

# 2017 Schedule 22 Annual Summary Report

## Caramat Drinking-Water System

March 2018

Prepared by the



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

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## ***Section 1: Introduction***

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This report is a summary of water quality information for the Caramat Drinking-Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1<sup>st</sup> to December 31<sup>st</sup> 2017. The Caramat Drinking-Water System is categorized as a Small Municipal Residential Drinking-Water System.

This report is prepared by The Ontario Clean Water Agency on behalf of the Corporation of the Municipality of Greenstone – Caramat Ward. A copy of the Summary Report is to be provided to the members of the municipal council by March 31<sup>st</sup> 2018.

## ***Section 2: What Does This Report Contain?***

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"The report must,

- (a) list the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and,
- (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure."

- O. Reg. 170/03 s. 22 (2)

"The report must also include the following information for the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement."

-O. Reg. 170/03 s. 22 (3)

### **Section 3: Daily Flow Rates**

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In accordance with the *Municipal Drinking Water Licence 225-101 Schedule C: System – Specific Conditions 1.0 Performance Limits*, the Caramat drinking water system shall not be operated to exceed the rated capacity for maximum flow rate from the treatment subsystem to the distribution system of  $75.2 \text{ m}^3 / \text{day}$ .

The drinking water system may be operated temporarily at a rate above the rated capacity where necessary for:

- (i) the purposes of fighting a large fire or,
- (ii) the maintenance of the drinking-water system

In 2017, the average monthly raw flow rate was  $531.49 \text{ m}^3$ ; the average raw daily flow rate was  $17.44 \text{ m}^3$ , with a maximum raw daily flow rate of  $49.20 \text{ m}^3$ .

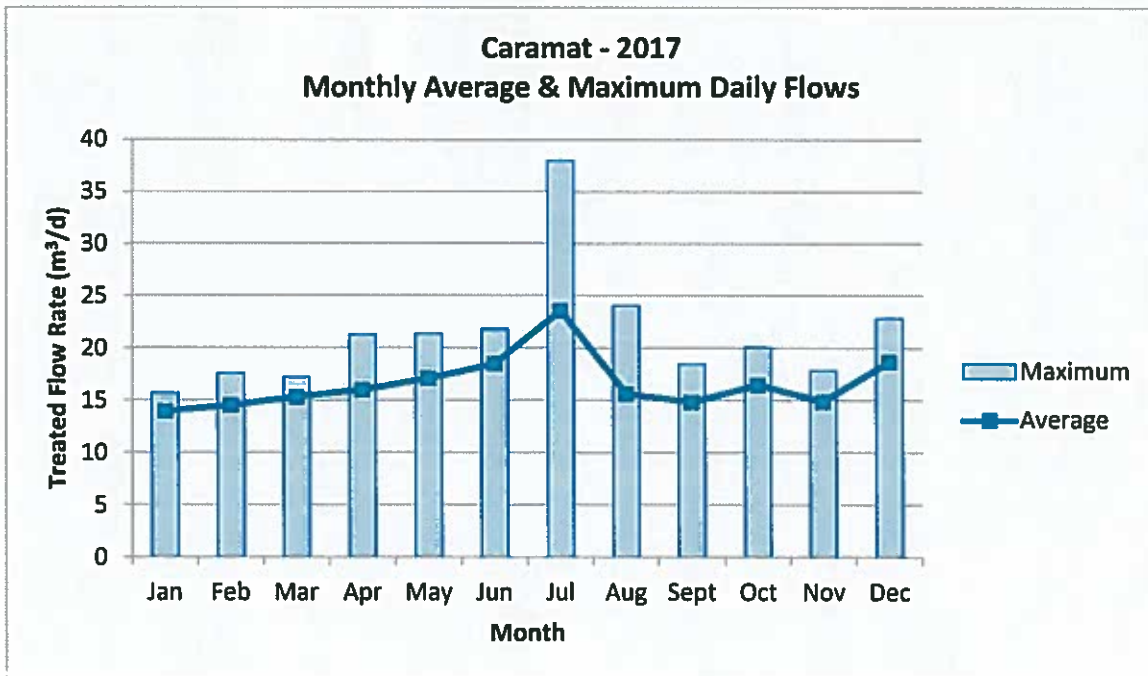
In 2017, the average monthly treated flow rate was  $506.85 \text{ m}^3$ ; the average daily treated flow was  $16.64 \text{ m}^3$  and the maximum daily treated flow for the year was  $38.00 \text{ m}^3$ ; this represents 50.5% of the allowable daily volume.

A summary of raw and treated flows, including maximum raw flow into the treatment system as well as treated average, maximum and total flow rates are included in the tables below.

