

February 6, 2017

Mayor Andy Major and Council
The Corporation of the Township of Manitouwadge
1 Mississauga Drive
Manitouwadge, Ontario
P0T 2C0

Re: 2015 Annual Summary Report for the Manitouwadge Drinking-Water System

Ontario's Drinking-Water Systems Regulation (O.Reg.170/03), made under the *Safe Drinking Water Act, 2002*, requires that the owner of a drinking water system prepare an annual summary for municipalities on the operation of the system and the quality of its water.

The annual summary must cover the period of January 1st to December 31st in a year and must *be prepared not later than March 31st* of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2015 Annual Summary for the Manitouwadge Drinking-Water System.

Pursuant to the legislative requirements, *Schedule 22 Summary Reports for Municipalities*, the annual summary 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)

In addition, Section 12 (1) - 4 - gives the direction that a copy of the annual summary for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The reports should be made available at the office of the municipality, or at a location that is accessible to the users of the water system.

The report was not completed as required and was identified in the annual inspection of the drinking water system by the MOE. This report was prepared by the Ontario Clean Water Agency on behalf of the Township of Manitowadge and is based on information kept on record by the Township at the Manitowadge Drinking-Water System. The report covers the period January 1st through to December 31st 2015.

Yours truly,

A handwritten signature in black ink, appearing to read 'B. McMahon', with a long horizontal stroke extending to the right.

Bradley McMahon
Senior Operations Manager
Northwestern Ontario Region

Copy to: Steve Butlin – Public Works Superintendent
Operations Staff –Manitowadge WS

2015 Schedule 22 Annual Summary Report

Manitouwadge Drinking-Water System

January 2017

Prepared by the



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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SECTION 1: INTRODUCTION

This report is a summary of water quality information for the Manitouwadge Drinking-Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1st to December 31st 2015. The Manitouwadge Drinking-Water System is categorized as a Large Municipal Residential Drinking Water System.

This report is prepared by The Ontario Clean Water Agency on behalf of the Corporation of the Township of Manitouwadge. A copy of the Summary Report was to be provided to the members of the municipal council by March 31st 2016.

SECTION 2: WHAT DOES THE REPORT CONTAIN

"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."

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"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:

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

SECTION 3: DAILY FLOW RATES

In accordance with the *Municipal Drinking Water Licence 229-101 Schedule C: System – Specific Conditions 1.0 Performance Limits*, the Manitowadge 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 **10472 m³ / 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 2015, the average monthly raw flow rate was 25157.19 m³; the average raw daily flow rate was 827.08 m³, with a maximum raw daily flow rate of 1547.60 m³.

In 2015, the average monthly treated flow rate was 23875.99 m³; the average daily treated flow was 784.96 m³ and the maximum daily treated flow for the year was 1403.90 m³; this represents 13.4 % of the allowable daily volume.

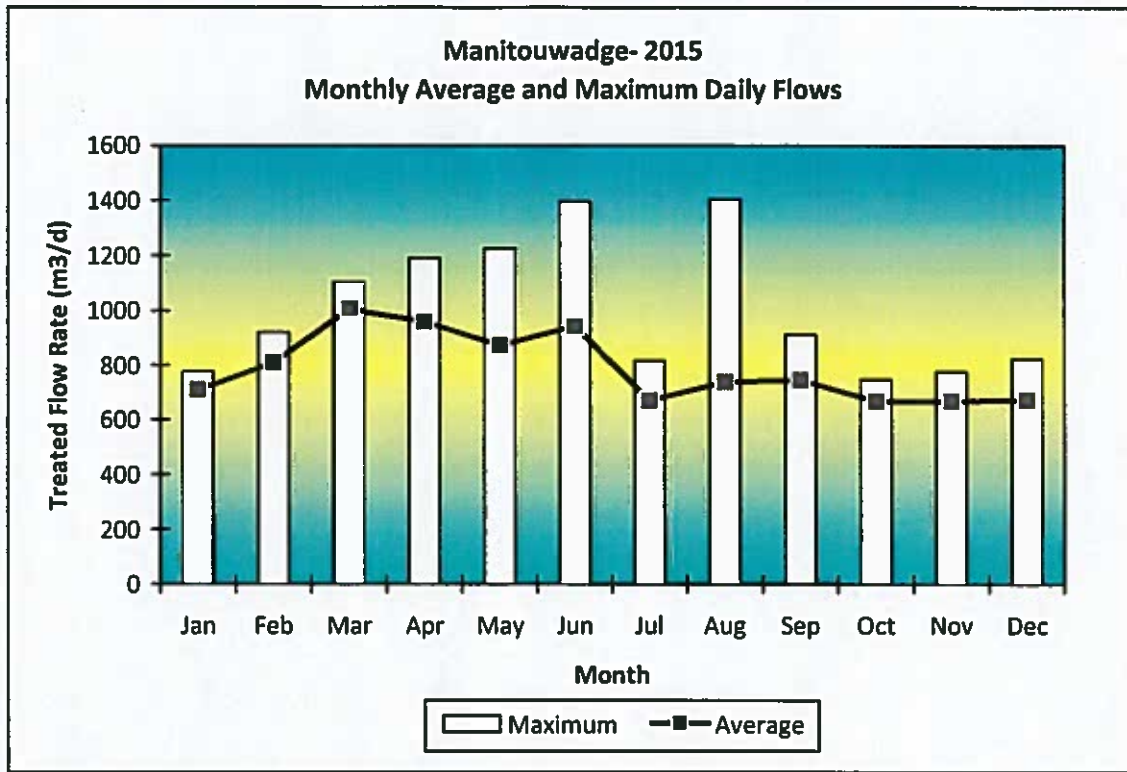
A summary of raw and treated flows, including maximum raw flow into the treatment system as well as treated average, maximum and total flow rates are included in the tables below.

