OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260001851
Drinking-Water System Name:	Grimsby Distribution System
Drinking-Water System Owner:	Corporation of the Town of Grimsby
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 to December 31, 2022

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 [x] No []	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Interested Authorities you report to:
160 Livingston Avenue Grimsby, Ontario	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
Fifty Road Subsystem	260069173

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

The Town of Grimsby's *Grimsby Distribution System* is a stand-alone drinking water distribution system which receives 100% of its drinking water from the Region of Niagara's *Grimsby Water Treatment Plant* and through connections with the Region of Niagara's *Grimsby Water System*.

The *Grimsby Distribution System* distributes drinking water to approximately 29,874 customers within the Town of Grimsby and also distributes drinking water to the City of Hamilton's *Fifty Road Subsystem*, which is located in Winona.

The *Grimsby Distribution System* consists of approximately 135.5 Km of watermain ranging in size from 100 mm to 300 mm diameter.

List all water treatment chemicals used over this reporting period

N/A

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 was no new watermain installed or replaced in 2022

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	Corrective	Corrective
			Measure	Action	Action Date
2022-04-07	Total Coliform - AWQI 158142	1	CFU/100mL	Re-Sample	2022-04-12
2022-05-05	Total Coliform - AWQI 158325	1	CFU/100mL	Re-Sample	2022-05-11
2022-09-08	Total Coliform - AWQI 159882	1	CFU/100mL	Re-Sample	2022-09-13

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples ¹	Range of E.Coli or Fecal Results (min #) -(max #)	Range of Total Coliform Results (min #) -(max #)	Range of Background Results (min #) -(max #)	Range of HPC Results (min #) -(max #)
Raw	-	-	-	-	-
Treated	-	-	-	-	-
Distribution (Schedule 10) ²	624	0	0 - 1	0 – 5	0 – 17
Distribution (Other) ³	41	0	0	0 – 0	0 - 140
Distribution (Other) ³					

¹All samples collected were tested for E. coli, Total Coliform, HPC and background.

²Weekly routine microbiological samples collected per Schedule 10.

³ Microbiological samples collected in no-routine instances (i.e. watermain breaks, new connections, AWQI follow up resample(s), etc.).

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	Free Chlorine Rnge of Results (min #) - (max #)	Unit of Measure	Total Chlorine Range of Results (min #) - (max #)	Unit of Measure
Turbidity	-	-	-	-	-
Chlorine (Schedule 6) ¹	624	0.60 - 1.35	mg/L	0.75 – 1.53	mg/L
Chlorine (Schedule 7) ²	416	0.50 - 1.31	mg/L	-	-
Chlorine (Schedule 13) ³	8	0.82 - 1.15	mg/L	0.99 - 1.33	mg/L
Chlorine (Schedule 15.1) ⁴	8	0.83 - 1.14	mg/L	0.94 - 1.21	mg/L
Chlorine (Other) ⁵	41	0.72 - 1.28	mg/L	0.80 - 1.47	mg/L
Chlorine (Other) ⁵	1739	0.33 - 1.31	mg/L	-	-
Fluoride	-	-	-	-	-

¹Chlorine measured when collecting weekly routine microbiological samples per Schedule 10.

² Chlorine measured during weekly (typically Tuesdays & Thursdays) operational checks per Schedule 7.

³ Chlorine measured when collecting quarterly Total Haloacetic Acids (HHAs) and Total Trihalomethane (THM) Samples per Schedule 13.

⁴ Chlorine measured when collecting semi-annual lead sample per Schedule 15.1.

⁵ Chlorine measured for all other special purposes (i.e. system flushing, watermain breaks, new connections, etc.).

