



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	<b>220000969</b>
<b>Drinking-Water System Name:</b>	Rainy River Water System
<b>Drinking-Water System Owner:</b>	Corporation of the Town of Rainy River
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2018 to December 31, 2018

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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><a href="http://www.rainyriver.ca">www.rainyriver.ca</a>  Town of Rainy River Municipal Office  Town of Rainy River Water Treatment Plant</p> </div>	<p><b><u>Complete for all other Categories.</u></b></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 m<sup>3</sup>. 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.

**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**

New roof on the water treatment plant at a cost of \$137,500.

**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
January 17, 2014	Sodium 20.0	15.8	ug/L		
	Lead 10.0		ug/L	Inform Homeowner	

**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 #)

<b>Raw</b>	51	0 - 57	3 - 2420		
<b>Treated</b>	51	0	0	51	0 - 1
<b>Distribution</b>	102	0	0	51	0 - 2

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	<b>Number of Grab Samples</b>	<b>Range of Results (min #)-(max #)</b>
<b>Turbidity</b>	<b>8760</b>	<b>.04 – .30</b>
<b>Chlorine</b>	<b>8760</b>	<b>.98 mg/L – 2.83 mg/L</b>
<b>Fluoride (If the DWS provides fluoridation)</b>		

*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.**

<b>Date of legal instrument issued</b>	<b>Parameter</b>	<b>Date Sampled</b>	<b>Result</b>	<b>Unit of Measure</b>

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Antimony</b>	Jan 16, 2018	<0.60	ug/L	No
<b>Arsenic</b>	Jan 16, 2018	<1.0	ug/L	No
<b>Barium</b>	Jan 16, 2018	<1.0	ug/L	No
<b>Boron</b>	Jan 16, 2018	<50	ug/L	No
<b>Cadmium</b>	Jan 16, 2018	<0.10	ug/L	No
<b>Chromium</b>	Jan 16, 2018	<1.0	ug/L	No
<b>Lead</b>	Oct 10, 2017	<1.0	ug/L	No
<b>Mercury</b>	Jan 16, 2018	<0.10	ug/L	No
<b>Selenium</b>	Jan 16, 2018	<1.0	ug/L	No
<b>Sodium</b>	Jan 17, 2014	15.8	ug/L	No
<b>Uranium</b>	Jan 16, 2018	<2.0	ug/L	No
<b>Fluoride</b>	Jan 15, 2014	<0.030	ug/L	No
<b>Nitrite</b>	Jan 16, 2018	<0.010	ug/L	No
<b>Nitrate</b>	Jan 16, 2016	0.105	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 16, 2018	<0.10	ug/L	No
Aldicarb	Jan 16, 2018	<1.0	ug/L	No
Aldrin + Dieldrin	Jan 16, 2018	<0.040	ug/L	No
Atrazine + N-dealkylated metabolites	Jan 16, 2018	<0.20	ug/L	No
Azinphos-methyl	Jan 16, 2018	<0.10	ug/L	No
Bendiocarb	Jan 16, 2018	<0.20	ug/L	No
Benzene	Jan 16, 2018	<0.50	ug/L	No
Benzo(a)pyrene	Jan 16, 2018	<0.010	ug/L	No
Bromoxynil	Jan 16, 2018	<0.20	ug/L	No
Carbaryl	Jan 16, 2018	<0.20	ug/L	No
Carbofuran	Jan 16, 2018	<0.20	ug/L	No
Carbon Tetrachloride	Jan 16, 2018	<0.20	ug/L	No
Chlordane (Total)	Jan 16, 2018	<0.30	ug/L	No
Chlorpyrifos	Jan 16, 2018	<0.10	ug/L	No
Cyanazine	Jan 16, 2018	<0.10	ug/L	No
Diazinon	Jan 16, 2018	<0.10	ug/L	No
Dicamba	Jan 16, 2018	<0.20	ug/L	No
1,2-Dichlorobenzene	Jan 16, 2018	<0.50	ug/L	No
1,4-Dichlorobenzene	Jan 16, 2018	<0.50	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 16, 2018	<0.20	ug/L	No
1,2-Dichloroethane	Jan 16, 2018	<0.50	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 16, 2018	<0.50	ug/L	No
Dichloromethane	Jan 16, 2018	<5.0	ug/L	No
2,4 Dichlorophenol	Jan 16, 2018	<0.20	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 16, 2018	<0.20	ug/L	No
Diclofop-methyl	Jan 16, 2018	<0.20	ug/L	No
Dimethoate	Jan 16, 2018	<0.10	ug/L	No
Dinoseb	Jan 16, 2018	<0.20	ug/L	No
Diquat	Jan 16, 2018	<1.0	ug/L	No
Diuron	Jan 16, 2018	<1.0	ug/L	No
Glyphosate	Jan 16, 2018	<5.0	ug/L	No
Heptachlor + Heptachlor Epoxide	Jan 16, 2018	<0.20	ug/L	No
Lindane (Total)	Jan 16, 2018	<0.10	ug/L	No
Malathion	Jan 16, 2018	<0.10	ug/L	No
Methoxychlor	Jan 16, 2018	<0.10	ug/L	No
Metolachlor	Jan 16, 2018	<0.10	ug/L	No
Metribuzin	Jan 16, 2018	<0.10	ug/L	No
Monochlorobenzene	Jan 16, 2018	<0.50	ug/L	No
Paraquat	Jan 16, 2018	<1.0	ug/L	No
Parathion	Jan 16, 2018	<0.10	ug/L	No
Pentachlorophenol	Jan 16, 2018	<0.50	ug/L	No

