SUMMARY REPORT

ONTARIO REGULATION 170/03 SCHEDULE 22

HILLSBURGH DRINKING 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:	HILLSBURGH DRINKING WATER SYSTEM
DRINKING-WATER SYSTEM NUMBER:	220007285
DRINKING-WATER SYSTEM CATEGORY:	LARGE MUNICIPAL RESIDENTIAL
DRINKING-WATER WORKS PERMIT #:	102-202, Issue #2 – December 1, 2015
MUNICIPAL DRINKING WATER LICENCE #:	102-102, Issue #3 – December 14, 2018
PERMIT TO TAKE WATER #:	6306-8X5KRY (H2), 7740-A9ZNTP (H3)

REPORT:

This report is a summary of water quality information for the Hillsburgh 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.

Non-Compliance Description	Date Non-Compliance Issued	Corrective Action	Date Corrective Action Implemented
During an MECP Inspection, the chemicals utilized at the Hillsburgh Heights Pumphouse were observed. It was found that the supplier of ferric chloride had changed since the last inspection due to the old supplier not selling the chemical in smaller quantities. The newly ordered chemical was found to not be NSF certified as per the MDWL license requirements.	01/09/2020	The previously ordered chemical was disposed of and a new supplier was found that sold NSF certified ferric chloride. The NSF certified chemical was then used as required.	01/10/2020

The Hillsburgh Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on December 3, 2019.

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

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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: Hillsburgh DWS – Maximum Allowable Volume and Flow Rate, and Rated Capacity						
Hillsburgh Well Supply	Well H2	Well H3	Treated H2	Treated H3		
Design Capacity (m³/day)	982.00	655.00	1011.00	654.00		
Approved Maximum Flow Rate (L/min)	682.00	454.00	-	-		
Average Day Flow (m³/day)	64.60	153.46	73.85	154.32		
Maximum Day Flow (m³/day)	508.47	341.64	568.76	263.16		
% Average Day Flow/Design Capacity	6.58	23.43	7.30	23.60		
% Maximum Day Flow/Design Capacity	51.78	75.25	56.26	40.24		
Average Peak Flow Rate (L/min)	576.53	455.78	-	-		
Maximum Peak Flow Rate (L/min)	661.60	1000.00	-	-		
% Average Peak Flow Rate/Approved	84.54	101.39	-	-		
% Maximum Peak Flow Rate/Approved	97.01	220.26	-	-		

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.
- Spikes in Maximum Flow Rate are due to instantaneous pump starts.

Table 2: Facility Flow Summary for Treated Water H2								
	Treated – Hillsburgh Heights							
Month Monthly Flow Total (m³/month) Daily Flow Average (m³/day) Daily Flow I (m³/day)				Max Percent Rated Capacity (%)				
January	2386.58	76.99	281.99	27.89				
February	1967.99	70.29	144.86	14.33				
March	2122.61	68.47	96.91	9.59				
April	1921.36	64.05	74.91	7.41				
May	2268.23	73.17	137.91	13.64				
June	2277.78	81.35	128.56	12.72				
July	2974.51	95.95	122.42	12.11				
August	2646.90	85.38	126.24	12.49				

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September	1995.97	66.53	106.54	10.54
October	1911.44	61.66	86.40	8.55
November	1771.15	61.07	77.45	7.66
December	2488.28	80.27	568.76	56.26
Total	26732.80			
Avg		73.85		
Max			568.76	56.26

Table 3: Facility Flow Summary for Treated Water H3							
	Treated - Glendevon						
Month	Monthly Flow Total (m³/month)	Daily Flow Average (m³/day)	Daily Flow Maximum (m³/day)	Max Percent Rated Capacity (%)			
January	6156.60	198.60	263.16	40.24			
February	3905.73	139.49	213.10	32.58			
March	3863.34	124.30	147.64	22.57			
April	4489.73	149.66	185.15	28.31			
May	4886.77	157.64	199.40	30.49			
June	4536.60	162.02	218.06	33.34			
July	5767.73	186.06	223.72	34.21			
August	5158.68	166.41	232.31	35.52			
September	3987.47	132.92	161.35	24.67			
October	4641.97	149.74	224.61	34.34			
November	4559.12	157.21	181.58	27.76			
December	3921.21	126.49	147.41	22.54			
Total	55864.95						
Avg		154.32					
Max			263.16	40.24			

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

Table 4: Facility Flow Summary for Raw Water Source H2 Well H2 – Hillsburgh Heights						
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	2071.97	66.84	253.92	25.86	526.20	30
February	1832.45	65.44	171.15	17.43	549.10	28
March	1965.34	63.40	189.76	19.32	549.20	31

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April	1906.14	63.54	152.09	15.49	660.70	28
May	2138.04	68.97	202.69	20.64	661.60	29
June	2196.37	78.44	151.33	15.41	656.50	27
July	2770.29	89.36	156.69	15.96	640.90	28
August	2079.42	67.08	141.90	14.45	619.90	29
September	1539.90	51.33	128.41	13.08	502.10	26
October	1504.13	48.52	112.87	11.49	499.10	27
November	1313.15	45.28	115.37	11.75	506.10	24
December	2066.86	66.67	508.47	51.78	547.00	29
Total	23384.06					336
Avg		64.60			576.53	
Max			508.47	51.78	661.60	

Table 5: Fa	Table 5: Facility Flow Summary for Raw Water Source H3						
	Well H3 – Glendevon						
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	6264.64	202.09	341.64	52.16	410.60	31	
February	4126.61	147.38	267.39	40.82	410.70	28	
March	3795.95	122.45	200.48	30.61	417.60	31	
April	4336.18	144.54	207.48	31.68	422.90	30	
May	5143.49	165.92	294.99	45.04	398.30	30	
June	4404.57	157.31	226.69	34.61	423.70	28	
July	5717.15	184.42	291.14	44.45	406.10	31	
August	5043.41	162.69	275.84	42.11	404.70	31	
September	4016.35	133.88	219.62	33.53	1000.00	30	
October	4542.75	146.54	233.73	35.68	392.00	31	
November	4458.38	153.74	221.87	33.87	392.30	29	
December	3704.72	119.51	200.01	30.54	390.40	31	
Total	55554.20					361	
Avg		153.46			455.78		
Max			341.64	52.16	1000.00		