



2024 SCHEDULE 22 SUMMARY REPORT

ANTEN MILLS
DRINKING WATER
SYSTEM

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

Prepared for the Corporation of the Township of Springwater 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:	220005447
Drinking-Water System Name:	Anten Mills Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Springwater
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	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 August 22, 2024 for the period covering September 7, 2023 to August 22, 2024. On October 24, 2023 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 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
<ul style="list-style-type: none"> Loss of monitoring data- occurrence incident with O.Reg 170/03, Schedule 6. On June 8, 2024 the Redlion recorder failed and stopped recording data. 	2024-06-8 from 1249 hrs to 2024-06-10 at 1112 hrs (46 hours & 23 minutes)	<ul style="list-style-type: none"> June 10, 2024 - OCWA operator noticed the data loss All alarms and equipment; including chlorine analyzers were working during the occurrence. New redlion unit installed and programmed on July 10, 2024. Verbal notification of incident was provided to the MECP on June 11, 2024 and a follow-up written

Incident	Duration	Corrective Actions
		notification was provided on June 11, 2024. No further actions advised.

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

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 10) 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):	128-103 (Issue Number: 3)
Allowable Rated Capacity:	1557.6 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 Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2024

Timeframe	Treated Water Flow				Total Volume (m ³)
	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	
January	147.03	9.44%	173.00	11.11%	4558.00
February	145.97	9.37%	162.00	10.40%	4233.00
March	151.52	9.73%	175.00	11.24%	4697.00
April	168.73	10.83%	421.00	27.03%	5062.00
May	196.03	12.59%	253.00	16.24%	6077.00
June	286.00	18.36%	404.00	25.94%	8294.00

Treated Water Flow					
Timeframe	Average Flow (m³/day)	Percent of Rated Capacity	Maximum Flow (m³/day)	Percent of Rated Capacity	Total Volume (m³)
July	345.29	22.17%	485.00	31.14%	10704.00
August	374.61	24.05%	480.00	30.82%	11613.00
September	330.37	21.21%	443.00	28.44%	9911.00
October	222.42	14.28%	492.00	31.59%	6895.00
November	190.60	12.24%	223.00	14.32%	5718.00
December	196.84	12.64%	222.00	14.25%	6102.00
2024	229.62	14.74%	492.00	31.59%	83,864.00

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL (1557.6 m³/day) 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 system can be found in Table 5, Table 7 and Table 9. 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.

2.2 Raw Water

Permit to Take Water Number (PTTW):	4822-97RJX6 4316-CYNKUF
Allowable Maximum Raw Water Volume - Well #1:	417.60 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #1:	290 L/min (4.83 L/sec)
Allowable Maximum Volume of Raw Water - Well #2:	360.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #2:	250 L/min (4.16 L/sec)
Allowable Maximum Volume of Raw Water - Well #3:	780.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #3:	909 L/min (15.15 L/sec)
Allowable Maximum Daily Taking of Water from Any Combination of Wells:	780.00 m ³ /day

During the reporting period Anten Mills Drinking Water System operated under two separate PTTWs:

- From January 1 to January 3, 2024: Anten Mills DWS operated under PTTW #4822-97RJX6 which was set to expire on December 31, 2023. Under the approval of the MECP, PTTW #4822-97RJX6 which was to remain in effect until a determination on the PTTW renewal could be made.
- From January 3, 2024 to the end of the reporting period: Anten Mills DWS operated under PTTW #4316-CYNKUF as the new PTTW was issued. Upon issuance, PTTW #4822-97RJX6 was backdated to December 31, 2023. There were no changes to the raw water

allowable maximum volume takings or flowrates. There was no change in the allowable maximum combined raw water volume from all wells.

As per both PTTWs, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit. Notwithstanding, the above maximum daily takings, the maximum daily taking of water from all wells identified is limited to 780.00 m³/day. See table 10 for a review of the combined maximum daily takings of water from all wells identified within the Anten Mills Drinking Water System.

Table 4. Raw Water (Well #1) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Well #1					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	2.50	0.60%	3.00	0.72%	15.00
February	74.09	17.74%	136.00	32.57%	1704.00
March	84.90	20.33%	142.00	34.00%	2632.00
April	92.40	22.13%	152.00	36.40%	2772.00
May	109.03	26.11%	174.00	41.67%	3380.00
June	157.83	37.79%	215.00	51.48%	4577.00
July	189.68	45.42%	301.00	72.08%	5880.00
August	194.92	46.68%	267.00	63.94%	4678.00
September	2.40	0.57%	5.00	1.20%	12.00
October	9.57	2.29%	50.00	11.97%	67.00
November	38.78	9.29%	115.00	27.54%	349.00
December	97.03	23.24%	126.00	30.17%	3008.00
2024	87.76	21.02%	301.00	72.08%	29074.00

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #1 (417.60 m³/day).