<b>Phorate</b>	Jan 16, 2018	<0.10	ug/L	<b>No</b>
<b>Picloram</b>	Jan 16, 2018	<0.20	ug/L	<b>No</b>
<b>Polychlorinated Biphenyls(PCB)</b>	Jan 16, 2018	<0.35	ug/L	<b>No</b>
<b>Prometryne</b>	Jan 16, 2018	<0.10	ug/L	<b>No</b>
<b>Simazine</b>	Jan 16, 2018	<0.10	ug/L	<b>No</b>
<b>THM</b> (NOTE: show latest annual average)	October 2018	84.0	ug/L	<b>No</b>
<b>Temephos</b>	Jan 16, 2018	<0.20	ug/L	<b>No</b>
<b>Terbufos</b>	Jan 16, 2018	<0.20	ug/L	<b>No</b>
<b>Tetrachloroethylene</b>	Jan 16, 2018	<0.50	ug/L	<b>No</b>
<b>2,3,4,6-Tetrachlorophenol</b>	Jan 16, 2018	<0.50	ug/L	<b>No</b>
<b>Triallate</b>	Jan 16, 2018	<0.10	ug/L	<b>No</b>
<b>Trichloroethylene</b>	Jan 16, 2018	<0.50	ug/L	<b>No</b>
<b>2,4,6-Trichlorophenol</b>	Jan 16, 2018	117.6	ug/L	<b>No</b>
<b>2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)</b>	Jan 16, 2018	<0.20	ug/L	<b>No</b>
<b>Trifluralin</b>	Jan 16, 2018	<0.10	ug/L	<b>No</b>
<b>Vinyl Chloride</b>	Jan 16, 2018	<0.20	ug/L	<b>No</b>

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

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
<b>Sodium 20.0</b>	<b>15.8</b>	<b>ug/L</b>	<b>Jan 17, 2014</b>
<b>THM 100.0</b>	<b>57.2</b>	<b>ug/L</b>	<b>April 2018</b>
<b>THM 100.0</b>	<b>125.0</b>	<b>ug/L</b>	<b>July 2018</b>
<b>THM 100.0</b>	<b>108.0</b>	<b>ug/L</b>	<b>October 2018</b>