

Drinking Water Systems Regulation O.Reg. 170/03

BIRDS CREEK PUBLIC SCHOOL ANNUAL REPORT

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|---------------------------------|---|
| Drinking water system number: | 260013910 |
| Drinking water system name: | Bird's Creek 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 |

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| Number of Designated Facilities Served: | 1 |
| Copies provided of annual report to all designated facilities served: | YES |
| Number of interested authorities you report to: | 1 |
| 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 |
| 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

A service contract is in place with Culligan 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 |
| 0 | Repair Required Equipment |
| 0 | 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. The costs for regular maintenance on water treatment equipment was :

\$4,166.28

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 |
|---------------|-----------|----------|---|------------------------|
| 31-May-21 | Sodium | 66.5mg/L | Resampled. Signs posted. Bottled water supplied as alternative. | Immediate |

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 (min-max) | Range of TC Results (min-max) |
|-------------------------------|-------------------|------------------------------------|-------------------------------|
| Raw | 12 | 0-0 | 0-0 |
| Treated- Staff Kitchen | 20 | 0-0 | 0-0 |
| Distribution | 20 | 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) |
|------------------|------------------------|----------------------------|
| Turbidity | 20 | 0.09-0.76 |
| Chlorine | 196 | 0.07-0.59 |

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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 | 5-Oct-21 | 0.00421 | mg/L | No |
| Lead - FLUSHED | | 0.00186 | mg/L | No |
| Mercury | 31-May-21 | <0.00002 | mg/L | No |
| Nitrite | 16-Mar-22 | <0.1 | mg/L | No |
| Nitrate | | 0.9 | 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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|---|-----------|-----------|------|----|
| 2-Methyl-4-chlorophenoxyacetic acid (MCPA) | 31-May-21 | < 0.01 | mg/L | No |
| Metolachlor | 31-May-21 | < 0.003 | mg/L | No |
| Metribuzin | 31-May-21 | < 0.003 | mg/L | No |
| Monochlorobenzene | 31-May-21 | < 0.0005 | mg/L | No |
| Paraquat | 31-May-21 | < 0.001 | mg/L | No |
| Pentachlorophenol | 31-May-21 | < 0.0002 | mg/L | No |
| Phorate | 31-May-21 | < 0.0003 | mg/L | No |
| Picloram | 31-May-21 | < 0.015 | mg/L | No |
| PolyChlorinated Biphenyls (PCB) | 31-May-21 | < 0.00005 | mg/L | No |
| Prometryne | 31-May-21 | < 0.0001 | mg/L | No |
| Simazine | 31-May-21 | < 0.0005 | mg/L | No |
| Terbufos | 31-May-21 | < 0.0005 | mg/L | No |
| Tetrachloroethylene | 31-May-21 | < 0.0005 | mg/L | No |
| 2,3,4,6-Tetrachlorophenol | 31-May-21 | < 0.0002 | mg/L | No |
| Triallate | 31-May-21 | < 0.01 | mg/L | No |
| Trichloroethylene | 31-May-21 | < 0.0005 | mg/L | No |
| 2,4,6-Trichlorophenol | 31-May-21 | < 0.0002 | mg/L | No |
| Trifluarlin | 31-May-21 | < 0.0005 | mg/L | No |
| Trihalomethanes (THM) | 31-May-21 | < 0.006 | mg/L | No |
| Vinyl Chloride | 31-May-21 | < 0.0002 | mg/L | No |