

Moose Creek Drinking Water System
O. Reg. 170/03 Schedule 22 - Summary Report for Municipalities

This report is a summary of water quality information for Moose Creek's Drinking Water System, published in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation (O. Reg. 170/03) for the reporting period of January 1, 2017 to December 31, 2017. Moose Creek's Drinking Water System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Township of North Stormont.

Who gets a copy of the Report:

- In the case of a drinking-water system owned by a municipality, the members of the municipal council;
- In the case of a drinking-water system owned by a municipal service board established under section 195 of the Municipal Act, 2001, the members of the municipal service board; or
- In the case of a drinking-water system owned by a corporation, the board of directors of the corporation.

What must the Report contain?

The report must:

- (a) List the requirements of the Act, the regulations, the system's approval and any order that the system failed to meet at any time during the period covered by the report and specify the duration of the failure; and
- (b) for each failure referred to in clause (a), describe the measures that were taken to correct the failure.

The following table lists the requirements that the system failed to meet and the measures taken to correct the failure:

Drinking Water Legislation	List the requirement(s) the system failed to meet	Specify the duration of the failure (i.e. date(s))	Describe the measures taken to correct the failure	Status (complete or outstanding)
Safe Drinking Water Act	n/a			
Ontario Regulations	n/a			
Permit to Take Water # 4000-9YGLJP	n/a			
Drinking Water Works Permit # 182-203	n/a			
Municipal Drinking Water Licence # 182-103	Section 2.1.1 - continuous flow measurement and recording for the flow rate and daily volume of treated water that flows to the distribution system.	08/02/2017 - 08/09/2017	Flow meter was operational. Communication had to be restored between the plant and SCADA.	Complete
Provincial Officer's Order	n/a			

What else must the Report contain?

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

- a) 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 and daily instantaneous peak flow rates.
- b) A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval.

Attached please find the 2017 Performance Assessment Report and 2017 Annual Records of Water Taking for Moose Creek's Drinking Water System, which contain all required flow information.

When does the Report get submitted?

If a report is prepared for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31, 2018.

ONTARIO CLEAN WATER AGENCY WATER PLANT PERFORMANCE ASSESSMENT REPORT

MUNICIPALITY: TOWNSHIP OF NORTH STORMONT
 PROJECT: MOOSE CREEK WTP
 ORG. NUM.: 6608
 WORKS NUM.: 220008033
 DESCRIPTION: 3 WELL PUMPING SYSTEM C/W ELEVATED STORAGE
DISINFECTION IS WITH SODIUM HYPOCHLORITE

YEAR: 2017
 WATER SOURCE: GROUNDWATER
 DESIGN CAPACITY: 896 m³/d

MONTH	SYSTEM FLOWS (TREATED)			TREATED		DISTRIBUTION		BACTI (INDICATE NO. OF SAMPLES)				RAW WATER	
	TOTAL FLOW	AVG DAY FLOW	MAX DAY FLOW	MIN FREE CL ₂ RESID.	MAX FREE CL ₂ RESID.	MIN FREE CL ₂ RESID.	MAX FREE CL ₂ RESID.	<i>E.coli</i> , TC, HPC					
	(m ³)	(m ³)	(m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	Safe		Adverse		<i>E. coli</i>	
								TREAT	DIST	TREAT	DIST	ABSENT	PRESENT
JAN	4,313	139	226	1.25	4.37	0.63	1.90	15	25	0	0	15	0
FEB	4,272	153	383	1.20	3.28	0.62	1.77	12	20	0	0	12	0
MAR	4,002	129	188	1.57	2.65	0.44	1.62	12	20	0	0	12	0
APR	4,154	138	283	1.12	2.54	0.43	1.62	12	20	0	0	12	0
MAY	4,906	158	300	1.68	3.02	0.52	1.73	15	25	0	0	15	0
JUN	5,002	167	263	1.51	2.91	0.63	1.70	12	20	0	0	12	0
JUL	5,317	172	212	1.65	2.90	0.46	1.41	15	25	0	0	15	0
AUG	5,522	178	283	0.61	2.60	0.50	1.85	12	20	0	0	12	0
SEP	5,255	175	425	1.10	3.69	0.56	1.36	12	20	0	0	12	0
OCT	4,963	160	396	1.23	2.85	0.54	1.79	15	25	0	0	15	0
NOV	4,141	138	196	1.18	2.54	0.46	1.23	12	20	0	0	12	0
DEC	4,485	145	234	1.23	2.78	0.45	1.78	12	20	0	0	12	0
TOTAL	56,332							156	260	0	0	156	0
AVG		154											
MIN				0.61		0.43							
MAX			425		4.37		1.90						
CRITERIA			896	CT=0.32		0.05	4.00						

