Wastewater Treatment Plant

- Plant electrical maintenance and repairs.
- ESA Deficiencies rectified.
- Tested dissolved oxygen sensors and replaced oxygen sensor caps.

- 400 Building – Heater maintenance
- 400 Building – Troubleshoot and repaired sludge pump

5.3 Water Treatment Plant

- Plant electrical maintenance and repairs.
- ESA deficiencies rectified.

5.4 Booster/Water Dispenser Stations/Waterworks

- Maintenance and repairs on water dispensing units at both Evergreen and Rabbit Lake.
- ESA deficiencies rectified.

5.5 Operations Building

- Electrical maintenance and repairs.
- ESA deficiencies rectified.
- Replaced motion sensor light switches in new office spaces.
- Installed new receptacles for security doors in reception entrances.

5.6 Waste Transfer Facility

- Electrical maintenance and repairs.
- ESA Deficiencies rectified.

5.7 Facilities

- Electrical maintenance at City Hall, Kenora and Keewatin Recreation Centre's, Libraries, Museum, and Arts Centre.
- ESA Deficiencies rectified.
- Parkade – Repaired vandalized photoelectric sensors in overhead exit.
- City Hall – Office light repairs.
- Second Street Parking Kiosk – Piped in new feed from streetlight and installed internal battery charger.
- Automatic Washroom – Low heat call.

5.8 Firehall(s)

- ESA deficiencies rectified.

5.9 Parks/Cemetery

- ESA deficiencies rectified.
- Main Street Dock – Electrical service deficiency repaired.
- Coney Island Bridge – Repaired vandalized lighting.
- Beatty Park – Repaired pavilion lights. Installed eve receptacle for Christmas lights and made extension cord to feed Christmas star.

- Keewatin Sign – Installed receptacle for Christmas lighting.
- Main Street Christmas Tree – Hooked up electrical to test lights for Synergy North. Walked each route and repaired receptacles, lights, and cords.

6.0 Traffic Signals/Streetlights

- Electrical maintenance, troubleshooting, repairs, and monitoring.
- Main St and Second St – Synchronized timing.
- Crosswalk at Ninth St N and Eleventh Ave N – Electrical investigation and support.

6.1 Locates

- Located and marked City underground electrical infrastructure.
- Emergency locates for Sewer and Water digs.

6.2 Grinder Pumps

- Wiring and initial setup of new pumps and floats.
- Maintenance and repairs of some of the 300+ in use throughout the City.