

Drinking Water Systems Regulation O.Reg. 170/03

COE HILL PUBLIC SCHOOL ANNUAL REPORT

Drinking water system number:	260013923
Drinking water system name:	Coe Hill 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 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:	Coe Hill Public School and Coe Hill Daycare (DWIS#5000096409)
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 Coe Hill Public School drinking water system consists of one well, located south of the school along the western fenceline. A submersible pump supplies raw water to a mechanical room in the basement of the school. The water passes through a pressure tank initially and then passes a pre-chlorination injection point. The pre-chlorinated water passes through a 450-litre retention tank and then a flow meter prior to water conditioning. The water then passes through a water softener and an activated carbon filter. After carbon filtration the water passes through a 25-1 micron cartridge filter and then a 1-micron (absolute) cartridge filter. Primary disinfection is then provided by a Trojan UV max pro 20 followed by a solenoid valve that automatically shuts off water flow in the case of poor water quality or loss of power. The water is then passed by a post-chlorination injector prior to distribution to the school plumbing (supplemental chlorination). Chlorine residual is measured each day the school is open.

A service contract is in place for 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. 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
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 :

\$4,404.26

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
19-Nov-21	Free Chlorine residual	Oppm	Chlorine injector repaired. Flushed all distribution lines. Resampled.	19-Nov-21

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	0-3
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	0.09-0.26
Chlorine	196	0.15-0.63

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	21-May-19	<0.0001	mg/L	No
Arsenic	21-May-19	0.0001	mg/L	No
Barium	21-May-19	<0.001	mg/L	No
Boron	21-May-19	0.029	mg/L	No
Cadmium	21-May-19	<0.000015	mg/L	No
Chromium	21-May-19	<0.002	mg/L	No
Fluoride	21-May-19	0.1	mg/L	No
Lead - STANDING	1-Oct-21	0.00273	mg/L	No
Lead - FLUSHED		0.00082	mg/L	No
Mercury	21-May-19	<0.00002	mg/L	No
Nitrite	16-Mar-22	<0.1	mg/L	No
Nitrate		3	mg/L	No
Selenium	21-May-19	<0.001	mg/L	No
Sodium	21-May-19	57.1	mg/L	Yes
Uranium	21-May-19	0.00011	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	21-May-19	<	0.0003	mg/L	No
Atrazine + N-dealkylated metabolites	21-May-19	<	0.0005	mg/L	No
Azinphos-methyl	21-May-19	<	0.001	mg/L	No
Benzene	21-May-19	<	0.0005	mg/L	No
Benzo(a)pyrene	21-May-19	<	0.000006	mg/L	No
Bromoxynil	21-May-19	<	0.0005	mg/L	No
Carbaryl	21-May-19	<	0.003	mg/L	No
Carbofuran	21-May-19	<	0.001	mg/L	No
Carbon Tetrachloride	21-May-19	<	0.0002	mg/L	No
Chlorpyrifos	21-May-19	<	0.0005	mg/L	No
Diazinon	21-May-19	<	0.001	mg/L	No
Dicamba	21-May-19	<	0.01	mg/L	No
1,2-Dichlorobenzene	21-May-19	<	0.0005	mg/L	No
1,4-Dichlorobenzene	21-May-19	<	0.0005	mg/L	No
1,2-Dichloroethane	21-May-19	<	0.0005	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	21-May-19	<	0.0005	mg/L	No
Dichlormethane	21-May-19	<	0.005	mg/L	No
2,4-Dichlorophenol	21-May-19	<	0.0002	mg/L	No
2,4-Dichlorophenoxyacetic acid (2,4-D)	21-May-19	<	0.01	mg/L	No
Diclofop-methyl	21-May-19	<	0.0009	mg/L	No
Dimethoate	21-May-19	<	0.001	mg/L	No
Diquat	21-May-19	<	0.005	mg/L	No
Diuron	21-May-19	<	0.005	mg/L	No
Glyphosate	21-May-19	<	0.005	mg/L	No
Malathion	21-May-19	<	0.005	mg/L	No

Drinking Water Systems Regulation O.Reg. 170/03

2-Methyl-4-chlorophenoxyacetic acid (MCPA)	21-May-19	<	0.01	mg/L	No
Metolachlor	21-May-19	<	0.003	mg/L	No
Metribuzin	21-May-19	<	0.003	mg/L	No
Monochlorobenzene	21-May-19	<	0.0005	mg/L	No
Paraquat	21-May-19	<	0.001	mg/L	No
Pentachlorophenol	21-May-19	<	0.0002	mg/L	No
Phorate	21-May-19	<	0.0003	mg/L	No
Picloram	21-May-19	<	0.015	mg/L	No
PolyChlorinated Biphenyls (PCB)	21-May-19	<	0.00005	mg/L	No
Prometryne	21-May-19	<	0.0001	mg/L	No
Simazine	21-May-19	<	0.0005	mg/L	No
Terbufos	21-May-19	<	0.0005	mg/L	No
Tetrachloroethylene	21-May-19	<	0.0005	mg/L	No
2,3,4,6-Tetrachlorophenol	21-May-19	<	0.0002	mg/L	No
Triallate	21-May-19	<	0.01	mg/L	No
Trichloroethylene	21-May-19	<	0.0005	mg/L	No
2,4,6-Trichlorophenol	21-May-19	<	0.0002	mg/L	No
Trifluarlin	21-May-19	<	0.0005	mg/L	No
Trihalomethanes (THM)	5-Oct-21		0.006	mg/L	No
Vinyl Chloride	21-May-19	<	0.0002	mg/L	No