THE TOWN OF RAINY RIVER MUNICIPAL WATER SYSTEM SUMMARY REPORT 0. Reg. 170/03, Schedule 22

For The Period:

January 1, 2019 to December 31, 2019

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Prepared For:

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Summary Report Rainy River Water System 2018

Drinking Water Works Permit # 296-201 – Dated August 5, 2016

Municipal Drinking Water Licence # 296-101 – Dated August 5, 2016

Permit to Take Water # 1073-83VK8T – Dated August 5, 2016 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 2019 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

Pesticides and PCB

Amended to O. Reg.17/04

Reg. 169/03

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

Reporting, Notification and Corrective Action

| | NON COMPLIANCE WITH REGULATORY REQUIREMENTS | ACTIONS REQUIRED | ACTIONS TAKEN |
|----|--|---|---------------|
| 1. | Where an activity has occurred that could introduce contamination, all parts of the drinking water system were not disinfected in accordance with Schedule B, Condition 2.3 of the Drinking Water Works Permit. | Effective immediately, operators must ensure that the ministry's Watermain Disinfection Procedure (WDP) is adhered to for all new watermain installations. Records must also be maintained in accordance with Section 4.0 of the WDP. Compliance with the WDP will be reassessed during the next inspection. | |
| 2. | | | |
| 3. | | | |

Capacity Assessment

The maximum rated capacity of the Plant is 28.6 L/S. In 2019, the maximum flow of water through the Water Treatment Plant was 30 L/S (i.e. 2,204 m^3 per day) or 8% over the rated capacity.

In 2019 the annual average daily flow was 10.72 L/S (i.e. 554 m^3 per day) or 38% 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 | 14,647 m ³ | 30.0 L/S | 8.90 L/S | 108% of rated capacity |
| February | 13,939 m ³ | 9.5 L/S | 8.13 L/S | 34% of rated capacity |
| March | 16,992 m ³ | 13.95 L/S | 8.82 L/S | 50% of rated capacity |
| April | $13,545 \text{ m}^3$ | 10.08 L/S | 7.91 L/S | 36% of rated capacity |
| May | $13,208 \text{ m}^3$ | 18.10 L/S | 10.96 L/S | 65% of rated capacity |
| June | $14,494 \text{ m}^3$ | 23.3 L/S | 16.15 L/S | 83% of rated capacity |
| July | $16,074 \text{ m}^3$ | 25.76 L/S | 18.34 L/S | 92% of rated capacity |
| August | $16,056 \text{ m}^3$ | 24.59 L/S | 18.00 L/S | 88% of rated capacity |
| September | $12,156 \text{ m}^3$ | 15.15 L/S | 10.67 L/S | 54% of rated capacity |
| October | $11,178 \text{ m}^3$ | 14.42 L/S | 6.90 L/S | 51% of rated capacity |
| November | $10,985 \text{ m}^3$ | 13.71 L/S | 7.03 L/S | 49% of rated capacity |
| December | $12,027 \text{ m}^3$ | 8.84 L/S | 6.86 L/S | 31% of rated capacity |
| Total Flows | 165,301 m ³ | | <u>Yearly Average</u> Instantaneous Peak <u>Flow</u> | |
| Average Monthly Flow | 13,775 m ³ | | 10.72 L/S or 38% of rated capacity | 61% of the rated capacity |

The total flow for 2019 was 165,301 m³. The average monthly flow for 2019 was 472 m³. The average daily instantaneous peak flow rate was 10.72 L/S which is 38% of the plant's rated capacity.

The highest daily instantaneous peak flow rate was 30.0 L/S (distribution break). This instantaneous flow was 8% over the rated capacity of the plant.

Sodium result tested February 19, 2019 18.2 mg/L

Fluoride result tested February 19, 2019 < 0.020 ug/L

October 2019 running average for THM's was 64.65 ug/L