

Drinking Water Systems Regulation O.Reg. 170/03

MASSASSAGA-REDNERSVILLE PUBLIC SCHOOL ANNUAL REPORT

Drinking water system number:	260014014
Drinking water system name:	Massassaga Rednersville Public School
Drinking water system owner:	Hastings and Prince Edward District School Board
Drinking water system category:	Small Non-Municipal Non-Residential
Period Being Reported:	April 1, 2022 - March 31, 2023

Number of Designated Facilities Served:	3
Copies provided of annual report to all designated facilities served:	YES
Number of interested authorities you report to:	3
Copies provided of annual report to all interested authorities for each designated facility served:	YES
List all drinking water systems (if any) which receive all of their drinking water from your system:	Massassauga_Rednersville Public School and YMCA Kids Club-Mass-Red Site (#500104586),
Copies provided of annual report to all drinking water system owners to whom you provide all of its drinking water:	YES
Indicate method of notifying system users of annual report availability free of charge:	Website and Public Request

Description of Drinking Water System:

The Massassaga-Rednersville Public School drinking water system consists of one in ground storage tank equipped with a submersible pump (replaced Fall 2019) that supplies hauled water to the water treatment system. Water from a facility meeting the requirement of O. Reg.170/03 is hauled to the school to serve as the drinking water source. The treated water system begins with a cartridge style sediment filter, passes through a UV Pro 20 disinfection system and then is injected with chlorine (supplemental chlorination) prior to being distributed to plumbing. The system is equipped with a solenoid valve that shuts down water in instances of poor water quality or loss of power; the solenoid is tested weekly. Chlorine residual is measured each day the school is open.

A service contract is in place with MacLellan Water Technologies to maintain the treatment systems.

To satisfy treatment requirements as described in Ontario Regulation 170/03, Ultraviolet disinfection equipment is used as primary disinfection. In addition to meeting the minimum treatment requirement we add chlorination as a means of secondary disinfection, though it is not required in this system.

A professional engineer hired by the Board certified that the water supply and works do meet the minimum standards set out in the Ontario Regulation 170/03. The engineer also certified that the minimum treatment laid out in Schedule 2 of the regulations is being complied with and that all equipment required by Schedule 6 and Schedule 9 of the regulations is provided.

Water treatment chemicals used over this reporting period:

12% Sodium hypochlorite solution

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Significant Expenses incurred included (0=N/A, X=APPLICABLE):

0	Install Required Equipment
X	Repair Required Equipment
X	Replace Required Equipment

Description and breakdown of monetary expenses incurred: April 1, 2022 - March 31, 2023

Water system upgrades and replacements:

No major upgrades or replacements of equipment were completed during this year.

\$0.00

Routine system maintenance (Including service contracts):

Regular maintenance includes monthly checks of the water treatment system by a service contractor and the minor repair/replacement of necessary parts/equipment(including cistern maintenance). The costs, tax excluded, for regular maintenance on water treatment

\$5,180.15

Water sampling and analysis:

The cost for microbiological and chemical water sampling by Greer Galloway and analytical fees was:

\$4,911.39

Staff Training:

Costs for required training of staff under Ontario Regulation 170/03 was:

\$304.62

Details on notices submitted in accordance with subsection 18(1) of the SDWA or section 16-4 of Schedule 16 of O.Reg. 170/03 and reported to SAC:

April 1, 2022 - March 31, 2023

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective action date
No incidents.					

Microbiological testing done under the Schedule 10, 11 or 12 of O.Reg 170/03:

April 1, 2022 - March 31, 2023

	Number of samples	Range of E.Coli or Fecal Results (min-max)	Range of TC Results (min-max)
Raw	13	0-0	0-0
Treated- Staff Kitchen	13	0-0	0-0
Distribution	13	0-0	0-0

Operational testing done under Schedule 7, 8 or 9 of O.Reg. 170/03:

April 1, 2022 - March 31, 2023

	Number of Grab Samples	Range of Results (min-max)
Turbidity	13	0.13-0.27
Chlorine	224	0.25-1.16

