2024 SCHEDULE 22 SUMMARY REPORT

ERIN DRINKING WATER SYSTEM

For the period of January 1st, 2024 to December 31st, 2024

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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 <u>O.Reg 170/03, Schedule 22,</u> <u>Summary Reports for Municipalities</u> for the following system and reporting period:

Drinking-Water System Number:
Drinking-Water System Name:
Drinking-Water System Owner:
Drinking-Water System Category:
Period being reported:

220000013
Erin Drinking Water System
The Corporation of the Town of Erin
Large Municipal Residential
January 1, 2024 – December 31, 2024

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on October 16, 2024 for the period covering November 24, 2023 to November 4, 2024. On November 13, 2024 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 2023/2024 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 a 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.

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 Erin Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 13) 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):	102-101 (Issue Number: 4)
Allowable Rated Capacity Well E7:	2,592 m³/day
Allowable Rated Capacity Well E8:	2,362 m³/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.

Treated Water Flow – Well E7								
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m³)			
January	325.64	12.56%	1037.87	40.04%	7164.06			
February	581.88	22.45%	1311.83	50.61%	16874.46			
March	500.53	19.31%	1514.87	58.44%	15516.44			
April	777.33	29.99%	1430.87	55.20%	23319.90			
May	679.40	26.21%	1519.30	58.61%	21061.49			
June	455.99	17.59%	1372.56	52.95%	13679.78			
July	691.98	26.70%	1466.22	56.57%	21451.47			
August	519.30	20.03%	1127.95	43.52%	16098.17			
September	582.17	22.46%	1105.68	42.66%	17465.06			
October	489.08	18.87%	969.90	37.42%	15161.58			
November	548.95	21.18%	1258.67	48.56%	16468.39			
December	742.05	28.63%	1311.67	50.60%	23003.43			
2024	574.52	22.17%	1519.30	58.61%	207264.23			

 Table 3. Treated Water (Well E7) Annual and Monthly Average and Maximum Flows

 with Comparison to Rated Capacity and Total Volume for 2024

Treated Water Flow – Well E8								
Timeframe	Average Flow (m ³ /day)	Percent of Maximu Rated Flow Capacity (m ³ /da		Percent of Rated Capacity	Total Volume (m³)			
January	395.20	16.73%	1259.92	53.34%	12251.26			
February	349.32	14.79%	1146.37	48.53%	10130.20			
March	664.02	28.11%	1457.84	61.72%	20584.74			
April	376.22	15.93%	1393.32	58.99%	11286.74			
May	666.32	28.21%	1463.85	61.98%	20656.02			
June	752.81	31.87%	1485.10	62.87%	22584.35			
July	464.62	19.67%	1382.85	58.55%	14403.23			
August	586.92	24.85%	882.45	37.36%	18194.43			
September	550.52	23.31%	735.63	31.14%	16515.67			
October	562.87	23.83%	1032.69	43.72%	17448.91			
November	516.03	21.85%	1066.36	45.15%	15480.84			
December	593.02	25.11%	775.99	32.85%	18383.51			
2024	539.82	22.85%	1485.10	62.87%	197919.90			

Table 4. Treated Water (Well E8) Annual and Monthly Average and Maximum Flows
with Comparison to Rated Capacity and Total Volume for 2024

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, Table 10 and Table 12. 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.

Treated Water Flowrate – Well E7					
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)			
January	333.56	1592.16			
February	1028.91	2400.00			
March	897.58	2400.00			
April	1018.01	2400.00			
May	1023.43	2082.00			
June	563.66	1619.00			
July	483.49	2308.56			
August	496.63	2400.00			
September	1083.14	1767.00			

Table 5.	Treated	Water	(Well	E7)	Annual	and	Monthly	Average	and	Maximum
Flowrates	for 2024									

Treated Water Flowrate – Well E7						
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)				
October	1108.44	2400.00				
November	1004.27	2400.00				
December	990.54	1986.00				
2024	835.97	2400.00				

