



ANNUAL REPORT 2019

Drinking-Water System Number:	#220000585
Drinking-Water System Name:	Parry Sound Drinking Water Treatment Plant
Drinking-Water System Owner:	Corporation of the Town of Parry Sound
Drinking-Water System Category:	“Large Municipal Residential”: Drinking Water System
Period being reported:	2019: January 1, 2019 to December 31, 2019

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of Parry Sound Tony Agnello Water Treatment Plant 10 Salt Dock Road Parry Sound, ON P2A 0E1 Phone: 705-746-5641</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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Note: For the following tables below, additional rows or columns may be added, or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
McDougall - Nobel Distribution, LMR-DWS	260079131

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all its drinking water?
 Yes [X] No []

Indicate how you notified system users that your annual report is available and is free of charge.

- Public access/notice via the web
 Public access/notice via Government Office
 Public access/notice via a newspaper
 Public access/notice via Public Request
 Public access/notice via a Public Library
 Public access/notice via other method

Describe your Drinking-Water System

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 (as amended), 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, Certificate of Approval No. 0584-6VDLT3 dated December 19, 2006 and amended March 14, 2008 by certificate of Approval No. 2741-7BUQXX which is now replaced by "Municipal Drinking Water Licence No 144-101" issued on August 2, 2016. In general, the Parry Sound Large Municipal Residential Drinking Water System can be described as follows:

- * Gravity fed 0.76 meter diameter polyethylene water intake approximately 175 meters out in the Big Sound of Georgian Bay at the foot of Waubeek Street. It includes an intake structure, which restricts intake velocities and discourages fish etc. from entering. The intake is approximately 16 meters below the surface.

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

- a low lift pumping station
 - twin raw water feed tanks containing 240 membrane elements packaged into 12 cassettes, (six in each of two trains)
 - membrane filtration facilities consisting of the membranes themselves as well as vacuum permeate pumps, backpulse tanks and associated valves and controls
 - a membrane integrity testing system (MIT)
 - a membrane cleaning system
 - chemical feed systems including: sodium hypochlorite (chlorination), sodium bisulphate, sodium thiosulphate (dechlorination), poly-aluminum chloride (coagulant), polymer feed system (related to the waste side rather than the drinking water side)
 - 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
 - * Storage facilities at North Sector, Parry Sound Drive (McDougall Township) and Bowes Street
 - * Booster pumping facilities at one location within the distribution system

The process at the treatment plant employs membrane ultra filtration, 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 chlorine disinfection prior to delivery to the municipal distribution system.

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



List all water treatment chemicals used over this reporting period

The following water treatment chemicals were used with respect to the Parry Sound Water Treatment Plant during the period January 1, 2019 to December 31, 2019.

- Sodium Hypochlorite (for finished water disinfection and membrane cleaning)
- Sodium Thiosulphate (for dechlorination)
- Poly aluminum chloride (coagulant for raw water colour removal)
- Citric acid (for membrane cleaning)
- Sodium Hydroxide (for membrane cleaning)

For Waste Stream Treatment not included in drinking water treatment

- Polymer (to induce settling of reject water)

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

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Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
N/A					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	53	0 to 3	0 to 70	53	0 to 620
Treated	53	0 to 0	0 to 0	53	0 to 2
Distribution	201	0 to 0	0 to 0	201	0 to 7

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Turbidity	8760	0.013 to 0.175	NTU
Chlorine	8760	1.166 to 1.822	mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A	mg/L

***NOTE:** For continuous monitors use 8760 as the number of samples.*

**High readings due to calibration of analyzer. This is not a reportable incident
*High readings due to malfunctioning analyzer. This is not a reportable incident
NOTE: Record the unit of measure if it is not milligrams per liter.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	19/06/17	0.09<MDL	ug/L	No
Arsenic	19/06/17	0.2	ug/L	No
Barium	19/06/17	9.26	ug/L	No
Boron	19/06/17	10	ug/L	No
Cadmium	19/06/17	0.005	ug/L	No
Chromium	19/06/17	0.16	ug/L	No
*Lead		N/A		
Mercury	19/06/17	0.01<MDL	ug/L	No
Selenium	19/06/17	0.07	ug/L	No
Sodium		N/A	mg/L	No
Uranium	19/06/17	0.006	ug/L	No
Fluoride		N/A	mg/L	No
Nitrite	19/06/10	0.003<MDL	mg/L	No
Nitrate	19/06/10	0.234	mg/L	No

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period.

