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

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	**DWS 220008765**
Drinking-Water System Name:	Chepstow Drinking Water System
Drinking-Water System Owner:	Municipality of Brockton
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1, 2024 to December 31, 2024

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [x]

Is your annual report available to the public at no charge on a website on the Internet?
Yes [x] No [ ]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Municipal of Brockton
100 Scott St., PO Box 68
Walkerton, ON
N0G 2V0
(519) 881-2223

Complete for all other Categories.

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [x] No [ ]

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?
Yes [ ] 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
N/A	

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
[x] 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

Chepstow Powers Subdivision water system consists of a 150 mm bedrock well drilled to a depth of 57.6 m with approximately 15.8 m of till overburden. The well is equipped with a 1.1 kW submersible pump rated at 2.21 L/s at a TDH of 414 kpa. The pumphouse is located on top of the well and houses chlorine pumps utilizing sodium hypochlorite, 2 sets of two-stage filtration (5 micron and 1 micron) filters, followed by 2 Ultraviolet units. The water then enters a chlorine contact loop and is delivered to the distribution system with pressure maintenance provided by 3 – 455 L cushion tanks. The system has a standby diesel generator for emergency situations that was installed in 2011.

List all water treatment chemicals used over this reporting period

NSF Certified Sodium Hypochlorite (12%)

Were any significant expenses incurred to?

[ ] Install required equipment
[ ] Repair required equipment
[ ] Replace required equipment

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

There were no major expenses incurred

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
N/A					

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		
Distribution	53	0 – 0	0 - 0	53	<10 - >2,000

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 #)
Filtered Effluent Turbidity	**366**	**0.06 – 0.22 ntu**
Chlorine **Chlorine Dist.**	**366** **250**	**0.86 - 1.97** **0.85 - 1.88**
Fluoride (If the 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
N/A				

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alkalinity	Mar. 12, 2024 Sep. 24, 2024	233 236	mg/L	
Antimony	Feb. 14, 2023	<0.6	ug/L	
Arsenic	Feb. 14, 2023	0.2	ug/L	
Barium	Feb. 14, 2023	177	ug/L	
Boron	Feb. 14, 2023	39	ug/L	
Cadmium	Feb. 14, 2023	<0.003	ug/L	
Chromium	Feb. 14, 2023	0.20	ug/L	
Lead 15.1	Mar. 14, 2023 Sep. 12, 2023	0.06 0.08	ug/L	
Lead	Oct. 22, 2024	0.27	ug/L	
Mercury	Feb. 14, 2023	<0.01	ug/L	
Selenium	Feb. 14, 2023	<0.04	ug/L	
Sodium	Oct. 11, 2023	5.33	mg/L	
Uranium	Feb. 14, 2023	0.114	ug/L	
Fluoride	Oct. 11, 2023 Oct. 17, 2023	1.61 1.71	ug/L	Yes - Public Notified
Nitrate 1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	 Jan. 16, 2024 Apr. 16, 2024 Jul. 16, 2024 Oct. 22, 2024	 <0.006 <0.006 <0.006 <0.006	mg/L	
Nitrite 1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	 Jan. 16, 2024 Apr. 16, 2024 Jul. 16, 2024 Oct. 22, 2024	 <0.003 <0.003 <0.003 <0.003	mg/L	

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Feb. 14, 2023	<0.02	ug/L	
Atrazine + N-dealkylated metabolites	Feb. 14, 2023	<0.01	ug/L	
Azinphos-methyl	Feb. 14, 2023	<0.05	ug/L	
Benzene	Feb. 14, 2023	<0.32	ug/L	
Benzo(a)pyrene	Feb. 14, 2023	<0.004	ug/L	
Bromoxynil	Feb. 14, 2023	<0.33	ug/L	
Carbaryl	Feb. 14, 2023	<0.05	ug/L	
Carbofuran	Feb. 14, 2023	<0.01	ug/L	
Carbon Tetrachloride	Feb. 14, 2023	<0.17	ug/L	
Chlorpyrifos	Feb. 14, 2023	<0.02	ug/L	
Diazinon	Feb. 14, 2023	<0.02	ug/L	
Dicamba	Feb. 14, 2023	<0.20	ug/L	