Table 5. Raw Water (Well #1) Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate – Well #1	
Timeframe	Maximum Flowrate (L/sec)
January	4.40
February	4.40
March	4.40
April	4.50
May	6.00 ^{5A}
June	4.50
July	4.40

Raw Water Flowrate – Well #1	
Timeframe	Maximum Flowrate (L/sec)
August	4.50
September	4.30
October	6.00 ^{5B}
November	4.00
December	4.00
2024	6.00^{5A}

A review of flow information for the reporting period indicates that the system operated within the PTTW’s maximum allowable raw water flowrate for Well #1 (4.83 L/sec) with the exception of:

- ^{5A}May 31, 2024 - Flowrate exceedances were due to flow meter calibrations, and not actual readings.
- ^{5B}October 9, 2024 – Flowrate exceedances were of very short duration and caused by well pump start up.

Table 6. Raw Water (Well #2) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Well #2					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	2.33	0.65%	3.00	0.83%	14.00
February	58.57	16.27%	108.00	30.00%	1347.00
March	68.03	18.90%	115.00	31.94%	2109.00
April	74.77	20.77%	124.00	34.44%	2243.00
May	88.39	24.55%	141.00	39.17%	2740.00
June	126.83	35.23%	182.00	50.56%	3678.00
July	156.42	43.45%	300.00	83.33%	4849.00
August	155.38	43.16%	208.00	57.78%	3729.00
September	2.00	0.56%	4.00	1.11%	10.00
October	9.00	2.50%	41.00	11.39%	54.00
November	35.11	9.75%	103.00	28.61%	316.00
December	89.94	24.98%	118.00	32.78%	2788.00
2024	72.23	20.06%	300.00	83.33%	23877.00

A review of flow information for the reporting period indicates that the system operated within the PTTW’s maximum allowable daily raw water volume for Well #2 (360.00 m³/day).

Table 7. Raw Water (Well #2) Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate – Well #2	
Timeframe	Maximum Flowrate (L/sec)
January	3.70
February	4.00
March	4.00
April	4.00
May	4.10
June	4.10
July	4.00
August	4.00
September	3.90
October	3.80
November	3.90
December	4.10
2024	4.10

A review of flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate for Well #2 (4.16 L/sec).

Table 8. Raw Water (Well #3) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Well #3					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	141.84	18.18%	211.00	27.05%	4397.00
February	94.58	12.13%	206.00	26.41%	1135.00
March	7.40	0.95%	10.00	1.28%	37.00
April	29.17	3.74%	134.00	17.18%	175.00
May	15.00	1.92%	46.00	5.90%	90.00
June	11.50	1.47%	38.00	4.87%	69.00
July	14.00	1.79%	20.00	2.56%	70.00
August	232.50	29.81%	464.00	59.49%	3255.00
September	319.67	40.98%	434.00	55.64%	9590.00
October	208.23	26.70%	358.00	45.90%	6455.00
November	180.15	23.10%	278.00	35.64%	4864.00
December	7.33	0.94%	9.00	1.15%	44.00
2024	105.11	13.48%	464.00	59.49%	30181.00

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #3 (780.00 m³/day).

Table 9. Raw Water (Well #3) Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate – Well #3	
Timeframe	Maximum Flowrate (L/sec)
January	14.20
February	14.20
March	14.10
April	14.30
May	14.10
June	14.10
July	14.00
August	14.90
September	14.80
October	14.30
November	15.00
December	14.30
2024	15.00

A review of flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate for Well #3 (15.15 L/sec).

Table 10. Combined Well (Well 1, Well 2 & Well 3) Annual and Monthly Flow and Total Volume for 2024

Combined Well Flow (Well 1, Well 2 & Well 3)					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	138.31	17.73%	211.00	27.05%	4011.00
February	148.93	19.09%	206.00	26.41%	2085.00
March	148.45	19.03%	246.00	31.54%	3266.00
April	173.71	22.27%	410.00	52.56%	4864.00
May	202.58	25.97%	315.00	40.38%	5267.00
June	280.54	35.97%	397.00	50.90%	6733.00
July	351.07	45.01%	568.00	72.82%	10181.00
August	377.08	48.34%	479.00	61.41%	9427.00
September	328.90	42.17%	434.00	55.64%	6578.00
October	213.86	27.42%	449.00	57.56%	6202.00
November	185.52	23.78%	278.00	35.64%	4267.00
December	188.28	24.14%	244.00	31.28%	5460.00

Combined Well Flow (Well 1, Well 2 & Well 3)					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
2024	228.10	29.24%	568.00	72.82%	68341.00

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily taking of water from any combination of wells (780.00 m³/day).