

# Drinking Water Systems Regulation O.Reg. 170/03

## MASSASSAUGA-REDNERSVILLE PUBLIC SCHOOL ANNUAL REPORT

Drinking water system number:	<b>260014014</b>
Drinking water system name:	<b>Massassauga_Rednersville Public School</b>
Drinking water system owner:	<b>Hastings and Prince Edward District School Board</b>
Drinking water system category:	<b>Small Non-Municipal Non-Residential</b>
Period Being Reported:	<b>April 1st 2021 - March 31st, 2022</b>

Number of Designated Facilities Served:	2
Copies provided of annual report to all designated facilities served:	YES
Number of interested authorities you report to:	2
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
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 Massassauga-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 Culligan 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.

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**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
0	Repair Required Equipment
X	Replace Required Equipment

**Description and breakdown of monetary expenses incurred:** April 1st 2021 - March 31st, 2022

**Water system upgrades and replacements:**

No 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 Culligan and the minor repair/replacement of necessary parts/equipment(including cistern maintenance). The costs for regular maintenance on water treatment equipment was :

**\$3,299.99**

**Water sampling and analysis:**

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

**\$4,227.19**

**Staff Training:**

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

**\$220.00**

**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 1st 2021 - March 31st, 2022

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 1st 2021 - March 31st, 2022

	Number of samples	Range of E.Coli or Fecal Results (min-max)	Range of TC Results (min-max)
<b>Raw</b>	11	0-0	0-0
<b>Treated- Staff Kitchen</b>	11	0-0	0-0
<b>Distribution</b>	11	0-0	0-0

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

April 1st 2021 - March 31st, 2022

	Number of Grab Samples	Range of Results (min-max)
<b>Turbidity</b>	11	0.10-0.37
<b>Chlorine</b>	196	0.39-1.65

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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	13-Oct-21	0.0005	mg/L	No
Lead - FLUSHED		0.00031	mg/L	No
Mercury	N/A	N/A	mg/L	N/A
Nitrite	16-Mar-22	<0.1	mg/L	No
Nitrate		0.4	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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<b>2-Methyl-4-chlorophenoxyacetic acid (MCPA)</b>	N/A	N/A	mg/L	N/A
<b>Metolachlor</b>	N/A	N/A	mg/L	N/A
<b>Metribuzin</b>	N/A	N/A	mg/L	N/A
<b>Monochlorobenzene</b>	N/A	N/A	mg/L	N/A
<b>Paraquat</b>	N/A	N/A	mg/L	N/A
<b>Pentachlorophenol</b>	N/A	N/A	mg/L	N/A
<b>Phorate</b>	N/A	N/A	mg/L	N/A
<b>Picloram</b>	N/A	N/A	mg/L	N/A
<b>PolyChlorinated Biphenyls (PCB)</b>	N/A	N/A	mg/L	N/A
<b>Prometryne</b>	N/A	N/A	mg/L	N/A
<b>Simazine</b>	N/A	N/A	mg/L	N/A
<b>Terbufos</b>	N/A	N/A	mg/L	N/A
<b>Tetrachloroethylene</b>	N/A	N/A	mg/L	N/A
<b>2,3,4,6-Tetrachlorophenol</b>	N/A	N/A	mg/L	N/A
<b>Triallate</b>	N/A	N/A	mg/L	N/A
<b>Trichloroethylene</b>	N/A	N/A	mg/L	N/A
<b>2,4,6-Trichlorophenol</b>	N/A	N/A	mg/L	N/A
<b>Trifluarlin</b>	N/A	N/A	mg/L	N/A
<b>Trihalomethanes (THM)</b>	5-Oct-21	69µg/L	Voluntary Sampling	
<b>Vinyl Chloride</b>	N/A	N/A	mg/L	N/A