

2022 SCHEDULE 22 SUMMARY REPORT

HILLSBURGH
DRINKING WATER
SYSTEM

FRANK SMEDLEY
BOOSTER STATION

For the period of
January 1st, 2022 to December 31st, 2022

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



This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

Drinking-Water System Number:	220007285
Drinking-Water System Name:	Hillsburgh Drinking Water System
Drinking-Water System Owner:	The Corporation of the Town of Erin
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 – December 31, 2022

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on October 20, 2022 for the period covering December 14, 2021 to October 19, 2022. On November 21, 2022 the Inspection Report was issued and an Inspection Summary Rating Record (IRR) of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

Table 1. Non-Compliances and Corrective Actions noted in the 2021/2022 MECP Inspection Report

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system's approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period

Incident	Duration	Corrective Actions
N/A	N/A	N/A

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Hillsburgh Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 8) summarize the quantities and flowrates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flowrates approved in the system's approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary calibrated. These checks/verifications/calibrations are performed annually by a third party to ensure the flow measuring devices are within acceptable deviation limits.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	102-102 (Issue Number: 4)
Allowable Rated Capacity Hillsburgh Heights Well:	1,011 m ³ /day
Allowable Rated Capacity Glendevon Well:	654 m ³ /day
Allowable Flowrate into Treatment System:	Not listed in MDWL

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

Table 3. Treated Water (Hillsburgh Heights Well) Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2022

Treated Water Flow – Hillsburgh Heights Well					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	57.46	5.68%	127.70	12.63%	1781.13
February	81.83	8.09%	275.60	27.26%	2291.16
March	64.40	6.37%	160.99	15.92%	1996.39
April	93.16	9.22%	370.85	36.68%	2794.91
May	79.51	7.86%	135.53	13.41%	2464.86
June	103.22	10.21%	161.91	16.01%	3096.68
July	117.85	11.66%	177.57	17.56%	3653.35
August	76.68	7.58%	244.42	24.18%	2377.20
September	110.79	10.96%	509.07	50.35%	3323.63
October	75.26	7.44%	155.72	15.40%	2333.18
November	108.35	10.72%	464.18	45.91%	3250.43
December	72.24	7.14%	197.37	19.52%	2239.31
2022	86.73	8.58%	509.07	50.35%	31602.23

Table 4. Treated Water (Glendevon Well) Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2022

Treated Water Flow – Glendevon Well					
Timeframe	Average Flow (m³/day)	Percent of Rated Capacity	Maximum Flow (m³/day)	Percent of Rated Capacity	Total Volume (m³)
January	282.60	43.21%	310.86	47.53%	8760.48
February	303.02	46.33%	338.94	51.83%	8484.57
March	348.86	53.34%	521.16	79.69%	10814.75
April	320.11	48.95%	376.53	57.57%	9283.15
May	331.63	50.71%	385.73	58.98%	10280.63
June	375.87	57.47%	461.40	70.55%	11275.97
July	392.97	60.09%	440.79	67.40%	12181.98
August	368.04	56.28%	422.50	64.60%	11409.34
September	382.81	58.53%	439.19	67.15%	11484.41
October	401.37	61.37%	451.79	69.08%	12442.41
November	398.32	60.91%	465.24	71.14%	11949.66
December	398.07	60.87%	458.15	70.05%	12340.13
2022	358.64	54.84%	521.16	79.69%	130707.49

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL, for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

A summary of flowrates of water that flows into the treatment subsystem(s) can be found in Table 8 and Table 10. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into a treatment subsystem.

Table 5. Treated Water (Hillsburgh Heights Well) Annual and Monthly Average and Maximum Flowrates for 2022

Treated Water Flowrate – Hillsburgh Heights Well		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	1.33	8.23
February	1.91	8.25
March	1.47	34.53
April	2.17	39.73
May	1.85	45.67
June	2.40	45.79
July	2.73	35.81
August	1.82	44.74
September	2.58	31.87

Treated Water Flowrate – Hillsburgh Heights Well		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
October	1.76	41.87
November	2.51	12.95
December	1.67	8.96
2022	2.02	45.79

Table 6. Treated Water (Glendevon Well) Annual and Monthly Average and Maximum Flowrates for 2022

Treated Water Flowrate – Glendevon Well		
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)
January	198.58	600.48
February	216.96	596.40
March	247.00	605.52
April	223.09	785.52
May	231.29	1007.28
June	261.96	979.20
July	277.76	729.84
August	263.20	992.88
September	269.48	576.72
October	282.21	995.76
November	284.07	737.04
December	278.02	685.68
2022	252.80	1007.28

