

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

## BIRDS CREEK PUBLIC SCHOOL ANNUAL REPORT

Drinking water system number:	<b>260013910</b>
Drinking water system name:	<b>Bird's Creek 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 1, 2020 - March 31, 2021</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:	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:	Bird's Creek Public School and North Hastings Childrens Services
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 Bird's Creek Public School drinking water system consists of one well, located west of the school. The well is equipped with a submersible pump that supplies raw water through a pipe chase corridor inside the school. The water is chlorinated and then piped to a mechanical room where it passes through two large cartridge style sediment filters followed by a UV pro 20 disinfection system equipped with a solenoid valve that shuts down water flow in cases of low water quality or loss of power. The water is then passed by a post-chlorination injector prior to distribution to the school plumbing. Chlorine residual (supplemental chlorination) is measured each day the school is open.

A service contract is in place with Culligan Water, Belleville, to maintain the treatment system.

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):**

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

**Description and breakdown of monetary expenses incurred:** April 1, 2020 - March 31, 2021

**Water system upgrades and replacements:**

No upgrades or replacements of equipment were completed during this year; replacement parts only **\$1,274.93**

**Routine system maintenance (Including service contracts):**

Regular maintenance includes monthly checks of the water treatment system. Where components are replaced as regular maintenance (ie filters), that cost is noted under upgrades/replacements/part repair. The costs for regular maintenance on water treatment equipment was : **\$2,824.18**

**Water sampling and analysis:**

The cost for microbiological and chemical water sampling by Greer Galloway and analytical fees was: **\$2,793.66**

**Staff Training:**

Costs for required training of staff under Ontario Regulation 170/03 was: **\$84.62**

**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, 2020 - March 31, 2021

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, 2020 - March 31, 2021

	Number of samples	Range of E.Coli or Fecal Results (min-max)	Range of TC Results (min-max)
<b>Raw</b>	10	0-0	0-0
<b>Treated- Staff Kitchen</b>	17	0-0	0-0
<b>Distribution</b>	17	0-0	0-0

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

April 1, 2020 - March 31, 2021

	Number of Grab Samples	Range of Results (min-max)
<b>Turbidity</b>	17	0.08 - 0.75
<b>Chlorine</b>	180	0.07 - 0.77

## 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		24-May-16	<0.0001	mg/L	No
Arsenic		24-May-16	<0.0001	mg/L	No
Barium		24-May-16	0.180	mg/L	No
Boron		24-May-16	0.010	mg/L	No
Cadmium		24-May-16	<0.00002	mg/L	No
Chromium		24-May-16	<0.002	mg/L	No
*Lead	STANDING	25-Sep-20	0.00348	mg/L	No
	FLUSHED	25-Sep-20	0.00151	mg/L	No
Mercury		24-May-16	<0.00002	mg/L	No
Selenium		24-May-16	<0.001	mg/L	No
Sodium		24-May-16	39.4	mg/L	Yes
Uranium		24-May-16	0.00279	mg/L	No
Fluoride		24-May-16	0.1	mg/L	No
Nitrite - 4th quarter result		Mar-21	0.1	mg/L	No
Nitrate - 4th quarter result		Mar-21	0.7	mg/L	No

Organic testing done during this reporting period or most recent sample results:					
Parameter		Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor		24-May-16	<0.0003	mg/L	No
Atrazine + N-dealkylated metabolites		24-May-16	<0.0005	mg/L	No
Azinphos-methyl		24-May-16	<0.001	mg/L	No
Benzene		24-May-16	<0.0005	mg/L	No
Benzo(a)pyrene		24-May-16	<0.000005	mg/L	No
Bromoxynil		24-May-16	<0.0003	mg/L	No
Carbaryl		24-May-16	<0.003	mg/L	No
Carbofuran		24-May-16	<0.001	mg/L	No
Carbon Tetrachloride		24-May-16	<0.0002	mg/L	No
Chlorpyrifos		24-May-16	<0.0005	mg/L	No
Diazinon		24-May-16	<0.001	mg/L	No
Dicamba		24-May-16	<0.005	mg/L	No
1,2-Dichlorobenzene		24-May-16	<0.0001	mg/L	No
1,4-Dichlorobenzene		24-May-16	<0.0002	mg/L	No
1,2-Dichloroethane		24-May-16	<0.0001	mg/L	No
1,1-Dichloroethene (vinylidene chloride)		24-May-16	<0.0001	mg/L	No
Dichlormethane		24-May-16	<0.0003	mg/L	No
2,4-Dichlorophenol		24-May-16	<0.001	mg/L	No
2,4-Dichlorophenoxyacetic acid (2,4-D)		24-May-16	<0.005	mg/L	No
Diclofop-methyl		24-May-16	<0.0005	mg/L	No
Dimethoate		24-May-16	<0.001	mg/L	No
Diquat		24-May-16	<0.005	mg/L	No
Diuron		24-May-16	<0.005	mg/L	No
Glyphosate		24-May-16	<0.025	mg/L	No
MCPA 2-Methyl-4-chlorophenoxyacetic Acid		24-May-16	<0.00012	mg/L	No

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

Malathion	24-May-16	<0.005	mg/L	No
Metolachlor	24-May-16	<0.003	mg/L	No
Metribuzin	24-May-16	<0.003	mg/L	No
Monochlorobenzene	24-May-16	<0.0002	mg/L	No
Paraquat	24-May-16	<0.001	mg/L	No
Pentachlorophenol	24-May-16	<0.0001	mg/L	No
Phorate	24-May-16	<0.0003	mg/L	No
Picloram	24-May-16	<0.005	mg/L	No
PolyChlorinated Biphenyls (PCB)	24-May-16	<0.00005	mg/L	No
Prometryne	24-May-16	<0.0001	mg/L	No
Simazine	24-May-16	<0.0005	mg/L	No
THM	1-Sep-20	<0.006	mg/L	No
Terbufos	24-May-16	<0.0003	mg/L	No
Tetrachloroethylene	24-May-16	<0.0002	mg/L	No
2,3,4,6-Tetrachlorophenol	24-May-16	<0.0001	mg/L	No
Triallate	24-May-16	<0.01	mg/L	No
Trichloroethylene	24-May-16	<0.0001	mg/L	No
2,4,6-Trichlorophenol	24-May-16	<0.0001	mg/L	No
Trifluarlin	24-May-16	<0.0005	mg/L	No
Vinyl Chloride	24-May-16	<0.0002	mg/L	No

Inorganic or Organic Parameter(s) that exceed half the standard prescribed in Schedule 2 of ODWQS:				
Parameter	Result Value	Unit of Measure	Date of Sample	Notes:
Sodium	39.4	mg/L	24-May-16	Bottled water has been made available.