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	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	No of Samples	Result Value	Unit of Measure	Exceedance
Antimony	-		-	-	-
Arsenic	-		-	-	-
Barium	-		-	-	-
Boron	-		-	-	-
Cadmium	-		-	-	-
Chromium	-		-	-	-
*Lead	-		-	-	-
Mercury	-		-	-	-
Selenium	-		-	-	-
Sodium	-		-	-	-
Uranium	-		-	-	-
Fluoride	-		-	-	-
Nitrite	-		-	-	-
Nitrate	-		-	-	-

*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) - (max#)	Unit of Measure	Number of Exceedances	Range of Alkalinity Results (min#) - (max#)	Unit of Measure	Range of pH Results (min#) - (max#)	Unit of Measure
Plumbing	-	-	-	-	-	-	-	-
Distribution	8	0	ug/L	0	86 - 91	mg/L	6.89 - 7.58	pН

Summary of Organic parameters sampled during this reporting period or the most recent sample test results under Schedule 13

Parameter	Sample Date & Number of Samples	Result Value	Unit of Measure	Exceedance
Alachlor	-	-	-	-
Aldicarb	-	-	-	-
Aldrin + Dieldrin	-	-	-	-
Atrazine + N-dealkylated metobolites	-	-	-	-
Azinphos-methyl	-	-	-	-
Bendiocarb	-	-	-	-
Benzene	-	-	-	-

Parameter	Sample Date & Number of Samples	Result Value	Unit of Measure	Exceedance
Benzo(a)pyrene	-	-	_	-
Bromoxynil	-	-	-	_
Carbaryl	-	-	-	-
Carbofuran	-	-	-	-
Carbon Tetrachloride	-	-	-	-
Chlordane (Total)	-	-	-	-
Chlorpyrifos	-	-	-	-
Cyanazine	-	-	-	-
Diazinon	-	-	-	_
Dicamba	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-
1,4-Dichlorobenzene	_	-	-	_
Dichlorodiphenyltrichloroethane (DDT) + metabolites	-	-	-	-
1,2-Dichloroethane	-	-	-	-
1,1-Dichloroethylene (vinylidene chloride)	-	-	-	-
Dichloromethane	-	-	-	-
2-4 Dichlorophenol	-	-	-	-
2,4-Dichlorophenoxy acetic acid (2,4-D)	-	-	-	-
Diclofop-methyl	-	-	-	-
Dimethoate	-	-	-	-
Dinoseb	-	-	-	-
Diquat	-	-	-	-
Diuron	-	-	-	-
Glyphosate	-	-	-	-
Heptachlor + Heptachlor Epoxide	-	-	-	-
Lindane (Total)	-	-	-	-
Malathion	-	-	-	-
Methoxychlor	-	-	-	-
Metolachlor	-	-	-	-
Metribuzin	-	-	-	-
Monochlorobenzene	-	-	-	-
Paraquat	-	-	-	-
Parathion	-	-	-	-
Pentachlorophenol	-	-	-	-
Phorate	-	-	-	-
Picloram	-	-	-	-
Polychlorinated Biphenyls(PCB)	-	-	-	-
Prometryne	-	-	-	-
Simazine	-	-	-	-

Parameter	Sample Date &	Result	Unit of	Exceedance
	Number of Samples	Value	Measure	
	2022/01/01			
Total Haloacetic Acids	to	ND	ug/L	0
	2022/12/31			
	(4 samples)			
Total Trihalomethanes (THM)	2022/01/01			
(Running Annual Average)	to	22.275	ng/I	0
	2022/12/31	22.215	ug/L	0
	(4 samples)			
Temephos	-	-	-	-
Terbufos	-	-	-	-
Tetrachloroethylene	-	-	-	-
2,3,4,6-Tetrachlorophenol	-	-	-	-
Triallate	-	-	-	-
Trichloroethylene	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	-	-	-	-
Trifluralin	-	-	-	-
Vinyl Chloride	-	-	-	-

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

Schedule 2 of Olitario Drinning (Tater Quanty Standards)			
Parameter	Result Value	Unit of Measure	Date of Sample
-	-	-	-

Report Date: January 24th, 2022

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Brandon Wartman, CET, CMMIII Director of Public Works