2.2 Raw Water

Permit to Take Water Number (PTTW):	6306-8X5KRY, issued August 13, 2012
Allowable Maximum Raw Water Volume – Well H2:	982.00 m ³ /day
Allowable Maximum Raw Water Flowrate - Well H2:	682 L/min

Permit to Take Water Number (PTTW):	0035-CH4ET4, issued August 11, 2022
Allowable Maximum Raw Water Volume – Well H2:	982.00 m ³ /day
Allowable Maximum Raw Water Flowrate - Well H2:	682 L/min

Permit to Take Water Number (PTTW):	7740-A9ZNTF, issued May 18, 2016
Allowable Maximum Raw Water Volume – Well H3:	655.00 m ³ /day
Allowable Maximum Raw Water Flowrate - Well H3:	454 L/min

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit.

The respective requirements for the above noted PTTWs are applicable to the following timeframes within the reporting period:

- Well H2 PTTW 6306-8X5KRY – January 1, 2022 to August 10, 2022
- Well H2 PTTW 0035-CH4ET4 – August 11, 2022 to December 31, 2022
- Well H3 PTTW 7740-A9ZNTP – January 1, 2022 to December 31, 2022

Table 7. Raw Water (Well H2) Monthly Average, Maximum Flow and Total Volume for 2022

Raw Water Flow – Well H2					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	69.17	7.04%	241.30	24.57%	1798.36
February	92.45	9.41%	268.14	27.31%	2033.79
March	75.84	7.72%	249.98	25.46%	2123.41
April	107.10	10.91%	339.65	34.59%	2570.36
May	74.09	7.54%	271.81	27.68%	2296.71
June	101.90	10.38%	272.17	27.72%	3056.98
July	121.97	12.42%	264.52	26.94%	3537.27
August	88.86	9.05%	321.52	32.74%	2399.10
September	102.15	10.40%	566.09	57.65%	3064.36
October	72.32	7.37%	299.55	30.50%	2242.06
November	104.69	10.66%	403.91	41.13%	3140.59
December	73.66	7.50%	346.85	35.32%	2062.38
2022	90.35	9.20%	566.09	57.65%	30325.37

A review of flow information for the reporting period indicates that the system operated within the maximum allowable daily raw water volume listed in PTTW 6306-8X5KRY and PTTW 0035-CH4ET4 for Well H2.

Table 8. Raw Water (Well H2) Annual and Monthly Average and Maximum Flowrates for 2022

Raw Water Flowrate – Well H2		
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)
January	476.28	589.90
February	438.50	581.30
March	500.70	586.80

Raw Water Flowrate – Well H2		
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)
April	424.47	567.00
May	462.59	567.30
June	441.26	551.60
July	517.53	649.80
August	561.31	649.50
September	554.44	643.60
October	529.46	637.00
November	557.80	630.50
December	514.57	622.60
2022	498.24	649.80

A review of flow information for the reporting period indicates that the system operated within the maximum allowable raw water flowrate listed in PTTW 6306-8X5KRY and PTTW 0035-CH4ET4 for Well H2.

Table 9. Raw Water (Well H3) Monthly Average, Maximum Flow and Total Volume for 2022

Raw Water Flow – Well H3					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	276.33	42.19%	320.95	49.00%	8566.18
February	302.60	46.20%	340.36	51.96%	8472.89
March	342.93	52.36%	544.97	83.20%	10630.79
April	305.92	46.71%	385.37	58.84%	9177.57
May	325.61	49.71%	381.12	58.19%	10093.91
June	370.15	56.51%	446.68	68.20%	11104.46
July	387.47	59.16%	448.98	68.55%	12011.44
August	364.49	55.65%	434.19	66.29%	11299.17
September	385.59	58.87%	488.22	74.54%	11567.68
October	396.29	60.50%	523.46	79.92%	12284.95
November	410.81	62.72%	501.83	76.61%	12324.21
December	401.27	61.26%	445.14	67.96%	12439.52
2022	355.79	54.31%	544.97	83.20%	129972.77

A review of flow information for the reporting period indicates that the system operated within the maximum allowable daily raw water volume listed in PTTW 7740-A9ZNTF for Well H3.

Table 10. Raw Water (Well H3) Annual and Monthly Average and Maximum Flowrates for 2022

Raw Water Flowrate – Well H3		
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)
January	408.64	432.60
February	427.80	432.40
March	418.47	425.90
April	413.02	429.50
May	412.43	421.40
June	397.35	404.90
July	388.05	394.00
August	387.19	390.70
September	358.29	419.90
October	409.84	452.20
November	397.42	409.90
December	391.49	403.50
2022	400.83	452.20

A review of flow information for the reporting period indicates that the system operated within the maximum allowable raw water flowrate listed in PTTW 7740-A9ZNTP for Well H3.