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 2015

Month	Average Daily Raw Flow Rate (m³/d)	Maximum Daily Raw Flow Rate (m³/d)	Average Daily Treated Flow Rate (m³/d)	Maximum Daily Treated Flow Rate (m³/d)	Total Monthly Treated Flow Rate (m³/ month)
January	738.59	822.44	709.08	776.11	21981.45
February	843.13	980.04	807.37	918.64	21798.86
March	1058.93	1211.73	1003.04	1103.33	31094.09
April	1014.62	1240.91	958.24	1190.99	28747.19
May	919.13	1249.52	871.70	1225.53	27022.82
June	998.79	1463.44	941.57	1394.74	28247.14
July	712.44	938.16	670.15	814.17	20774.63
August	791.30	1547.60	738.47	1403.90	22892.62
September	793.50	1067.73	744.36	911.65	22330.77
October	695.59	853.35	668.10	747.01	20710.99
November	688.19	806.96	667.55	774.49	20026.35
December	703.36	903.13	673.77	823.12	20886.95
	2015 Total Treated Flows (m³)			286511.86	

Comparison of Treated Monthly Average and Maximum Treated Flows for 2015



SECTION 4: SYSTEM FAILURES AND CORRECTIONS

The Ministry of Environment did not conduct an inspection of the Manitouwadge Drinking-Water System on.

The last inspection was in August of 2014.

There were two actions from the report. Both were tied to the sampling time between the quarterly sampling requirements for THM and Nitrates and Nitrites.

<u>Item</u>	<u>Non-Compliance Identified</u>	<u>Compliance Date</u>	<u>Action Being Taken to Address Item</u>	<u>Status</u>
1	All trihalomethanes water quality monitoring requirements prescribed by legislation were not conducted within the required frequency. As part of the requirements of Schedule 13, treated water trihalomethane sampling and testing is to be performed every three months. Four samples were collected and analyzed during 2013 and	Not specified	Samples required to be collected every three months will be collected as specified	Complete

Item	Non-Compliance Identified	Compliance Date	Action Being Taken to Address Item	Status
	<p>three to date during 2014. The results for the four most recent samples tested prior to this inspection were 36.4 µg/L, 29.6 µg/L, 24.8 µg/L and 30.2 µg/L, as recorded in the Ministry's database.</p> <p>It is noted that, based on records reviewed, the sampling frequency was not carried out each three months. Despite there being the requisite number of samples collected during 2013, for example, the last sample was collected September 23, 2013, approximately a week prior to the last three month period. In addition it is apparent that two samples have been collected in in the first three months of 2014 thus far (January 7 and March 24).</p> <p>Although it was observed that the results of trihalomethane testing to date demonstrates consistency in that all were well below the maximum acceptable concentration, care must be taken on the part of the Township to ensure that at least one distribution sample is taken and tested every three months.</p> <p>Action(s) Required: The Township must exercise care to ensure that at least one distribution sample is taken and tested for trihalomethanes every three months.</p>			
2	<p>All nitrate/nitrite water quality monitoring requirements prescribed by legislation were not conducted within the required frequency for the DWS.</p> <p>As part of the requirements of Schedule 13, treated water nitrates and nitrites are required to be evaluated every three months. Four samples were collected and analyzed during 2013 and three to date during 2014. The nitrate results for the four most recent samples tested prior to this inspection were 1.43 mg/L, 1.44 mg/L, 1.47 mg/L and 1.44 mg/L. (In all cases, nitrite results were below the detectable limit).</p> <p>It is noted that, based on records reviewed, the sampling frequency was not carried out each three months. Despite there being the requisite number of samples collected during 2013, for example, the last sample was collected September 23, 2013, approximately a week prior to the last three month period. In addition it is apparent that two samples have been collected in in the first three months of 2014 thus far (January 7 and March 24).</p> <p>Although it was observed that the results of nitrate and nitrite testing to date demonstrated consistency in that they were all well below the maximum acceptable concentration for both parameters, care must be taken on the part of the Township to ensure that at least one distribution sample is taken and tested every three months.</p> <p>Action(s) Required: The Township must exercise care to ensure that at least one water sample is taken and tested for nitrates and nitrites every three months.</p>	Not specified	Samples required to be collected every three months will be collected as specified	Complete

SECTION 5: CONCLUSION

In the reporting year of 2015, there were no adverse water quality incident (AWQI) reports filed.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date

For the operating year of 2015, the Manitowadge 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.