Table 6.	Treated	Water	(Well	E8)	Annual	and	Monthly	Average	and	Maximum
Flowrates	s for 2024		-	-			-	-		

Treated Water Flowrate – Well E8					
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)			
January	743.80	1438.00			
February	674.77	1105.00			
March	763.53	1105.00			
April	490.37	1521.00			
May	516.19	1093.00			
June	622.23	1357.00			
July	324.73	1057.00			
August	410.23	1225.00			
September	384.68	1424.00			
October	393.30	990.00			
November	397.17	1303.00			
December	416.28	1328.00			
2024	511.44	1521.00			

2.2 Raw Water

Permit to Take Water Number (PTTW):	6432-CC5LK7
Allowable Maximum Raw Water Volume – Well E7:	2,160.00 m³/day
Allowable Maximum Raw Water Flowrate - Well E7:	1,800 L/min
Allowable Maximum Raw Water Volume – Well E8:	1,968.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well E8:	1,640 L/min
Allowable Maximum Volume of Raw Water – Well E9:	2764.80 m ³ /day
Allowable Maximum Raw Water Flowrate – Well E9:	1,920 L/min
Allowable Maximum Raw Water Volume for any Combination of Wells:	4,128.00 m³/day
Allowable Maximum Raw Water Volume for any Combination of Wells for one 60 day consecutive period during wellfield testing:	6,892.80 m³/day

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.

	Raw Water Flow – Well E7					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)	
January	488.51	22.62%	1047.25	48.48%	14655.30	
February	578.96	26.80%	1317.25	60.98%	16789.92	
March	494.50	22.89%	1515.58	70.17%	15329.48	
April	768.77	35.59%	1453.21	67.28%	23063.23	
May	673.30	31.17%	1448.21	67.05%	20872.20	
June	455.96	21.11%	1419.80	65.73%	13678.71	
July	683.71	31.65%	1448.29	67.05%	21194.94	
August	514.68	23.83%	1143.68	52.95%	15955.09	
September	575.79	26.66%	1096.30	50.75%	17273.76	
October	481.43	22.29%	961.06	44.49%	14924.34	
November	544.87	25.23%	1259.26	58.30%	16346.17	
December	735.09	34.03%	1284.00	59.44%	22787.81	
2024	582.96	26.99%	1515.58	70.17%	212870.95	

Table 7.	Raw Water (Well E7)	Monthly Average,	Maximum Flow	and Total Volume
for 2024				

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 6432-CC5LK7 for Well E7.

Table 8. Raw Water (Well E7) Annual and Monthly Average and Maximum
Flowrates for 2024

Raw Water Flowrate – Well E7					
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)			
January	1436.79	1769.28			
February	1469.49	1640.00			
March	1157.55	1466.00			
April	1349.10	1465.00			
May	1328.71	1704.00			
June	1214.47	1506.00			
July	1451.55	1482.00			
August	1463.81	1512.00			
September	1436.30	1502.00			
October	1498.55	1589.00			
November	1498.59	1524.00			

Raw Water Flowrate – Well E7				
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)		
December	1508.80	1538.00		
2024	1401.14	1769.28		

A review of flow information for the reporting period indicates that the system operated within the maximum allowable raw water flowrate listed in PTTW 6432-CC5LK7 for Well E7.

 Table 9. Raw Water (Well E8) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Well E8					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	393.43	19.99%	1311.68	66.65%	12196.23
February	345.85	17.57%	1139.30	57.89%	10029.75
March	658.71	33.47%	1413.20	71.81%	20420.04
April	373.99	19.00%	1401.88	71.23%	11219.66
May	662.52	33.66%	1464.05	74.39%	20538.09
June	747.04	37.96%	1487.64	75.59%	22411.22
July	463.06	23.53%	1399.15	71.10%	14354.72
August	584.75	29.71%	900.10	45.74%	18127.39
September	546.33	27.76%	742.03	37.70%	16390.00
October	558.64	28.39%	1042.19	52.96%	17317.89
November	512.05	26.02%	1059.69	53.85%	15361.59
December	588.28	29.89%	763.62	38.80%	18236.68
2024	536.22	27.25%	1487.64	75.59%	196603.26

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 6432-CC5LK7 for Well E8.