COMMENTS: MAX. DAY FLOWS INCLUDE FIRE HYDRANT FLUSHING (SPRING & FALL)

Facility Flow Summary

Drinking-Water System Number: 220008033
 Drinking-Water System Name: MOOSE CREEK DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 182-103
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Well #1
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 4000-9YGLJP

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	2699.00	87.06	142.00	5.29
Feb	2664.00	95.14	239.00	5.34
Mar	2523.00	81.39	124.00	5.38
Apr	2614.00	87.13	181.00	5.44
May	3071.00	99.06	189.00	5.30
Jun	3104.00	103.47	162.00	5.16
Jul	3324.00	107.23	135.00	5.17
Aug	3506.00	113.10	175.00	5.13
Sep	3283.00	109.43	268.00	5.13
Oct	3097.00	99.90	249.00	5.10
Nov	2604.00	86.80	122.00	5.17
Dec	2808.00	90.58	141.00	5.15
Total	35297.00			
Avg	2941.42	96.69		
Max	3506.00		268.00	5.44
Criteria			650.00	7.43

Facility Flow Summary

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Raw Water

Raw Water (Source Name) Raw Well #2
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 4000-9YGLJP

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	871.00	28.10	70.00	3.12
Feb	535.00	19.11	149.00	3.10
Mar	676.00	21.81	60.00	3.10
Apr	1118.00	37.27	111.00	3.12
May	853.00	27.52	82.00	3.11
Jun	879.00	29.30	85.00	3.06
Jul	920.00	29.68	81.00	2.99
Aug	1464.00	47.23	108.00	3.01
Sep	1172.00	39.07	164.00	2.99
Oct	506.00	16.32	68.00	2.97
Nov	617.00	20.57	71.00	2.89
Dec	695.00	22.42	66.00	2.90
Total	10306.00			
Avg	858.83	28.20		
Max	1464.00		164.00	3.12
Criteria			298.00	3.45

Facility Flow Summary

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 Drinking-Water System Name: MOOSE CREEK DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Large Municipal Residential
 Municipal Drinking Water License: 182-103
 Period being reported: January 1 - December 31, 2017

Raw Water

Raw Water (Source Name) Raw Well #3
 Source Type: Drilled
 Drinking Water Permit to Take Water No: 4000-9YGLJP

Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	752.00	24.26	87.00	3.39
Feb	1092.00	39.00	124.00	3.38
Mar	819.00	26.42	73.00	3.39
Apr	462.00	15.40	64.00	3.37
May	1014.00	32.71	114.00	3.38
Jun	1049.00	34.97	96.00	3.36
Jul	1108.00	35.74	79.00	3.34
Aug	693.00	22.35	79.00	3.34
Sep	843.00	28.10	81.00	3.34
Oct	1411.00	45.52	158.00	3.33
Nov	946.00	31.53	70.00	3.35
Dec	1005.00	32.42	89.00	3.35
Total	11194.00			
Avg	932.83	30.70		
Max	1411.00		158.00	3.39
Criteria			298.00	3.45

Drinking Water Inspector
Ministry of Environment and Climate Change
Brenda.Beaudoin@ontario.ca

August 24, 2017

Re: Moose Creek DWS - Notification of Non-Compliance with MDWL Requirement

This notification is being submitted in accordance with the terms and conditions of the SDWA and Municipal Drinking Water License # 182-103. This written notice confirms the verbal notification provided by OCWA on August 10, 2017.

Communication between the treated flow meter at Moose Creek's Water Treatment Facility and OCWA's SCADA system failed at approximately 10:20 on August 2, 2017. The trending was restored at 11:00 on August 9, 2017. The flow meter itself was operational during this time.

Section 2.1.1 under Schedule C of Moose Creek's MDWL requires that "continuous flow measurement and recording shall be undertaken for: the flow rate and daily volume of treated water that flows from the treatment subsystem to the distribution system".

It should be noted that there was no interruption in the raw flow trending from the wells during the time the treated flow trending was unavailable.

If you have any questions or concerns, please contact me at (613) 448-3098.

Sincerely,



Dawn Crump
Process & Compliance Technician
Seaway Valley Cluster

c.c. Stephane Barbarie, Senior Operations Manager, OCWA
Marc Chenier, C.A.O./Clerk, Township of North Stormont