

THE CORPORATION OF THE TOWN OF PARRY SOUND RESOLUTION IN COUNCIL

NO. 2022 - 026

DIVISION LIST	YES NO	DATE: March 15, 2022
Councillor V. BACKMAN Councillor P. BORNEMAN Councillor R. BURDEN Councillor B. HORNE Councillor B. KEITH Councillor D. McCANN Mayor J. McGARVEY		SECONDED BY:
CARRIED: DEFEATE	D: Post	tponed 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 2021", as prepared by the Manager of Water Systems.

Mayor Jamie McGarvey

Town of Parry Sound Tony Agnello Water Treatment Plant

Large Municipal Residential Drinking Water System Summary Report (2021)

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, 2021 to December 31, 2021.

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 consists 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, 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.

List of Requirements-Failed to Meet in 2021

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 2021 year.

There were no incidents to report in 2021.

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 2021 values for the Parry Sound Water Treatment System are as follows:

Average Daily Flow Monthly Average Daily Flows	=	2,881 m³/day
January 2021	=	2,667 m³/day
February 2021	=	2,647 m³/day
March 2021	=	2,685 m³/day
April 2021	=	2,611 m³/day
May 2021	=	3,122 m³/day
June 2021	=	3,654 m³/day
July 2021	=	3,213 m³/day
August 2021	=	3,291 m³/day
September 2021	=	2,832 m³/day
October 2021	=	2,720 m³/day

November 2021 = $2,571 \text{ m}^3/\text{day}$

December 2021 = $2,555 \text{ m}^3/\text{day}$

Maximum Daily Flow = $5,037 \text{ m}^3/\text{day (June } 10, 2021)$

Daily Instantaneous Peak Flow = 96.9 L/sec (August 18, 2021)

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 2021 was 5,037 m³/day. This means in 2021 the Parry Sound Water Treatment Plant operated at 50.3% capacity on the maximum daily flow day.