



THE CORPORATION OF THE TOWN OF PARRY SOUND
RESOLUTION IN COUNCIL

NO. 2024 – 035

DIVISION LIST

YES NO

DATE: March 5, 2024

- Councillor **G. ASHFORD**
- Councillor **J. BELESKEY**
- Councillor **P. BORNEMAN**
- Councillor **B. KEITH**
- Councillor **D. McCANN**
- Councillor **C. McDONALD**
- Mayor **J. McGARVEY**

MOVED BY:

SECONDED BY:

CARRIED: DEFEATED: Postponed to: _____

Whereas the Town of Parry Sound owns and operates the Parry Sound Drinking Water System (M.O.E. Designation Number 2200000585) which has been categorized as a "Large Residential" Drinking Water System, and

Whereas Ontario Regulation 170-03 (as amended) under the Safe Drinking Water Act requires, according to "Schedule 22 Summary Reports for Municipalities" that all large Municipal Residential Drinking water systems have a report prepared no later than March 31st of each year addressing the items detailed in the Regulation and is given to the members of Council in the case of a drinking water system owned by a municipality;

Therefore, be it resolved that Council of the Town of Parry Sound hereby acknowledges receipt of the report titled:

"Town of Parry Sound Tony Agnello Water Treatment Plant, Large Municipal Residential Drinking Water System Summary Report (2023)", as prepared by Kyle Hall, Manager of Water Systems.

Mayor Jamie McGarvey

Town of Parry Sound Tony Agnello Water Treatment Plant

Large Municipal Residential Drinking Water System Summary Report (2023)

This Summary Report is prepared in accordance with the requirements of the Safe Drinking Water Act (SDWA) and Ontario Regulation 170/03 Schedule 22 - “Summary Reports for Municipalities”. This Report covers the period from January 1, 2023 to December 31, 2023.

System Description

The Town of Parry Sound’s Water Treatment System, which is classified under the Safe Drinking Water Act (SDWA) and Ontario Reg. 170/03 – Drinking Water Systems Regulation, is categorized as a “Large Municipal Residential” Drinking Water System. The detailed description of the system is provided in Ministry of Environment, Conservation and Parks “Municipal Drinking Water Licence No 144-101” issued on July 26, 2021. In general, the Parry Sound System can be described as follows:

- Gravity fed water intake piping in the Big Sound of Georgian Bay that includes an intake diffuser structure and screens.

The treatment plant is a submerged vacuum driven hollow tube ultrafiltration membrane system which consists of the following major components:

- a low lift pumping system
- twin raw water feed tanks containing 240 membrane elements packaged into 12 cassettes, (6 in each of two trains)
- ultrafiltration membrane facilities consisting of the membranes themselves as well as air ejectors, backpulse tanks with associated valves and controls.

- a membrane integrity testing system (MIT)
- a membrane cleaning system
- chemical feed systems including Sodium Hypochlorite (chlorination), Sodium Thiosulphate (de-chlorination), Polyaluminium Chloride (coagulant), Polymer (related to the waste stream side rather than drinking water).
- Chlorine contact tank
- Clearwater reservoir
- High lift pumps
- Generator room (providing backup power in the event of a hydro outage)
- Distribution system serving the Town of Parry Sound consisting of approximately 45 km of pipe with diameters ranging from 25mm to 450mm in size and pipe material consisting of cast iron, ductile iron, asbestos cement, copper, polyethylene, PVC, and HDPE.
- Elevated storage tower facilities at Bowes Street and North Sector Parry Sound Drive (Municipality of McDougall) which both have rechlorination capabilities.
- Booster pumping facilities in one location (Church Street) within the distribution facility.

The process at the treatment plant employs membrane ultrafiltration, augmented by colour removal capabilities for periods when the raw water demonstrates a colour removal requirement (usually in conjunction with spring runoff from the Seguin River and/or Georgian Bay thermal flips), followed by primary and secondary chlorine disinfection prior to delivery to the municipal distribution system.

The Parry Sound Drinking Water System provides treated water to the McDougall-Nobel water distribution system from a point at the base of the North Sector Water Tower commencing in December 2006.

Reporting and Corrective Actions

This section is provided to meet the requirements of Ontario Regulation 170/03 under the SDWA Schedule 22-Summary Reports for Municipalities 22-(2).

The following summarizes all the known requirements of the Act, the regulations, systems approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the 2023 year.

1. Schedule C Condition 1.6.1 wastewater residuals management of the Parry Sound Municipal Drinking Water Licence (MDWL) 144-101 requires a running annual average (RAA) of total suspended solids (TSS) and total chlorine residual be calculated at least once monthly based on the previous twelve months of results. Additionally, condition 1.6.2 requires that if the RAA value exceeds the annual average concentration limits a report is made to the Ministry district office within 72 hours of receipt of the last lab result used in the calculation.

Reject water discharge RAA limit of 0.02 mg/L for total chlorine residual was exceeded for the months of January - June 2023 and was reported to MECP. A new lower limit testing procedure was implemented in May of 2023 which allowed the RAA to be within the required limits as of July 2023. No further action required.

2. O. Reg 170/03 Schedule 15.1 requires pH and alkalinity sampling annually in the water distribution system during a winter period (December 15 - April 15) and summer period (June 15 - October 15).

The summer period sampling was taken on November 6, 2023, which was outside the required timeframe. Notification was made to the MECP. Corrective action included staff training on sampling schedules, modification to sampling calendars, and creation of a sampling checklist log sheet.

Annual Water Production/Delivery Information

This section is prepared to satisfy the requirements of Ontario Regulation 170/03 under the SDWA Schedule 22-Summary Reports for Municipalities 22-2(3).

The Town of Parry Sound water operators record daily flow rates and associated recording times to be able to determine average daily flows, monthly average flows, maximum daily flows, daily instantaneous peak flow rate and water taking quantities.

These are also continuously recorded by a SCADA system. The SCADA system is backed up by the manual flow recording by operators.

The 2023 values for the Parry Sound Water Treatment System are as follows:

Average Daily Flow = 2,934 m³/day

Monthly Average Daily Flows

January 2023 = 2,698 m³/day

February 2023 = 2,853 m³/day

March 2023 = 2,727 m³/day

April 2023 = 2,751 m³/day

May 2023 = 3,170 m³/day

June 2023 = 3,790 m³/day

July 2023 = 3,461 m³/day

August 2023 = 3,027 m³/day

September 2023 = 2,882 m³/day

October 2023 = 2,783 m³/day

November 2023 = 2,546 m³/day

December 2023 = 2,530 m³/day

Maximum Daily Flow = 4,586 m³/day (May 30, 2023)

Daily Instantaneous Peak Flow = 129.6 L/sec (June 1, 2023)

Municipal Drinking Water Licence No 144-101 issued on July 26, 2021 established the maximum rated capacity of the Parry Sound Water Treatment Plant as 10,000 m³/day. It can be seen from above that the maximum daily flow experienced at the Parry Sound Treatment Plant for the year 2023 was 4,586 m³/day. This means in 2023 the Parry Sound Water Treatment Plant operated at 45.9% capacity on the maximum daily flow day.