

# SUMMARY REPORT

ONTARIO REGULATION 170/03  
SCHEDULE 22

## HILLSBURGH DRINKING WATER SYSTEM

FOR THE PERIOD:  
JANUARY 1, 2020 – DECEMBER 31, 2020

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



ONTARIO CLEAN WATER AGENCY  
AGENCE ONTARIENNE DES EAUX

## SUMMARY REPORTS FOR MUNICIPALITIES

Period from: JANUARY 01, 2020 – DECEMBER 31, 2020

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

<b>DRINKING-WATER SYSTEM NAME:</b>	<b>HILLSBURGH DRINKING WATER SYSTEM</b>
<b>DRINKING-WATER SYSTEM NUMBER:</b>	<b>220007285</b>
<b>DRINKING-WATER SYSTEM CATEGORY:</b>	LARGE MUNICIPAL RESIDENTIAL
<b>DRINKING-WATER WORKS PERMIT #:</b>	102-202, Issue #3 – Issued: November 2, 2020
<b>MUNICIPAL DRINKING WATER LICENCE #:</b>	102-102, Issue #4 – Issued: November 2, 2020 Expiry: November 1, 2025
<b>PERMIT TO TAKE WATER #:</b>	6306-8X5KRY (H2) – Expiry: July 31, 2022 7740-A9ZNTF (H3) – Expiry: May 31, 2026

#### 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, 2020 to December 31, 2020**.

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.

<b>Non-Compliance Description</b>	<b>Date Non-Compliance Issued</b>	<b>Corrective Action</b>	<b>Date Corrective Action Implemented</b>
Non-Compliance issued from MECP Inspection Report dated October 29, 2020 All continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were not equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.	12/22/2020	Developed a procedure for testing for analyzer and alarms at both pumphouses and the FSBS.	01/29/2021
Non-Compliance issued from MECP Inspection Report dated October 29, 2020 Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was not performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and/or was not recording data with the prescribed format.	12/22/2020	Developed SOP for Loss of power/outage; The electrical contractor was onsite following the inspection and corrected the alarm issue that was caused from the chlorine analyzer alarm being alarmed out after power failure to the PLC; also noted that the UPS had failed within 5 minutes of power loss and was replaced by electrical contractor	01/29/2021
Non-Compliance issued from MECP Inspection Report dated October 29, 2020 All specified corrective actions (as per Schedule 17) were not taken to address adverse conditions.	12/22/2020	Developed SOP for operators to review the distribution chlorine analyzer file daily to ensure regulatory compliance is met with regards to	01/29/2021

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		continuous monitoring; review and update existing corporate SOP for reporting of adverse results to make it more site specific to Hillsburgh DWS.	
All required notifications of adverse water quality incidents were not immediately provided as per O. Reg. 170/03 16-6.	12/22/2020	Included reporting requirements within the SOP	01/29/2021
Non-Compliance issued from MECP Inspection Report dated October 29, 2020 MECP was not notified of complaints received from public as required by pump test permit #3556-BGDKMZ when pump testing of a new well in December 2019 and January 2020 was completed.	12/22/2020	This has all been documented under LWIS IR # 1-NUK81 and the operating authority / owner has advised this oversight will not occur again in the future.	12/22/2020

\*Refer to MECP Inspection Report for further details on non-compliance

**The Hillsburgh Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on October 29, 2020.**

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.

#### **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.

Hillsburgh Well Supply	Well H2	Well H3	Treated H2	Treated H3
Design Capacity (m <sup>3</sup> /day)	982.00	655.00	1011.00	654.00
Approved Maximum Flow Rate (L/min)	682.00	454.00	-	-
Average Day Flow (m <sup>3</sup> /day)	81.47	182.59	84.38	186.71
Maximum Day Flow (m <sup>3</sup> /day)	358.52	332.22	307.39	287.91
% Average Day Flow/Design Capacity	8.30	27.88	8.35	28.55
% Maximum Day Flow/Design Capacity	36.51	50.72	30.40	44.02
Average Peak Flow Rate (L/min)	575.78	393.78	-	-
Maximum Peak Flow Rate (L/min)	610.80	439.20	-	-
% Average Peak Flow Rate/Approved	84.43	86.74	-	-
% Maximum Peak Flow Rate/Approved	89.56	96.74	-	-

A review of flow information for the period of January 1, 2020 to December 31, 2020 indicates that:

- The maximum daily volume specified in the PTTW was not exceeded on any well.