Table 10. Raw Water (Well E8) Annual and Monthly Average and Maximum
Flowrates for 2024

Raw Water Flowrate – Well E8					
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)			
January	1242.37	1303.00			
February	1149.76	1302.00			
March	1107.72	1298.00			
April	983.63	1306.00			
May	1238.06	1305.00			

Raw Water Flowrate – Well E8				
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)		
June	1185.10	1302.00		
July	1135.06	1281.00		
August	1217.49	1285.68		
September	1271.67	1289.00		
October	1273.02	1288.00		
November	1228.59	1284.00		
December	1262.61	1274.00		
2024	1191.26	1306.00		

A review of flow information for the reporting period indicates that the system operated within the maximum allowable raw water flowrate listed in PTTW 6432-CC5LK7 for Well E8.

Table 11. Raw Water (Well E9) Monthly Average, Maximum Flow ar	nd Total
Volume for 2024 ^{11A}	

Raw Water Flow – Well E9					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m ³)
January	N/A	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A	N/A
April	N/A	N/A	N/A	N/A	N/A
May	N/A	N/A	N/A	N/A	N/A
June	N/A	N/A	N/A	N/A	N/A
July	N/A	N/A	N/A	N/A	N/A
August	N/A	N/A	N/A	N/A	N/A
September	N/A	N/A	N/A	N/A	N/A
October	N/A	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2024	N/A	N/A	N/A	N/A	N/A

^{11A}There was no water taking for Well E9 during the reporting period, the well has been approved in the PTTW but has not been commissioned and is not currently online.

Table 12. Raw W	ater (Well E9) Annual and Monthly Average and Maximum
Flowrates for 202	24 ^{12A}

Raw Water Flowrate – Well E9				
Timeframe	Average Flowrate (L/min)	Maximum Flowrate (L/min)		
January	N/A	N/A		
February	N/A	N/A		
March	N/A	N/A		
April	N/A	N/A		
May	N/A	N/A		
June	N/A	N/A		
July	N/A	N/A		
August	N/A	N/A		
September	N/A	N/A		
October	N/A	N/A		
November	N/A	N/A		
December	N/A	N/A		
2024	N/A	N/A		

^{12A}There was no water taking for Well E9 during the reporting period, the well has been approved in the PTTW but has not been commissioned and is not currently online.

Table 13. Raw Water Monthly Average, Maximum Flow and Total Volume of any
Combination of Wells (Well E7, Well E8 and Well E9) for 2024 ^{13A}

Raw Water Flow – Any Combination of Wells (Well E7, Well E8, Well E9)					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume ^{13A}	Maximum Flow (m³/day)	Percent of Allowable Volume ^{13A}	Total Volume (m³)
January	881.94	21.36%	2358.93	57.14%	26851.53
February	924.82	22.40%	2456.55	59.51%	26819.67
March	1153.21	27.94%	2928.78	70.95%	35749.52
April	1142.76	27.68%	2855.09	69.16%	34282.89
May	1335.82	32.36%	2912.26	70.55%	41410.29
June	1203.00	29.14%	2907.44	70.43%	36089.93
July	1146.76	27.78%	2847.44	68.98%	35549.66
August	1099.44	26.63%	2043.78	49.51%	34082.49
September	1122.13	27.18%	1838.33	44.53%	33663.76
October	1040.07	25.20%	2003.25	48.53%	32242.23
November	1056.93	25.60%	2318.95	56.18%	31707.76
December	1323.37	32.06%	2047.62	49.60%	41024.49
2024	1119.19	27.11%	3003.22	72.75%	409474.22

^{13A}Based on an allowable volume of 4,128.00 m³/day as stipulated in PTTW 6432-CC5LK7 for the period of January 1, 2024 to December 31, 2024

A review of flow information for the reporting period indicates that the system operated within the maximum allowable daily taking of water listed in PTTW 6432-CC5LK7 for any combination of wells.