

SUMMARY REPORTS FOR MUNICIPALITIES

Report

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

This report was prepared by The Ontario Clean Water Agency on behalf of the Township of Minden Hills

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	No failures to report			
Ontario Regulations (eg. O.Reg 170/03, O.Reg 128/04, O.Reg 903)	Chlorine - TW	09-Aug-2017	Increased chlorine dose, flushed and sampled chlorine residual and bacti in distribution. Based on TW flow rate, CT was met.	Complete

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)
MDWL # 246-102	No failures to report			
DWWP # 246-202	No failures to report			
Permit to Take Water # 3450-7HEQFN	No failures to report			
Provincial Officer's Order	No failures to report			

MOECC compliance inspections for 2016-17 and 2017-18 did not identify any issues.

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:

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 and daily instantaneous peak flow rates.
2. 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, the Facility Flow Summary Reports for Wells 1 and 2, and a summary of Raw Water Flow Rates for the Lutterworth Pines DWS. These summaries contain all required flow information.

The maximum daily volume Lutterworth Pines DWS is permitted to supply is 120.4m³/day. The maximum daily volume supplied in 2017 was 26.08m³/day and the average volume per day was 10.70m³/day.

The Ontario Clean Water Agency aims to strictly adhere to operational and compliance limits, however certain operational circumstances may cause results to be temporarily outside of the limits. Limits that are momentarily surpassed as a result of pump start-ups, power outages/generator tests, pump rotation, calibrations, alarm verification, etc are a normal part of operations and do not indicate a true exceedance. A true exceedance will be noted and documented within the report.

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.

End

Attachments

Ontario Clean Water Agency
Performance Assessment Report Water

From: 01/01/2017 to 31/12/2017

Facility: [5999] LUTTERWORTH PINES DRINKING WATER SYSTEM

Works: [260091936]

	01/2017	02/2017	03/2017	04/2017	05/2017	06/2017	07/2017	08/2017	09/2017	10/2017	11/2017	12/2017	<--Total-->	<--Avg-->	<--Max-->	<--Min-->	<--Criteria-->
Flows:																	
Raw Flow: Monthly Total - RW1 (m³)	212.40	128.78	214.98	166.89	200.90	137.06	164.13	201.79	58.87	153.23	162.12	131.77	1932.92				
Raw Flow: Monthly Total - RW2 (m³)	167.42	206.97	176.31	180.92	187.42	229.71	188.14	134.57	259.55	167.25	151.70	271.00	2320.96				
Raw Flow: Monthly Avg - RW1 (m³/d)	6.85	4.60	6.93	5.56	6.48	4.57	5.29	6.51	1.96	4.94	5.40	4.25		5.28			
Raw Flow: Monthly Avg - RW2 (m³/d)	5.40	7.39	5.69	6.03	6.05	7.66	6.07	4.34	8.65	5.40	5.06	8.74		6.37			
Raw Flow: Monthly Max - RW1 (m³/d)	19.02	14.25	16.44	15.15	22.22	13.23	15.64	15.77	19.00	11.75	14.99	13.93			22.22		120.40
Raw Flow: Monthly Max - RW2 (m³/d)	16.17	14.77	13.49	13.59	14.59	18.64	13.65	11.10	14.00	13.88	12.48	25.82			25.82		120.40
Treated Flow: Monthly Total - TW (m³)	330.62	308.62	372.72	325.30	368.18	335.12	326.64	298.09	286.73	285.00	289.90	380.08	3907.00				
Treated Flow: Monthly Avg - TW (m³/d)	10.67	11.02	12.02	10.84	11.88	11.17	10.54	9.62	9.56	9.19	9.66	12.26		10.70			
Treated Flow: Monthly Max - TW (m³/d)	18.48	14.42	15.80	14.78	21.98	15.32	15.19	15.25	18.71	13.00	14.37	26.08			26.08		120.40
Turbidity:																	
Raw: Max Turbidity - RW1 (NTU)	0.17	0.15	0.18	0.19	0.19	0.21	0.20	0.20	0.18	0.22	0.19	0.21			0.22		
Raw: Max Turbidity - RW2 (NTU)	0.14	0.20	0.25	0.24	0.24	0.28	0.28	0.19	0.22	0.24	0.23	0.26			0.28		
Chemical Parameters:																	
Treated: Max Nitrite - TW (mg/L)	< 0.003			< 0.003			< 0.003			< 0.003					< 0.003		1
Treated: Max Nitrate - TW (mg/L)	0.066			0.035			0.053			0.037					0.066		10
Treated: Uranium - TW (ug/L)	1.46	1.6	5.53	4.84	0.014	0.011	< 0.027	0.004	0.005	0.004	0.013	0.236			5.53		20
Distribution: Max THM - DW (µg/l)	13			6.4			8.2			7.8					13		100
Chlorine Residuals:																	
Treated: Min Free Cl2 Resid - TW (mg/L)	0.80	0.37	0.68	0.00	0.00	0.78	1.01	0.38	1.43	1.37	1.20	0.09				0.00	0.50
Treated: Max Free Cl2 Resid - TW (mg/L)	3.51	5.00	3.51	3.70	5.00	4.19	4.86	5.00	4.10	2.51	2.72	2.82			5.00		
Dist: Min Free Cl2 Resid - DW (mg/L)	1.24	1.01	1.20	1.31	1.36	1.44	1.34	1.09	1.51	1.23	1.43	0.72				0.72	0.05
Dist: Max Free Cl2 Resid - DW (mg/L)	1.64	1.84	1.94	2.04	1.96	1.91	1.84	1.81	1.88	1.73	1.73	1.67			2.04		
Bacti Samples Collected:																	
Raw Bacti: # of samples - RW1	1	1	1	1	1	1	1	1	1	1	1	1	12				
Raw Bacti: # of samples - RW2	1	1	1	1	1	1	1	1	1	1	1	1	12				
Dist Bacti: # of samples - DW	3	2	2	2	2	2	3	3	2	2	2	3	28				
Dist Bacti: # of TC exceedances - DW	0	0	0	0	0	0	0	0	0	0	0	0	0				0
Dist Bacti: # of EC exceedances - DW	0	0	0	0	0	0	0	0	0	0	0	0	0				0