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Inorganic testing done during this reporting period or most recent sample results:				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	N/A	N/A	mg/L	N/A
Arsenic	N/A	N/A	mg/L	N/A
Barium	N/A	N/A	mg/L	N/A
Boron	N/A	N/A	mg/L	N/A
Cadmium	N/A	N/A	mg/L	N/A
Chromium	N/A	N/A	mg/L	N/A
Fluoride	N/A	N/A	mg/L	N/A
Lead - STANDING	14-Jun-22	0.00051	mg/L	No
Lead - FLUSHED		0.00026	mg/L	No
Mercury	N/A	N/A	mg/L	N/A
Nitrite	14-Mar-23	0.05	mg/L	No
Nitrate		0.39	mg/L	No
Selenium	N/A	N/A	mg/L	N/A
Sodium	N/A	N/A	mg/L	N/A
Uranium	N/A	N/A	mg/L	N/A

Organic testing done during this reporting period or most recent sample results:				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	N/A	N/A	mg/L	N/A
Atrazine + N-dealkylated metabolites	N/A	N/A	mg/L	N/A
Azinphos-methyl	N/A	N/A	mg/L	N/A
Benzene	N/A	N/A	mg/L	N/A
Benzo(a)pyrene	N/A	N/A	mg/L	N/A
Bromoxynil	N/A	N/A	mg/L	N/A
Carbaryl	N/A	N/A	mg/L	N/A
Carbofuran	N/A	N/A	mg/L	N/A
Carbon Tetrachloride	N/A	N/A	mg/L	N/A
Chlorpyrifos	N/A	N/A	mg/L	N/A
Diazinon	N/A	N/A	mg/L	N/A
Dicamba	N/A	N/A	mg/L	N/A
1,2-Dichlorobenzene	N/A	N/A	mg/L	N/A
1,4-Dichlorobenzene	N/A	N/A	mg/L	N/A
1,2-Dichloroethane	N/A	N/A	mg/L	N/A
1,1-Dichloroethylene (vinylidene chloride)	N/A	N/A	mg/L	N/A
Dichlormethane	N/A	N/A	mg/L	N/A
2,4-Dichlorophenol	N/A	N/A	mg/L	N/A
2,4-Dichlorophenoxyacetic acid (2,4-D)	N/A	N/A	mg/L	N/A
Diclofop-methyl	N/A	N/A	mg/L	N/A
Dimethoate	N/A	N/A	mg/L	N/A
Diquat	N/A	N/A	mg/L	N/A
Diuron	N/A	N/A	mg/L	N/A
Glyphosate	N/A	N/A	mg/L	N/A
Malathion	N/A	N/A	mg/L	N/A

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2-Methyl-4-chlorophenoxyacetic acid (MCPA)	N/A	N/A	mg/L	N/A
Metolachlor	N/A	N/A	mg/L	N/A
Metribuzin	N/A	N/A	mg/L	N/A
Monochlorobenzene	N/A	N/A	mg/L	N/A
Paraquat	N/A	N/A	mg/L	N/A
Pentachlorophenol	N/A	N/A	mg/L	N/A
Phorate	N/A	N/A	mg/L	N/A
Picloram	N/A	N/A	mg/L	N/A
PolyChlorinated Biphenyls (PCB)	N/A	N/A	mg/L	N/A
Prometryne	N/A	N/A	mg/L	N/A
Simazine	N/A	N/A	mg/L	N/A
Terbufos	N/A	N/A	mg/L	N/A
Tetrachloroethylene	N/A	N/A	mg/L	N/A
2,3,4,6-Tetrachlorophenol	N/A	N/A	mg/L	N/A
Triallate	N/A	N/A	mg/L	N/A
Trichloroethylene	N/A	N/A	mg/L	N/A
2,4,6-Trichlorophenol	N/A	N/A	mg/L	N/A
Trifluarlin	N/A	N/A	mg/L	N/A
Trihalomethanes (THM)	31-Aug-22	79µg/L	Voluntary Sampling	
Vinyl Chloride	N/A	N/A	mg/L	N/A