1,2-Dichlorobenzene	**Feb. 14, 2023**	**<0.41**	**ug/L**	
1,4-Dichlorobenzene	**Feb. 14, 2023**	**<0.36**	**ug/L**	
1,2-Dichloroethane	**Feb. 14, 2023**	**<0.35**	**ug/L**	
1,1-Dichloroethylene (vinylidene chloride)	**Feb. 14, 2023**	**<0.33**	**ug/L**	
Dichloromethane	**Feb. 14, 2023**	**<0.35**	**ug/L**	
2-4 Dichlorophenol	**Feb. 14, 2023**	**<0.15**	**ug/L**	
2,4-D (2,4-Dichlorophenoxy acetic acid)	**Feb. 14, 2023**	**<0.19**	**ug/L**	
Diclofop-methyl	**Feb. 14, 2023**	**<0.40**	**ug/L**	
Dimethoate	**Feb. 14, 2023**	**<0.06**	**ug/L**	
Diquat	**Feb. 14, 2023**	**<1.0**	**ug/L**	
Diuron	**Feb. 14, 2023**	**<0.03**	**ug/L**	
Glyphosate	**Feb. 14, 2023**	**<1.0**	**ug/L**	
HAA (Haloacetic Acid) **1st Quarter** **2nd Quarter** **3rd Quarter** **4th Quarter**	 **Jan. 16, 2024** **Apr. 16, 2024** **Jul. 16, 2024** **Oct. 22, 2024**	 **5.3** **5.3** **5.3** **5.3**	**ug/L**	
MCPA (2-Methyl-4-chlorophenoxyacetic acid	**Feb. 14, 2023**	**<0.00012**		
Malathion	**Feb. 14, 2023**	**<0.02**	**ug/L**	
Metolachlor	**Feb. 14, 2023**	**<0.01**	**ug/L**	
Metribuzin	**Feb. 14, 2023**	**<0.02**	**ug/L**	
Monochlorobenzene	**Feb. 14, 2023**	**<0.30**	**ug/L**	
Paraquat	**Feb. 14, 2023**	**<1.0**	**ug/L**	
Pentachlorophenol	**Feb. 14, 2023**	**<0.15**	**ug/L**	
Phorate	**Feb. 14, 2023**	**<0.01**	**ug/L**	
Picloram	**Feb. 14, 2023**	**<1.0**	**ug/L**	
Polychlorinated Biphenyls(PCB)	**Feb. 14, 2023**	**<0.04**	**ug/L**	
Prometryne	**Feb. 14, 2023**	**<0.03**	**ug/L**	
Simazine	**Feb. 14, 2023**	**<0.01**	**ug/L**	
THM (NOTE**:** show latest annual average**)**	**2024 Average**	**6.6**	**ug/L**	
Terbufos	**Feb. 14, 2023**	**<0.01**	**ug/L**	
Tetrachloroethylene	**Feb. 14, 2023**	**<0.35**	**ug/L**	
2,3,4,6-Tetrachlorophenol	**Feb. 14, 2023**	**<0.20**	**ug/L**	
Triallate	**Feb. 14, 2023**	**<0.01**	**ug/L**	
Trichloroethylene	**Feb. 14, 2023**	**<0.44**	**ug/L**	
2,4,6-Trichlorophenol	**Feb. 14, 2023**	**<0.25**	**ug/L**	
Trifluralin	**Feb. 14, 2023**	**<0.02**	**ug/L**	
Vinyl Chloride	**Feb. 14, 2023**	**<0.17**	**ug/L**	

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
Fluoride	1.61	ug/L	Oct. 11, 2023
Fluoride	1.71	ug/L	Oct. 17, 2023