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- 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.

<b>Treated – Hillsburgh Heights</b>				
Month	Monthly Flow Total (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Rated Capacity (%)
<b>January</b>	2523.44	87.02	220.47	21.81
<b>February</b>	1809.95	62.41	80.13	7.93
<b>March</b>	2510.91	81.00	237.98	23.54
<b>April</b>	2153.95	71.80	86.45	8.55
<b>May</b>	3078.11	102.60	307.39	30.40
<b>June</b>	2972.88	99.10	123.15	12.187
<b>July</b>	3734.47	120.47	222.62	22.02
<b>August</b>	2958.90	95.45	166.80	16.50
<b>September</b>	2490.86	83.03	171.70	16.98
<b>October</b>	2127.99	68.64	108.87	10.77
<b>November</b>	2039.04	67.97	91.05	9.01
<b>December</b>	2227.99	71.87	137.51	13.60
<b>Total</b>	30628.49			
<b>Avg</b>		84.38		
<b>Max</b>			307.39	23.54

<b>Treated - Glendevon</b>				
Month	Monthly Flow Total (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Rated Capacity (%)
<b>January</b>	3445.10	118.80	236.02	36.09
<b>February</b>	4083.13	140.80	158.57	24.25
<b>March</b>	4572.53	147.50	271.06	41.45
<b>April</b>	4978.62	165.95	189.87	29.03
<b>May</b>	5303.53	176.78	242.43	37.07
<b>June</b>	6462.83	215.43	256.77	39.24
<b>July</b>	7119.62	229.67	285.40	43.64
<b>August</b>	6282.87	202.67	287.91	44.02

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<b>September</b>	5715.58	190.52	232.56	35.56
<b>October</b>	6610.33	213.24	232.00	35.47
<b>November</b>	6303.75	210.12	240.35	36.75
<b>December</b>	6896.19	222.46	246.04	37.62
<b>Total</b>	67774.08			
<b>Avg</b>		186.71		
<b>Max</b>			287.91	44.02

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 (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/min)	Number of Days of Water Taking
January	2555.37	79.53	215.35	21.93	610.80	31
February	1790.72	61.75	162.00	16.50	609.80	29
March	2424.91	78.22	358.52	36.51	605.80	31
April	2141.20	71.37	166.23	16.93	598.20	30
May	3060.18	102.01	311.27	31.70	595.90	30
June	2840.85	94.70	188.09	19.15	579.00	30
July	3652.72	117.83	196.87	20.05	574.90	31
August	2734.26	88.20	216.61	22.06	565.00	31
September	2413.05	80.43	169.75	17.29	560.50	30
October	2089.28	67.40	252.54	25.72	548.70	31
November	1923.48	64.12	171.04	17.42	531.90	30
December	2198.40	70.92	252.09	25.67	528.80	31
<b>Total</b>	29824.42					365
<b>Avg</b>		81.47			575.78	
<b>Max</b>			358.52	36.51	610.80	

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

Table 5: Facility Flow Summary for Raw Water Source H3						
Well H3 – Glendevon						
Month	Monthly Flow Total (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	3557.33	115.42	222.10	33.91	439.20	31
February	3927.48	135.43	199.33	30.43	392.50	29
March	4460.52	143.89	269.32	41.12	393.80	31
April	4824.29	160.81	251.16	38.35	394.00	30
May	5177.23	172.57	326.71	49.88	400.90	30
June	6392.70	213.09	332.22	50.72	398.00	30
July	6927.42	223.47	297.08	45.36	387.00	31
August	6248.36	201.56	298.11	45.51	392.70	31
September	5573.99	185.80	308.32	47.07	390.10	30
October	6421.71	207.15	297.65	45.44	381.50	31
November	6173.93	205.80	302.30	46.15	380.60	30
December	6804.86	219.51	307.92	47.01	375.00	31
<b>Total</b>	66489.82					365
<b>Avg</b>		182.59			393.78	
<b>Max</b>			332.22	50.72	439.20	