

# 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, 2022 - March 31, 2023</b>

Number of Designated Facilities Served:	1
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 & North Hastings Childrens Services (#500427389)
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 OCWA (Ontario Clean Water Agency) 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

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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 equipment was :

**\$6,181.02**

**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	Corrective Action	Corrective action date
None.				

**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 (min-max)	Range of TC Results (min-max)
<b>Raw</b>	13	0-0	0-0
<b>Treated- Staff Kitchen</b>	22	0-0	0-0
<b>Distribution</b>	22	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)
<b>Turbidity</b>	22	0.09-0.43
<b>Chlorine</b>	224	0.10-0.51

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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	31-May-21	0.0001	mg/L	No
Arsenic	31-May-21	<0.0001	mg/L	No
Barium	31-May-21	0.244	mg/L	No
Boron	31-May-21	0.013	mg/L	No
Cadmium	31-May-21	0.000027	mg/L	No
Chromium	31-May-21	<0.002	mg/L	No
Fluoride	31-May-21	<0.1	mg/L	No
Lead - STANDING	25-Aug-22	0.00088	mg/L	No
Lead - FLUSHED		0.00194	mg/L	No
Mercury	31-May-21	<0.00002	mg/L	No
Nitrite	14-Mar-23	0.05	mg/L	No
Nitrate		0.8	mg/L	No
Selenium	31-May-21	<0.001	mg/L	No
Sodium	31-May-21	66.5	mg/L	Yes
Uranium	31-May-21	0.00146	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	31-May-21	< 0.0003	mg/L	No
Atrazine + N-dealkylated metabolites	31-May-21	< 0.0005	mg/L	No
Azinphos-methyl	31-May-21	< 0.001	mg/L	No
Benzene	31-May-21	< 0.0005	mg/L	No
Benzo(a)pyrene	31-May-21	< 0.000006	mg/L	No
Bromoxynil	31-May-21	< 0.0005	mg/L	No
Carbaryl	31-May-21	< 0.003	mg/L	No
Carbofuran	31-May-21	< 0.001	mg/L	No
Carbon Tetrachloride	31-May-21	< 0.0002	mg/L	No
Chlorpyrifos	31-May-21	< 0.0005	mg/L	No
Diazinon	31-May-21	< 0.001	mg/L	No
Dicamba	31-May-21	< 0.01	mg/L	No
1,2-Dichlorobenzene	31-May-21	< 0.0005	mg/L	No
1,4-Dichlorobenzene	31-May-21	< 0.0005	mg/L	No
1,2-Dichloroethane	31-May-21	< 0.0005	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	31-May-21	< 0.0005	mg/L	No
Dichlormethane	31-May-21	< 0.005	mg/L	No
2,4-Dichlorophenol	31-May-21	< 0.0002	mg/L	No
2,4-Dichlorophenoxyacetic acid (2,4-D)	31-May-21	< 0.01	mg/L	No
Diclofop-methyl	31-May-21	< 0.0009	mg/L	No
Dimethoate	31-May-21	< 0.001	mg/L	No
Diquat	31-May-21	< 0.005	mg/L	No
Diuron	31-May-21	< 0.005	mg/L	No
Glyphosate	31-May-21	< 0.025	mg/L	No
Malathion	31-May-21	< 0.005	mg/L	No

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<b>2-Methyl-4-chlorophenoxyacetic acid (MCPA)</b>	31-May-21	< 0.01	mg/L	No
<b>Metolachlor</b>	31-May-21	< 0.003	mg/L	No
<b>Metribuzin</b>	31-May-21	< 0.003	mg/L	No
<b>Monochlorobenzene</b>	31-May-21	< 0.0005	mg/L	No
<b>Paraquat</b>	31-May-21	< 0.001	mg/L	No
<b>Pentachlorophenol</b>	31-May-21	< 0.0002	mg/L	No
<b>Phorate</b>	31-May-21	< 0.0003	mg/L	No
<b>Picloram</b>	31-May-21	< 0.015	mg/L	No
<b>PolyChlorinated Biphenyls (PCB)</b>	31-May-21	< 0.00005	mg/L	No
<b>Prometryne</b>	31-May-21	< 0.0001	mg/L	No
<b>Simazine</b>	31-May-21	< 0.0005	mg/L	No
<b>Terbufos</b>	31-May-21	< 0.0005	mg/L	No
<b>Tetrachloroethylene</b>	31-May-21	< 0.0005	mg/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	31-May-21	< 0.0002	mg/L	No
<b>Triallate</b>	31-May-21	< 0.01	mg/L	No
<b>Trichloroethylene</b>	31-May-21	< 0.0005	mg/L	No
<b>2,4,6-Trichlorophenol</b>	31-May-21	< 0.0002	mg/L	No
<b>Trifluarlin</b>	31-May-21	< 0.0005	mg/L	No
<b>Trihalomethanes (THM)</b>	31-May-21	< 0.006	mg/L	No
<b>Vinyl Chloride</b>	31-May-21	< 0.0002	mg/L	No