SUMMARY REPORT

ONTARIO REGULATION 170/03 SCHEDULE 22

ERINDRINKING WATER SYSTEM

FOR THE PERIOD: JANUARY 1, 2019 – DECEMBER 31, 2019

Prepared for the Town of Erin by the Ontario Clean Water Agency





Period from: JANUARY 01, 2019 - DECEMBER 31, 2019

DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

DRINKING-WATER SYSTEM NAME:	ERIN DRINKING WATER SYSTEM
DRINKING-WATER SYSTEM NUMBER:	220000013
DRINKING-WATER SYSTEM CATEGORY:	LARGE MUNICIPAL RESIDENTIAL
DRINKING-WATER WORKS PERMIT #:	102-201, Issue #3 – December 14, 2018
MUNICIPAL DRINKING WATER LICENCE #:	102-101, Issue #2 - November 23, 2015
PERMIT TO TAKE WATER #:	8112-9CPNNW

REPORT:

This report is a summary of water quality information for the Erin Water Supply, published in accordance with Schedule 22 of Ontario's Drinking-Water System Regulation 170/03 for the reporting period of **January 1, 2019 to December 31, 2019**.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Erin.

Issues of Non-Compliance

The following outlines any instances when the DWS failed to meet the requirements of the Act, Regulations, System Approval(s) and any Order during this reporting period and the measures taken to correct each failure.

There were no instances of non-compliance this reporting year.

The Erin Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on November 5, 2019.

Please refer to the Section 11 Annual Report for the Erin Drinking Water System for information regarding Adverse Water Quality Incident(s) which may have occurred during the reporting period.

Period from: JANUARY 01, 2019 - DECEMBER 31, 2019

DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

SYSTEM PERFORMANCE:

The following tables list the quantities and flow rates of the water supplied during the reporting period covered by this report, including each raw water well and the treated water system. It includes the monthly average, maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval.

Table 1: Erin DWS – Maximum Allowable Volume and Flow Rate, and Rated Capacity						
Erin Well Supply	Well E7	Well E8	Treated E7	Treated E8		
Design Capacity (m³/day)	2160.00	1968.00	2592.00	2362.00		
Approved Maximum Flow Rate (L/min)	1800.00	1640.00	-	-		
Average Day Flow (m³/day)	335.77	339.49	339.10	340.17		
Maximum Day Flow (m³/day)	1107.18	829.93	1130.84	842.20		
% Average Day Flow/Design Capacity	15.54	17.25	13.08	14.40		
% Maximum Day Flow/Design Capacity	51.26	42.17	43.63	32.66		
Average Peak Flow Rate (L/min)	1466.98	903.59	1	-		
Maximum Peak Flow Rate (L/min)	1588.80	968.40	ı	-		
% Average Peak Flow Rate/Approved	81.50	55.10	-	-		
% Maximum Peak Flow Rate/Approved	88.27	59.05	-	-		

A review of flow information for the period of January 1, 2019 to December 31, 2019 indicates that:

- The maximum daily volume specified in the PTTW was not exceeded on any well.
- The drinking water system did not exceed the rated capacity for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system as specified in the MDWL.

Table 2: Facility Flow Summary for Treated Water E7							
Treated							
Monthly Flow Total (m³/month)		Daily Flow Average (m³/day)	Daily Flow Maximum (m³/day)	Max Percent Rated Capacity (%)			
January	10169.76	328.06	615.25	23.74			
February	February 10368.14		878.64	33.90			
March	March 9257.49		591.65	22.83			
April	April 8618.54		287.28 597.89				
May	May 8467.20		621.64	23.98			
June	June 9639.92		344.28 794.60				
July	July 16676.41		1130.84	43.63			
August	10358.50	334.15	576.78	22.25			
September	8914.57	297.15	659.95	25.46			

Period from: JANUARY 01, 2019 - DECEMBER 31, 2019

DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

October	10210.81	329.28	620.00	23.92
November	8531.64	294.19	543.75	20.98
December 11542.80		372.35	615.06	23.73
Total	122755.80			
Avg		339.10		
Max			1130.84	43.63

Treated							
Month	Monthly Flow Total (m³/month)	Daily Flow Average (m³/day)	Daily Flow Maximum (m³/day)	Max Percent Rated Capacity (%)			
January	10619.20	342.55	842.20	35.66			
February	8232.64	294.02	683.91	28.95			
March	9912.47	330.42	625.98	26.50			
April	9767.95	325.60	644.40	27.28			
May	12380.63	399.38	761.41	32.24			
June	10555.32	376.98	770.09	32.60			
July	10891.76	351.35	772.42	32.70			
August	14024.39	452.40	757.42	32.07			
September	10758.88	358.63	713.38	30.20			
October	9046.00	291.81	507.93	21.50			
November	8944.64	308.44	514.83	21.80			
December	7668.42	247.37	407.62	17.26			
Total	122802.30						
Avg		340.17					
Max			842.20	35.66			

The following tables outline the detailed flow summary for each Raw Water Well:

Table 4: Facility Flow Summary for Raw Water Source E7								
	Well E7							
Month	Monthly Flow Average (m³/day) Daily Flow Daily Flow Water Taking Limits (%) Daily Flow Water Taking Limits (%) Oaily Flow Water Taking Limits (%)							
January	10033.03	323.65	631.22	29.22	1446.96	29		
February	10279.23	367.12	858.07	39.73	1451.04	27		
March	9190.96	296.48	578.72	26.79	1451.52	27		

Period from: JANUARY 01, 2019 - DECEMBER 31, 2019

DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

April	8534.61	284.49	546.98	25.32	1449.36	28
May	8384.08	270.45	642.83	29.76	1459.92	26
June	9606.54	343.09	750.78	34.76	1588.80	24
July	16421.93	529.74	1107.18	51.26	1456.56	31
August	10298.61	332.21	603.80	27.95	1464.72	30
September	8815.43	293.85	618.42	28.63	1463.76	30
October	10145.44	327.27	579.70	26.84	1454.40	31
November	8434.13	290.83	504.60	23.36	1457.76	29
December	11406.52	367.95	600.84	27.82	1458.96	31
Total	121550.50					343
Avg		335.77			1466.98	
Max			1107.18	51.26	1588.80	

Table 5: Fa	Table 5: Facility Flow Summary for Raw Water Source E8							
	Well E8							
Month	Monthly Flow Total (m³/month)	Daily Flow Average (m³/day)	Daily Flow Maximum (m³/day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking		
January	10602.35	342.01	829.93	42.17	968.40	31		
February	8221.67	293.63	684.27	34.77	947.52	27		
March	9844.79	328.16	623.93	31.70	947.52	30		
April	9721.16	324.04	614.45	31.22	920.00	31		
May	12364.39	398.85	783.26	39.80	914.88	31		
June	10518.66	375.67	768.17	39.03	915.36	28		
July	10846.10	349.87	779.43	39.61	942.72	30		
August	14078.85	454.16	757.42	38.49	916.08	31		
September	10673.16	355.77	693.83	35.26	915.60	30		
October	9050.02	291.94	525.86	26.72	837.36	31		
November	8901.57	306.95	482.02	24.49	809.52	29		
December	7734.28	249.49	419.83	21.33	808.08	31		
Total	122557.00					360		
Avg		339.49			903.59			
Max			829.93	42.17	968.40			