Facility Flow Summary

Drinking-Water System Number: 260091936
 Drinking-Water System Name: LUTTERWORTH PINES DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Small Municipal Residential
 Municipal Drinking Water License: 246-102
 Period being reported: 01/2017 12/2017

Raw Water				
Raw Water (Source Name)		RW 1		
Source Type:		Drilled		
Drinking Water Permit to Take Water No:		3450-7HEQFN		
Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	212.40	6.85	19.02	1.14
Feb	128.78	4.60	14.25	1.16
Mar	214.98	6.93	16.44	1.18
Apr	166.89	5.56	15.15	1.11
May	200.90	6.48	22.22	1.66
Jun	137.06	4.57	13.23	2.05
Jul	164.13	5.29	15.64	1.04
Aug	201.79	6.51	15.77	1.02
Sep	58.87	1.96	19.00	1.01
Oct	153.11	4.94	12.00	0.99
Nov	162.12	5.40	14.99	1.00
Dec	131.77	4.25	13.93	0.99
Total	1932.80			
Avg	161.07			
Max	214.98		22.22	2.05
Criteria			120.40	1.51

Note: Calibrations completed June 7, 2017 and caused high peak flow reading of 2.05L/sec.

Facility Flow Summary

Drinking-Water System Number: 260091936
 Drinking-Water System Name: LUTTERWORTH PINES DRINKING WATER SYSTEM
 Drinking-Water System Owner: Title Holder: Municipality
 Drinking-Water System Category: Small Municipal Residential
 Municipal Drinking Water License: 246-102
 Period being reported: 01/2017 12/2017

Raw Water				
Raw Water (Source Name)		RW 2		
Source Type:		Drilled		
Drinking Water Permit to Take Water No:		3450-7HEQFN		
Month	Monthly Flow Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/sec)
Jan	167.42	5.40	16.17	1.38
Feb	206.97	7.39	14.77	1.38
Mar	176.31	5.69	13.49	1.38
Apr	180.92	6.03	13.59	1.39
May	187.42	6.05	14.59	1.39
Jun	229.71	7.66	18.64	1.38
Jul	188.14	6.07	13.65	1.38
Aug	134.57	4.34	11.10	1.36
Sep	259.55	8.65	14.00	1.36
Oct	164.00	5.29	14.00	1.36
Nov	151.70	5.06	12.48	1.37
Dec	271.00	8.74	25.82	1.38
Total	2317.71			
Avg	193.14			
Max	271.00		25.82	1.39
Criteria			120.40	1.98

**Ontario Clean Water Agency
Raw Water Flow Rates Wells 1 and 2**

From: 01/04/2017 to 31/12/2017

Facility Org Number: 5999
 Facility Works Number: 260091936
 Facility Name: LUTTERWORTH PINES DRINKING WATER SYSTEM
 Facility Owner: Municipality: Township of Minden Hills

	RW1 / Flow Rate - l/s	RW1 / Flow Rate - l/s	RW2 / Flow Rate - l/s	RW2 / Flow Rate - l/s
	OL Month.Max	OL Month.Mean	OL Month.Max	OL Month.Mean
01/2017	1.14	0.08	1.38	0.06
02/2017	1.16	0.05	1.38	0.08
03/2017	1.18	0.08	1.38	0.06
04/2017	1.11	0.06	1.39	0.07
05/2017	1.66	0.08	1.39	0.07
06/2017	2.05	0.05	1.38	0.04
07/2017	1.04	0.06	1.38	0.07
08/2017	1.02	0.03	1.36	0.03
09/2017	1.01	0.02	1.36	0.10
10/2017	1.00	0.05	1.37	0.02
11/2017	1.00	0.06	1.37	0.05
12/2017	0.99	0.05	1.38	0.10
Avg		0.06		0.06
Max	2.05		1.39	