#### OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category: Period being reported: 220001432
City of Dryden
City of Dryden
Large Municipal Residential

<u>Complete if your Category is Large Municipal</u> <u>Residential or Small Municipal Residential</u>

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 web site on the Internet?

Yes [X] No []

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

A hard copy is available for inspection at the Public Works office at 159 King St. or on the web at www.dryden.ca.

Complete for all other Categories.

**Number of Designated Facilities served:** 

None

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [ ] No [ ] N/A

Number of Interested Authorities you report to: None

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:

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>		
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 [ ] No [ ] N/A

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	X   Public access/notice via the web
Ī	Public access/notice via Government Office
Ī	Public access/notice via a newspaper
ĺ	Public access/notice via Public Request
ĺ	Public access/notice via a Public Library
•	Public access/notice via other method

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

#### **Describe your Drinking-Water System**

The City of Dryden Water Treatment Plant is a Class II conventional surface water treatment plant. Raw water is pumped from Wabigoon Lake approximately 2km to the treatment plant where Aluminum Sulphate (alum) is added for coagulation. A second Raw water line has been added to provide redundancy. The water then flows to one of two solids contact units where polymer is added, and flocculation and sedimentation occurs. The heavier settled floc is dumped to the sanitary sewer. Hydrated lime is added for PH adjustment just before the effluent is gravity fed to four dual media rapid sand filters. The filters are equipped with automatic filter to waste valves. In the event of high filter effluent turbidity, the valves open automatically sending the high turbid water to waste. Filtered water then flows to the Clearwell. Chlorine is added in the Clear-well for primary disinfection. The water then flows to the reservoir and then to the Pump-well where it is pumped to the distribution system. Chlorine residual and turbidity are monitored with continuous on-line analyzers just prior to the water leaving the plant. The distribution system consists of 60 kilometers of water mains of various sizes and materials, 840 valves, 305 fire hydrants and 2600 service connections, supplying a service population of 7,300.

List all water treatment chemicals used over this reporting period

Aluminum Sulphate (alum), Polymer	(Nalclear 8181),	<b>Hydrated Lime and</b>	Chlorine
Gas.			

### Were any significant expenses incurred to?

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

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

Repair Back-flow preventers - \$7,686.00 Testing & Certifying Back-flow Preventers - \$989.00 Annual Service of Back-up Diesel Pump - \$978.00

**Annual Instrument Calibrations - \$2,749.00** 

Air Compressor Maintenance - \$5,211.00

Overhead Crane Inspections - \$1,190.00

Replace Gear Reducer on Lime Mixer - \$2,646.00

New Turbidity & Chlorine Standards for Lab - \$1,219.00

SCADA Maintenance - \$14,645.00

Unit Heater & Furnace Repair - \$3,706.00

WTP Camera & Communication Equipment - \$12,075.00

**New Valve Positioners - \$2,514.00** 

**Replace Tile Floor - \$120,283.00** 

Replace Launders in all 4 Filters - \$86,067.00

Replace Filter Piping - \$87,221.00

**Distribution System Valve Installations - \$119,749.00** 

Distribution System Mainline Upsize (Engineering) - \$24,178.00

Flat Rock Pumping Station Electrical Upgrades - \$116,577.00

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
Oct. 5, 2023	Microbiologic	EC & TC	Loss of Pressure in Distribution System	Sample & Flush BWA Issued	Oct. 5, 2023

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

during this reporting period.

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	Number	Range of E.Coli	Range of Total	Number	Range of HPC
	of	Or Fecal	Coliform	of HPC	Results
	Samples	Results	Results	Samples	(min #)-(max #)
		(min #)-(max #)	(min #)-(max #)		
Raw	52	0 <b>→</b> 5	0→32	None	N/A
		MPN/100mls	MPN/100mls		
Treated	52	0 cfu/100mls	0 cfu/100mls	52	$0 \rightarrow 10 \text{ cfu/ml}$
Distribution	314	0 cfu/100mls	0 cfu/100mls	104	$0 \rightarrow 60 \text{ cfu/ml}$

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

period covered by this Annual Report.

period covered by	, this initia	i itchoi u
	Number of	Range of Results
	Grab	(min #)-(max #)
	Samples	
Turbidity	8760	0.0 → 1.0 NTU
Chlorine	8760	0.0 → 1.86 Mg/l
Fluoride (If the		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	Limit
Jan 20, 2011 Licence-223-101	Backwash Suspended Solids	12 Monthly Composite samples	1.0 → 9.3	Mg/L	25 Mg/L