The quantity of raw water supplied during the reporting period did not exceed the terms and conditions of the *Permit to Take Water* nor did the treated flows directed to the distribution system exceed the rated capacity for this system.

### Monthly Raw & Treated Flow Rates for 2017

Month	Average Daily Raw Flow Rate (m <sup>3</sup> /d)	Maximum Daily Raw Flow Rate (m <sup>3</sup> /d)	Average Daily Treated Flow Rate (m <sup>3</sup> /d)	Maximum Daily Treated Flow Rate (m <sup>3</sup> /d)	Total Monthly Treated Flow Rate (m <sup>3</sup> /month)
January	13.92	16.10	13.97	15.70	433.00
February	14.53	18.30	14.54	17.60	407.05
March	15.37	20.00	15.33	17.20	475.10
April	15.73	19.40	16.01	21.30	480.20
May	17.12	21.20	17.10	21.40	530.10
June	18.80	29.00	18.51	21.80	555.30
July	24.64	49.20	23.61	38.00	732.00
August	17.33	22.60	15.64	24.10	484.70
September	16.48	22.60	14.86	18.50	445.90
October	18.69	22.80	16.50	20.10	511.60
November	16.67	19.80	14.90	17.90	447.10
December	20.05	22.60	18.71	22.90	580.10
2017 Total Treated Flows (m <sup>3</sup> )				6082.15	



## Section 4: System Failures and Correction

The Ministry of the Environment conducted an *announced* inspection of the Caramat Drinking-Water System on September 21, 2017. There were three non-compliance items identified in the inspection report. The final 2017 inspection rating record for the Caramat Drinking-Water System was 94.07%.

Item	Non-Compliance Identified	Compliance Date	Action Being Taken to Address item	Status
1	<p><b>All haloacetic acid water quality monitoring requirements prescribed by legislation are not being conducted within the required frequency and at the required location.</b></p> <p>In accordance with O. Reg. 170/03, Schedule 6-1.1 (4), when a sample is required to be collected in each calendar quarter, samples must be taken at least 60 days and not more than 120 days after the sample was last taken. HAAs were sampled and tested on February 6, April 3 and July 4, 2017. The period of time between the February 6, 2017 and April 3, 2017 samples is 56 days.</p> <p>Sampling for HAAs is being conducted at the same location as where THMs are being collected.</p> <p><b>Action(s) Required:</b> The operating authority must take care to ensure that sampling is conducted within the legislated timeframes of Schedule 6-1.1 of Ontario Regulation 170/03. Samples must be collected from the distribution system at a location that is likely to have an elevated potential for the formation of haloacetic acids.</p>	Not Specified	Scheduled work orders to be issued and reminders go out to manager, PCT and operators to ensure samples are conducted on time. This will also include location for which period of time in the year.	Complete
2	<p><b>All trihalomethane water quality monitoring requirements prescribed by legislation were not conducted within the required frequency and at the required location.</b></p> <p>For this review period, the May 2017 sample was not collected.</p> <p><b>Action(s) Required:</b> Care must be taken to ensure that monitoring for THMs is conducted on a monthly basis, as required by Municipal Drinking Water Licence no. 225-101.</p>	Not Specified	Scheduled work orders to be issued and reminders go out to manager, PCT and operators to ensure samples are conducted on time.	Complete
3	<p><b>All water quality monitoring requirements imposed by the Municipal Drinking Water Licence and/or Drinking Water Works Permit were not being met.</b></p> <p>The monthly THM samples were collected as prescribed during the inspection period with the exception of May 2017, whereby the sample was not collected.</p> <p><b>Action(s) Required:</b> The operating authority must take care to ensure that all water quality monitoring prescribed by Municipal Drinking Water Licence no. 225-101 is conducted as required.</p>	Not Specified	Scheduled work orders to be issued and reminders go out to manager, PCT and operators to ensure samples are conducted on time.	Complete

## Section 5: Conclusion

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In the reporting year of 2017, there was one adverse water quality incident (AWQI) report filed as summarized in the below table.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
30-Aug-17	Other Observation – loss of data from distribution Cl <sub>2</sub> analyzer on August 25 <sup>th</sup> from 17:31 – 20:08	-	-	OCWA Service Desk contacted to retrieve missing data. Missing data could not be retrieved. No corrective actions given by MOH/MOECC	30-Aug-17

The treated water samples at the plant and in the distribution system were shown to be free of bacteriological contaminants and met the Ontario Drinking Water Quality Standards.

For the operating year of 2017, the Caramat Drinking-Water System was able to meet the demand of water use within the town without exceeding the Municipal Drinking Water Licence and Permit to Take Water.