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	N/A		ug/L	
Distribution	N/A		ug/L	

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	19/06/17	0.02<MDL	ug/L	No
Atrazine + N-dealkylated metabolites	19/06/17	0.01	ug/L	No
Azinphos-methyl	19/06/17	0.05<MDL	ug/L	No
Benzene	19/06/17	0.32<MDL	ug/L	No
Benzo(a)pyrene	19/06/17	0.004<MDL	ug/L	No
Bromoxynil	19/06/17	0.33<MDL	ug/L	No
Carbaryl	19/06/17	0.05<MDL	ug/L	No
Carbofuran	19/06/17	0.01<MDL	ug/L	No
Carbon Tetrachloride	19/06/17	0.17<MDL	ug/L	No
Chlorpyrifos	19/06/17	0.02<MDL	ug/L	No
Diazinon	19/06/17	0.02<MDL	ug/L	No
Dicamba	19/06/17	0.20<MDL	ug/L	No
1,2-Dichlorobenzene	19/06/17	0.41<MDL	ug/L	No
1,4-Dichlorobenzene	19/06/17	0.36<MDL	ug/L	No
1,2-Dichloroethane	19/06/17	0.35<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	19/06/17	0.33<MDL	ug/L	No
Dichloromethane	19/06/17	0.35<MDL	ug/L	No
2-4 Dichlorophenol	19/06/17	0.15<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	19/06/17	0.19<MDL	ug/L	No
Diclofop-methyl	19/06/17	0.40<MDL	ug/L	No
Dimethoate	19/06/17	0.06<MDL	ug/L	No
Diquat	19/06/17	1<MDL	ug/L	No
Diuron	19/06/17	0.03<MDL	ug/L	No
Glyphosate	19/06/17	1<MDL	ug/L	No
Malathion	19/06/17	0.02<MDL	ug/L	No
Metolachlor	19/06/17	0.01<MDL	ug/L	No
Metribuzin	19/06/17	0.02<MDL	ug/L	No
Monochlorobenzene	19/06/17	0.3<MDL	ug/L	No
Paraquat	19/06/17	1<MDL	ug/L	No
Pentachlorophenol	19/06/17	0.15<MDL	ug/L	No
Phorate	19/06/17	0.01<MDL	ug/L	No
Picloram	19/06/17	1<MDL	ug/L	No
Polychlorinated Biphenyls(PCB)	19/06/17	0.04<MDL	ug/L	No
Prometryne	19/06/17	0.03<MDL	ug/L	No



Simazine	19/06/17	0.01<MDL	ug/L	No
THM (NOTE: show latest annual average)	19/12/09	60	ug/L	No
Terbufos	19/06/17	0.01<MDL	ug/L	No
Tetrachloroethylene	19/06/17	0.35<MDL	ug/L	No
2,3,4,6-Tetrachlorophenol	19/06/17	0.20<MDL	ug/L	No
Triallate	19/06/17	0.01<MDL	ug/L	No
Trichloroethylene	19/06/17	0.44<MDL	ug/L	No
2,4,6-Trichlorophenol	19/06/17	0.25<MDL	ug/L	No
Trifluralin	19/06/17	0.02<MDL	ug/L	No
Vinyl Chloride	19/06/17	0.17<MDL	ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
N/A			

Date Completed: February 24, 2020.