

## THE CORPORATION OF THE TOWN OF PARRY SOUND RESOLUTION IN COUNCIL

NO. 2021 - 032

DIVISION LIST	YES NO	DATE: March 16, 2021
Councillor V. BACKMAN		MOVED BY:
Councillor P. BORNEMAN Councillor R. BURDEN		BKeth
Councillor B. HORNE Councillor B. KEITH Councillor D. McCANN		SECONDED BY:
Mayor J. McGARVEY		
CARRIED: DEFEATE	D:	Postponed to:
		1/

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 2020", 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 (2020)

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, 2020 to December 31, 2020.

#### **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 August 2, 2016. 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 2020

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 2020 year.

There were no incidents to report in 2020.

### **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 an advanced SCADA system. The SCADA system is backed up by the manual flow recording by operators.

The 2020 values for the Parry Sound Water Treatment System are as follows:

Average Daily Flow Monthly Average Daily Flows	=	2,847 m³/day
January 2020	=	2,374 m³/day
February 2020	=	2,533 m³/day
March 2020	=	2,683 m³/day
April 2020	=	2,526 m³/day
May 2020	=	2,954 m³/day
June 2020	=	3,484 m³/day
July 2020	=	3,774 m³/day
August 2020	=	3,001 m³/day
September 2020	=	2,727 m³/day
October 2020	=	2,661 m³/day

November 2020 =  $2,700 \text{ m}^3/\text{day}$ 

December 2020 =  $2,750 \text{ m}^3/\text{day}$ 

**Maximum Daily Flow** =  $5,846 \text{ m}^3/\text{day (July } 9, 2020)$ 

**Daily Instantaneous Peak Flow =** 74.5 L/sec (September 17, 2020)

Municipal Drinking Water Licence No 144-101 issued on August 2, 2016 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 2020 was 5,846 m³/day. This means in 2020 the Parry Sound Water Treatment Plant operated at 58.5% capacity on the maximum daily flow day.