



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220000969
Drinking-Water System Name:	Rainy River Water System
Drinking-Water System Owner:	Corporation of the Town of Rainy River
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2017 to December 31, 2017

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>www.rainyriver.ca Town of Rainy River Municipal Office Town of Rainy River Water Treatment Plant</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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
Town of Rainy River	220000969

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.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- 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 Rainy River water is drawn from a surface water intake located in the Rainy River. The Rainy River is part of the Winnipeg River (Arctic) Watershed. The Water Treatment Plan is a Class II conventional surface water treatment plant that uses coagulation flocculation and sedimentation followed by filtration with a dual media anthracite/sand filter. Filtered water is then disinfected with chlorine gas within a dual chamber clear well with a storage capacity of 1,136 m³. The treated water is then pumped to the distribution system which serves approximately 925 people.

List all water treatment chemicals used over this reporting period

Aluminum Sulfate, Polyelectrolyte, Soda Ash, Chlorine Gas, Dowex Tan -1, Anion Exchange Resin, Solar Natural Salt Crystals

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

Real UV 254 cost \$2,000

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
July 2017	100.0	90.0	ug/L	Lower CL ²	July 2017
October 2017	100.0	65.5	ug/L	Lower CL ²	October 2017

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	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results (min #)-(max #)



		(min #)-(max #)	(min #)-(max #)		
Raw	52	< 1 - 45	1 - 2420		
Treated	52	0	0	52	0 - 1
Distribution	104	0	0	52	0 - 2

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	.04 – .30
Chlorine	8760	1.21 mg/L – 2.31 mg/L
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

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 17, 2017	<0.60	ug/L	No
Arsenic	Jan 17, 2017	<1.0	ug/L	No
Barium	Jan 17, 2017	<10	ug/L	No
Boron	Jan 17, 2017	<50	ug/L	No
Cadmium	Jan 17, 2017	<0.10	ug/L	No
Chromium	Jan 17, 2017	<1.0	ug/L	No
Lead	Oct 10, 2017	<1.0	ug/L	No
Mercury	Jan 17, 2017	<0.10	ug/L	No
Selenium	Jan 17, 2017	<1.0	ug/L	No
Sodium	Jan 17, 2014	15.8	ug/L	No
Uranium	Jan 17, 2017	<2.0	ug/L	No
Fluoride	Jan 15, 2014	<0.030	ug/L	No
Nitrite	Jan 17, 2017	<0.010	ug/L	No
Nitrate	Jan 17, 2017	0.060	ug/L	No

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 17, 2017	<0.10	ug/L	No
Aldicarb	Jan 17, 2017	<1.0	ug/L	No
Aldrin + Dieldrin	Jan 17, 2017	<0.040	ug/L	No
Atrazine + N-dealkylated metabolites	Jan 17, 2017	<0.20	ug/L	No
Azinphos-methyl	Jan 17, 2017	<0.10	ug/L	No
Bendiocarb	Jan 17, 2017	<0.20	ug/L	No
Benzene	Jan 17, 2017	<0.50	ug/L	No
Benzo(a)pyrene	Jan 17, 2017	<0.010	ug/L	No
Bromoxynil	Jan 17, 2017	<0.20	ug/L	No
Carbaryl	Jan 17, 2017	<0.20	ug/L	No
Carbofuran	Jan 17, 2017	<0.20	ug/L	No
Carbon Tetrachloride	Jan 17, 2017	<0.50	ug/L	No
Chlordane (Total)	Jan 17, 2017	<0.30	ug/L	No
Chlorpyrifos	Jan 17, 2017	<0.10	ug/L	No
Cyanazine	Jan 17, 2017	<0.10	ug/L	No
Diazinon	Jan 17, 2017	<0.10	ug/L	No
Dicamba	Jan 17, 2017	<0.20	ug/L	No
1,2-Dichlorobenzene	Jan 17, 2017	<0.50	ug/L	No
1,4-Dichlorobenzene	Jan 17, 2017	<0.50	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 17, 2017	<0.20	ug/L	No
1,2-Dichloroethane	Jan 17, 2017	<0.50	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 17, 2017	<0.50	ug/L	No
Dichloromethane	Jan 17, 2017	<5.0	ug/L	No
2,4 Dichlorophenol	Jan 17, 2017	<0.30	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 17, 2017	<0.20	ug/L	No
Diclofop-methyl	Jan 17, 2017	<0.20	ug/L	No
Dimethoate	Jan 17, 2017	<0.10	ug/L	No
Dinoseb	Jan 17, 2017	<0.20	ug/L	No
Diquat	Jan 17, 2017	<1.0	ug/L	No
Diuron	Jan 17, 2017	<1.0	ug/L	No
Glyphosate	Jan 17, 2017	<5.0	ug/L	No
Heptachlor + Heptachlor Epoxide	Jan 17, 2017	<0.20	ug/L	No
Lindane (Total)	Jan 17, 2017	<0.10	ug/L	No
Malathion	Jan 17, 2017	<0.10	ug/L	No
Methoxychlor	Jan 17, 2017	<0.10	ug/L	No
Metolachlor	Jan 17, 2017	<0.10	ug/L	No
Metribuzin	Jan 17, 2017	<0.10	ug/L	No
Monochlorobenzene	Jan 17, 2017	<0.50	ug/L	No
Paraquat	Jan 17, 2017	<1.0	ug/L	No
Parathion	Jan 17, 2017	<0.10	ug/L	No
Pentachlorophenol	Jan 17, 2017	<0.50	ug/L	No

Phorate	Jan 17, 2017	<0.10	ug/L	No
Picloram	Jan 17, 2017	<0.20	ug/L	No
Polychlorinated Biphenyls(PCB)	Jan 17, 2017	<0.35	ug/L	No
Prometryne	Jan 17, 2017	<0.10	ug/L	No
Simazine	Jan 17, 2017	<0.20	ug/L	No
THM (NOTE: show latest annual average)	Oct 17, 2017	63.32	ug/L	No
Temephos	Jan 17, 2017	<0.20	ug/L	No
Terbufos	Jan 17, 2017	<0.20	ug/L	No
Tetrachloroethylene	Jan 17, 2017	<0.50	ug/L	No
2,3,4,6-Tetrachlorophenol	Jan 17, 2017	<0.50	ug/L	No
Triallate	Jan 17, 2017	<0.10	ug/L	No
Trichloroethylene	Jan 17, 2017	<0.50	ug/L	No
2,4,6-Trichlorophenol	Jan 17, 2017	<0.50	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan 17, 2017	<0.20	ug/L	No
Trifluralin	Jan 17, 2017	<0.10	ug/L	No
Vinyl Chloride	Jan 17, 2017	<0.20	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
Sodium	15.8	ug/L	Jan 17, 2014
THM	90.0	ug/L	July 2017
THM	65.5	ug/L	October 2017