Drinking Water Systems Regulation O.Reg. 170/03

FOXBORO PUBLIC SCHOOL ANNUAL REPORT

Drinking water system number:	**260013936**
Drinking water system name:	**Foxboro 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 1st 2021 - March 31st, 2022**

Number of Designated Facilities Served:	2
Copies provided of annual report to all designated facilities served:	YES
Number of interested autorities 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:	Foxboro Public School and YMCA Kids Club-Foxboro Site (DWIS#5000021659)
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 Foxboro Public School drinking water system consists of one cistern located in the West school yard. Previously the system was also connected to a drilled well located in the Northwest corner of the school yard, this was disconnected during the summer of 2021 while the treatment system was being upgraded. Potable water is supplied through a facility that meets the requirements of O. Reg 170 by way of truck delivery at least 1x per week. A submersible pump supplies the water to a mechanical room in the school where the tap and drinking fountain water is filtered through two small cartridge style filters, then passes through an ultraviolet disinfection system, and prior to going to school is re-chlorinated to ensure secondary disinfection is maintained. Toilet water is not treated through the UV system, and is therefore physically separated via a backflow prevention system that is checked on a regular basis. In instances of poor water quality or loss of power, a solenoid valve shuts down the flow of water. The pressure system and other miscellaneous pipes and fittings are located in the same room. 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. The free chlorine residual is sampled and recorded on a daily basis and the UV solenoid is tested for proper functioning on a weekly basis.

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. They 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

Drinking Water Systems Regulation O.Reg. 170/03

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

X	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:

Installed new treatment system that includes 2 UV units, filters, flow meter, backflow preventer, chlorine pumps. **$27,460.00**

Routine system maintenance (Including service contracts):

Regular maintenance includes monthly checks of the water treatment system by MacLellan Water Technologies and the minor repair/replacement of necessary parts/equipment(including cistern maintenance). The costs for regular maintenance on water treatment equipment was : **$5,344.02**

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	Corrective Action	Corrective action date
15-Feb-22	Suspect leak in cistern	n/a	Cistern investigated March 15, 2022. No apparent leak. Plans to re-seal cistern this summer once school is out. School remains on bottled water; taps open for handwashing only.	15-Feb-22

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)
Raw	11	0-0	0-0
Treated- Staff Kitchen	11	0-0	0-0
Distribution	11	0-0	0-0

Drinking Water Systems Regulation O.Reg. 170/03

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)
Turbidity	11	0.10-0.33
Chlorine	196	0.18-1.87

Drinking Water Systems Regulation O.Reg. 170/03

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-Oct-21	0.00888	mg/L	No
Lead - FLUSHED		0.00549	mg/L	No
Mercury	N/A	N/A	mg/L	N/A
Nitrite	N/A	N/A	mg/L	N/A
Nitrate	N/A	N/A	mg/L	N/A
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 metobolites	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
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)	5-Oct-21	73µg/L	Voluntary Sampling	
Vinyl Chloride	N/A	N/A	mg/L	N/A