

**THE TOWN OF RAINY RIVER
MUNICIPAL WATER SYSTEM
SUMMARY REPORT
O. Reg. 170/03, Schedule 22**

For The Period:

January 1, 2022, to December 31, 2022

Received by Municipal Office January 17, 2023

Prepared For:

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Prepared January 17, 2023, By:

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**Summary Report
Rainy River Water System 2022**

Drinking Water Works Permit # 296-201 – Dated January 10, 2021

Municipal Drinking Water Licence # 296-201 – Dated January 10, 2021

Permit to Take Water # 8271-BJJJBC – Dated December 4, 2019

**Rate of taking shall not exceed a maximum of 1,715 litres per
minute and 2,473,024 litres per day.**

Permit is valid until December 4, 2029

All sampling and analysis requirements have been met for the year 2022 in accordance with Reg. 170/03.

Microbiological

Reg. 169/03
Amended to O. Reg. 17/04

Volatile Organics

Reg. 169/03
Amended to O. Reg. 17/04

Inorganics

Reg. 169/03
Amended to O. Reg. 17/04

Pesticides and PCB

Reg. 169/03
Amended to O. Reg. 17/04

Reporting, Notification and Corrective Action

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS	ACTIONS REQUIRED	ACTIONS TAKEN
<p>1. Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced, or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?</p> <p>All parts of the DWS were not disinfected in accordance with a procedure listed in Schedule B of the DWWP. In accordance with DWWP 296-201, Schedule B, Condition 2.3, Section d), "all parts of the drinking water system in contact with drinking water that are added, modified, replaced, extended shall be disinfected in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:...d) AWWA C653 – Standard for Disinfection of Water Treatment Plants."</p> <p>On January 28, 2022, operators replaced the backflow valve on distribution pump #3 in the water treatment plant. This replaced part comes into contact with drinking water and therefore needed to be disinfected in accordance with AWWA Standard C653 or a Director approved procedure. Operators were unaware of this requirement. The only record for this part replacement indicate that the valve was</p>	<p>By July 31, 2022, The Town of Rainy River must ensure that all operators review AWWA C653. By the same date, confirmation that operators have reviewed AWWA C653 must be provided to the undersigned water inspector at aaron.causyn@ontario.ca. Compliance with DWWP 296-201, Schedule B, Condition 2.3 will continue to be assessed during future inspections.</p>	

<p>"rinsed with hydro-chlor 12 solution". This does not meet the minimum requirements of AWWA C653. A Director approved procedure has not been issued for the Rainy River WTP.</p>		
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Capacity Assessment

The maximum rated capacity of the Plant is 28.6 L/S. In 2022, the maximum flow of water through the Water Treatment Plant was 23.49 L/S (i.e., 2,204 m³ per day) or 15% under the rated capacity.

In 2022 the annual average daily flow was 7.0 L/S (i.e., 554 m³ per day) or 25% of the capacity of the Plant.

Month	Flows	Highest Instantaneous Peak Flow	Average Daily Instantaneous Peak Flow	Percent of the Rated Capacity 28.6 L/S
January	13,112 m ³	8.16 L/S	7.0 L/S	29% of rated capacity
February	11,947 m ³	7.83 L/S	7.0 L/S	25% of rated capacity
March	12,230 m ³	13.03 L/S	7.0 L/S	47% of rated capacity
April	10,665 m ³	7.29 L/S	6.0 L/S	26% of rated capacity
May	9,768 m ³	10.43 L/S	6.0 L/S	38% of rated capacity
June	9,901 m ³	9.17 L/S	7.0 L/S	33% of rated capacity
July	11,226 m ³	23.49 L/S	8.0 L/S	85% of rated capacity
August	10,630 m ³	11.89 L/S	7.0 L/S	43% of rated capacity
September	9,441 m ³	11.04 L/S	6.0 L/S	40% of rated capacity
October	8,907 m ³	12.39 L/S	6.0 L/S	45% of rated capacity
November	8,217 m ³	11.84 L/S	6.0 L/S	43% of rated capacity
December	9,649 m ³	6.28 L/S	6.0 L/S	24% of rated capacity
Total Flows	125,693 m ³		<u>Yearly Average Instantaneous Peak Flow</u>	
Average Monthly Flow	10,474 m ³		7.0 L/S or 25% of rated capacity	40% of the rated capacity

The total flow for 2022 was 125,693 m³. The average monthly flow for 2022 was 10,474 m³. The average daily instantaneous peak flow rate was 7.0 L/S which is 25% of the plant's rated capacity.

The highest daily instantaneous peak flow rate was 23.49 L/S (hydrant flushing). This instantaneous flow was 15% under the rated capacity of the plant.

Sodium results tested January 19, 2021	26.0 ug/L
Fluoride results tested February 19, 2021	< 0.020 ug/L
October 2022 running average for THM's was	74.62 ug/L