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	Jan. 4	<0.5	Ug/l	No
Arsenic	Jan. 4	<1.0	Ug/l	No
Barium	Jan. 4	7.0	Ug/l	No
Boron	Jan. 4	<2.0	Ug/l	No
Cadmium	Jan. 4	<0.1	Ug/l	No
Chromium	Jan. 4	<1.0	Ug/l	No
*Lead	Sept. 25	0.5	Ug/l	No
Mercury	Jan. 4	<0.1	Ug/l	No
Selenium	Jan. 4	0.4	Ug/l	No
Sodium	Jan. 4	3230	Mg/l	No
Uranium	Jan. 4	<1.0	Ug/l	No
Fluoride	Jan. 4	< 0.05	Mg/l	No
(RawWater)				
Nitrite	Jan. 4	0.05	Mg/l	No
Nitrate	Jan. 4	< 0.05	Mg/l	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential 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)

<b>Location Type</b>	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution	6	0.1 →<0.5 ug/L	0

## Summary of Organic parameters sampled during this reporting period or the most

recent sample results

Parameter Parameter	Sample Date	Result	Unit of	Exceedance
		Value	Measure	
Alachlor	Jan. 4	< 0.24	Ug/l	No
MCPA	Jan. 4	< 5.0	Ug/l	No
Atrazine + N-dealkylated metobolites	Jan. 4	< 0.5	Ug/l	No
Azinphos-methyl	Jan. 4	< 0.18	Ug/l	No
Benzene	Jan. 4	< 0.1	Ug/l	No
Benzo(a)pyrene	Jan. 4	< 0.1	Ug/l	No
Bromoxynil	Jan. 4	< 0.08	Ug/l	No
Carbaryl	Jan. 4	<2.0	Ug/l	No
Carbofuran	Jan. 4	<3.0	Ug/l	No
Carbon Tetrachloride	Jan. 4	< 0.2	Ug/l	No
Chlorpyrifos	Jan. 4	< 0.18	Ug/l	No
Diazinon	Jan. 4	< 0.18	Ug/l	No
Dicamba	Jan. 4	< 0.07	Ug/l	No
1,2-Dichlorobenzene	Jan. 4	< 0.2	Ug/l	No
1,4-Dichlorobenzene	Jan. 4	< 0.3	Ug/l	No
1,2-Dichloroethane	Jan. 4	< 0.2	Ug/l	No
1,1-Dichloroethylene	Jan. 4	< 0.3	Ug/l	No
(vinylidene chloride)				
Dichloromethane	Jan. 4	<1.0	Ug/l	No
2-4 Dichlorophenol	Jan. 4	< 0.2	Ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-	Jan. 4	< 0.3	Ug/l	No
D)			_	
Diclofop-methyl	Jan. 4	< 0.1	Ug/l	No
Dimethoate	Jan. 4	< 0.18	Ug/l	No

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

Diquat	Jan. 4	< 0.2	Ug/l	No
Diuron	Jan. 4	<9.0	Ug/l	No
Glyphosate	Jan. 4	<20.0	Ug/l	No
Malathion	Jan. 4	< 0.18	Ug/l	No
Metolachlor	Jan. 4	< 0.12	Ug/l	No
Metribuzin	Jan. 4	< 0.12	Ug/l	No
Monochlorobenzene	Jan. 4	< 0.5	Ug/l	No
Paraquat	Jan. 4	< 0.2	Ug/l	No
Pentachlorophenol	Jan. 4	< 0.3	Ug/l	No
Phorate	Jan. 4	< 0.12	Ug/l	No
Picloram	Jan. 4	< 0.07	Ug/l	No
Prometryne	Jan. 4	< 0.0599	Ug/l	No
Simazine	Jan. 4	< 0.18	Ug/l	No
THM	Jan. 4	46.0	Ug/l	No
(NOTE: show latest annual average)				
Terbufos	Jan. 4	< 0.12	Ug/l	No
Tetrachloroethylene	Jan. 4	< 0.3	Ug/l	No
2,3,4,6-Tetrachlorophenol	Jan. 4	< 0.3	Ug/l	No
Triallate	Jan. 4	< 0.12	Ug/l	No
Trichloroethylene	Jan. 4	< 0.2	Ug/l	No
2,4,6-Trichlorophenol	Jan. 4	< 0.2	Ug/l	No
Trifluralin	Jan. 4	< 0.12	Ug/l	No
Vinyl Chloride	Jan. 4	< 0.1	Ug/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
None	n/a	n/a	n/a