OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220001432
Drinking-Water System Name:	City of Dryden Water Treatment
Drinking-Water System Owner:	City of Dryden
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1/2014 → December 31/2014

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] **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 http://www.dryden.ca/city_services/public_works/sewer_and_water/waterworks_annual_reports/	**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 **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** **Yes [ ] No [ ] N/A**

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 [ ] No [ ]   N/A

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

> **The City of Dryden Water Treatment Plant is a Class 11 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. 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 between the Clearwell and Reservoir for primary disinfection. The water then flows to the Pumpwell 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, 408 valves, 276 fire hydrants and 2400 service connections, supplying a service population of 6555.**

List all water treatment chemicals used over this reporting period

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

Were any significant expenses incurred to?
    [Yes] Install required equipment
    [Yes] Repair required equipment
    [Yes] Replace required equipment

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

> **WTP- Replace two 12" valves and actuators on filter effluent discharge. $5537.00**
> **WTP- Replace 2 Polymer Pumps. $10,263.00**
> **Duke St.- Rehabilitation of water mains and services. $773,600.00**

Water Distribution Swabbing - $18,253.00
Operator Training- $30,141.00

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. 31	Total Coliform	Present	P/A per 100 ml	Re-Sampling	Nov. 5
Mar. 4	Total Coliform	Present	P/A per 100 ml	Re-Sampling	Mar.7

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	52	0→8 cfu/100mls	0→ 2000 cfu/100mls	None	N/A
Treated	52	0 cfu/100mls	0 cfu/100mls	52	0→2 cfu/ ml
Distribution	312	0 cfu/100mls	0 cfu/100mls	104	0→18 cfu/ ml

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	8760	.05 → 1.0 NTU
Chlorine	8760	1.07 → 1.99 Mg/l
Fluoride (If the DWS provides fluoridation)	N/A	N/A

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**	2.0 → 9.2	**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. 28/14	**< .6**	Ug/l	No
Arsenic	Jan. 28/14	**< 1.0**	Ug/l	No
Barium	Jan. 28/14	**< 10**	Ug/l	No
Boron	Jan. 28/14	**< 50**	Ug/l	No
Cadmium	Jan. 28/14	**< .10**	Ug/l	No
Chromium	Jan. 28/14	**< 1.0**	Ug/l	No
*Lead	Oct. 9/14	**<1.0**	Ug/l	No
Mercury	Jan. 28/14	**< .10**	Ug/l	No
Selenium	Jan. 28/14	**< 1.0**	Ug/l	No
Sodium		**N/A**	Mg/l	No
Uranium	Jan. 28/14	**< 2.0**	Ug/l	No
Fluoride (RawWater)	July 28/14	**0.01**	Mg/l	No
Nitrite	Jan. 28/14	**< .02**	Mg/l	No
Nitrate	Jan. 28/14	**0.030**	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)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	**N/A**		
Distribution	**3**	**0 → <1.0 ug/L**	**0**

Lead Sampling is not required until 2014.

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	Jan. 28/14	< .1	Ug/l	No
Aldicarb	Jan. 28/14	< 1	Ug/l	No
Aldrin + Dieldrin	Jan. 28/14	< .04	Ug/l	No
Atrazine + N-dealkylated metobolites	Jan. 28/14	< .2	Ug/l	No
Azinphos-methyl	Jan. 28/14	< .1	Ug/l	No
Bendiocarb	Jan. 28/14	< .2	Ug/l	No
Benzene	Jan. 28/14	< .5	Ug/l	No
Benzo(a)pyrene	Jan. 28/14	< .01	Ug/l	No
Bromoxynil	Jan. 28/14	< .2	Ug/l	No
Carbaryl	Jan. 28/14	< .2	Ug/l	No
Carbofuran	Jan. 28/14	< .2	Ug/l	No
Carbon Tetrachloride	Jan. 28/14	< .5	Ug/l	No
Chlordane (Total)	Jan. 28/14	< .3	Ug/l	No
Chlorpyrifos	Jan. 28/14	< .1	Ug/l	No
Cyanazine	Jan. 28/14	< .1	Ug/l	No
Diazinon	Jan. 28/14	< .1	Ug/l	No
Dicamba	Jan. 28/14	< .2	Ug/l	No
1,2-Dichlorobenzene	Jan. 28/14	< .5	Ug/l	No
1,4-Dichlorobenzene	Jan. 28/14	< .5	Ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan. 28/14	< .4	Ug/l	No
1,2-Dichloroethane	Jan. 28/14	< .5	Ug/l	No
1,1-Dichloroethylene (vinylidene chloride)	Jan. 28/14	< .5	Ug/l	No
Dichloromethane	Jan. 28/14	< .5	Ug/l	No
2-4 Dichlorophenol	Jan. 28/14	< .3	Ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan. 28/14	117.8	%	No
Diclofop-methyl	Jan. 28/14	< .2	Ug/l	No
Dimethoate	Jan. 28/14	< .1	Ug/l	No
Dinoseb	Jan. 28/14	< .2	Ug/l	No
Diquat	Jan. 28/14	< 1	Ug/l	No
Diuron	Jan. 28/14	< 1	Ug/l	No
Glyphosate	Jan. 28/14	< 5	Ug/l	No
Heptachlor + Heptachlor Epoxide	Jan. 28/14	< .2	Ug/l	No
Lindane (Total)	Jan. 28/14	< .1	Ug/l	No
Malathion	Jan. 28/14	< .1	Ug/l	No
Methoxychlor	Jan. 28/14	< .1	Ug/l	No

Metolachlor	Jan. 28/14	< .1	Ug/l	No
Metribuzin	Jan. 28/14	< .1	Ug/l	No
Monochlorobenzene	Jan. 28/14	< .5	Ug/l	No
Paraquat	Jan. 28/14	< 1	Ug/l	No
Parathion	Jan. 28/14	< .1	Ug/l	No
Pentachlorophenol	Jan. 28/14	< .5	Ug/l	No
Phorate	Jan. 28/14	< .1	Ug/l	No
Picloram	Jan. 28/14	< .2	Ug/l	No
Polychlorinated Biphenyls(PCB)	Jan. 28/14	< .017	Ug/l	No
Prometryne	Jan. 28/14	< .1	Ug/l	No
Simazine	Jan. 28/14	< .1	Ug/l	No
THM (NOTE: show latest annual average)	Jan. 28/14	44.1	Ug/l	No
Temephos	Jan. 28/14	< .1	Ug/l	No
Terbufos	Jan. 28/14	< .2	Ug/l	No
Tetrachloroethylene	Jan. 28/14	< .5	Ug/l	No
2,3,4,6-Tetrachlorophenol	Jan. 28/14	< .5	Ug/l	No
Triallate	Jan. 28/14	< .1	Ug/l	No
Trichloroethylene	Jan. 28/14	< .5	Ug/l	No
2,4,6-Trichlorophenol	Jan. 28/14	< .5	Ug/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan. 28/14	< .2	Ug/l	No
Trifluralin	Jan. 28/14	< .1	Ug/l	No
Vinyl Chloride	Jan. 28/14	< .2	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