Ministry of the Ministère de Environment l'Environnement

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



Part III Form 2 Section 11. ANNUAL REPORT.

Drinking-Water System Number:	260011648
Drinking-Water System Name:	Kettleby PS
Drinking-Water System Owner:	York Region District School Board
Drinking-Water System Category:	Small Non-Municipal Non-Residential
Period being reported:	01/04/2022 to 31/03/2023

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]	Number of Designated Facilities served:
Is your annual report available to the public	Did you provide a copy of your annual
at no charge on a web site on the Internet?	report to all Designated Facilities you
Yes [x] No []	serve?
[] []	Yes [x] No []
Location where Report required under	
O. Reg. 170/03 Schedule 22 will be available	Number of Interested Authorities you
for inspection.	report to:
	1
	Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [x] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Kettleby PS	260011648



Ministry of the Ministère de

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

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water? Yes [x] No [..]

Indicate how you notified system users that your annual report is available, and is free of charge.

- [x] Public access/notice via the web
- [..] Public access/notice via Government Office
- [..] Public access/notice via a newspaper
- [x] Public access/notice via Public Request
- [..] Public access/notice via a Public Library
- [..] Public access/notice via other method:

Describe your Drinking-Water System

Kettleby PS is served by an onsite well water supply located on the north side of the school. The well is drilled to a depth of 24.82 meters below grade where water is obtained from a confined clay aquifer. An ultraviolet disinfection system is used in order to comply with minimum treatment requirements (please note a new ultraviolet disinfection system was installed in 2010). As an extra precaution, chlorine feed equipment and turbidity meter were installed even though not required by the regulation. A professional engineer hired by the Board in 2010 to complete an evaluation and provided certification that the water works at the school meets minimum treatment requirements set forth in the regulation. A UPS power back up unit was installed for the turbidity meter, chlorine analyzer, chessell recorder and UV system to provide power to the water treatment system for up to three hours in the event of a power failure. Automatic shut off valves were installed which stops water flow in the event the UV disinfection system alarms due to loss of intensity. This prevents the untreated water from being distributed to the system when the UV cannot provide adequate disinfection. In 2011, the Board installed three additional filter housing units in parallel to increase filtration capacity.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite (12% Chlorine solution)

Were any significant expenses incurred to?

- [..] Install required equipment
- [x] Repair required equipment
- [..] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

The cost to install, repair and replace required equipment, as well as the contractor to service the equipment and test the water, is approximately \$ 16446.49

Ministry of the Ministère de

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

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre?

Incident Date | Parameter | Result | Unit of Measure | Corrective Action | Corrective Action Date

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03,

during this reporting period.

	Number of Samples	Range of E.Coli or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)- (max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	12	0 - 0	0 - 0		
Treated	26	0 - 0	0 - 0	26	0 - 114
Distribution					

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the

period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	n/a	n/a
Chlorine	n/a	n/a
Fluoride (If the	n/a	n/a
DWS provides		
fluoridation)		

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: Record the unit of measure if it is **not** milligrams per litre.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	31/01/2022	.0006	mg/L	No
Arsenic	31/01/2022	.0011	mg/L	No
Barium	31/01/2022	.0857	mg/L	No
Boron	31/01/2022	.037	mg/L	No
Cadmium	31/01/2022	.000003	mg/L	No
Chromium	31/01/2022	.00011	mg/L	No
Fluoride	31/01/2022	.18	mg/L	No



Ministry of the Environment l'Environnement

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

Lead (Standing	24/07/2022	0.0015	mg/L	No
Sample)			_	
Lead (Flushed	24/07/2022	0	mg/L	No
Sample)				
Mercury	31/01/2022	.00001	mg/L	No
Nitrate	30/01/2023	.025	mg/L	No
Nitrate	07/11/2022	.022	mg/L	No
Nitrate	15/08/2022	.017	mg/L	No
Nitrate	24/05/2022	.019	mg/L	No
Nitrite	30/01/2023	.003	mg/L	No
Nitrite	07/11/2022	.003	mg/L	No
Nitrite	15/08/2022	.003	mg/L	No
Nitrite	24/05/2022	.003	mg/L	No
Selenium	31/01/2022	.00004	mg/L	No
Sodium	31/01/2022	18.8	mg/L	No
Uranium	31/01/2022	.000031	mg/L	No

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter Parameter	Sample	Result	Unit of	Exceedance
	Date	Value	Measure	
1,1-Dichloroethylene	31/01/2022	.00033	mg/L	No
1,2-Dichlorobenzene	31/01/2022	.00041	mg/L	No
1,2-Dichloroethane	31/01/2022	.00035	mg/L	No
1,4-Dichlorobenzene	31/01/2022	.00036	mg/L	No
2,3,4,6-Tetrachlorophenol	31/01/2022	.0002	mg/L	No
2,4,6-Trichlorophenol	31/01/2022	.00025	mg/L	No
2,4-D	31/01/2022	.00019	mg/L	No
2,4-Dichlorophenol	31/01/2022	.00015	mg/L	No
2-methyl-4-chlorophenoxyacetic acid	31/01/2022	.00012	mg/L	No
(MCPA)				
Alachlor	31/01/2022	.00002	mg/L	No
Atrazine + N-dealkylated metabolites	31/01/2022	.00001	mg/L	No
Azinphos-methyl	31/01/2022	.00005	mg/L	No
Benzene	31/01/2022	.00032	mg/L	No
Benzo(a)pyrene	31/01/2022	.000004	mg/L	No
Bromoxynil	31/01/2022	.00033	mg/L	No
Carbaryl	31/01/2022	.00005	mg/L	No
Carbofuran	31/01/2022	.00001	mg/L	No
Carbon Tetrachloride	31/01/2022	.00017	mg/L	No
Chlorpyrifos	31/01/2022	.00002	mg/L	No
Diazinon	31/01/2022	.00002	mg/L	No
Dicamba	31/01/2022	.0002	mg/L	No
Dichloromethane	31/01/2022	.00035	mg/L	No
Diclofop-methyl	31/01/2022	.0004	mg/L	No
Dimethoate	31/01/2022	.00006	mg/L	No
Diquat	31/01/2022	.001	mg/L	No
Diuron	31/01/2022	.00003	mg/L	No
Glyphosate	31/01/2022	.001	mg/L	No
Malathion	31/01/2022	.00002	mg/L	No
Metolachlor	31/01/2022	.00001	mg/L	No
Metribuzin	31/01/2022	.00002	mg/L	No



Ministry of the Environment l'Environnement

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

Monochlorobenzene	31/01/2022	.0003	mg/L	No
Paraquat	31/01/2022	.001	mg/L	No
PCB	31/01/2022	.00004	mg/L	No
Pentachlorophenol	31/01/2022	.00015	mg/L	No
Phorate	31/01/2022	.00001	mg/L	No
Picloram	31/01/2022	.001	mg/L	No
Prometryne	31/01/2022	.00003	mg/L	No
Simazine	31/01/2022	.00001	mg/L	No
Terbufos	31/01/2022	.00001	mg/L	No
Tetrachloroethylene	31/01/2022	.00035	mg/L	No
Triallate	31/01/2022	.00001	mg/L	No
Trichloroethylene	31/01/2022	.00044	mg/L	No
Trifluralin	31/01/2022	.00002	mg/L	No
Vinyl Chloride	31/01/2022	.00017	mg/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
n/a	n/a	n/a	n/a

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)