

2023 SCHEDULE 22 SUMMARY REPORT

LISLE
DRINKING WATER
SYSTEM



For the period of
January 1st, 2023 to December 31st, 2023

Prepared for the Corporation of the Township of Adjala-Tosorontio 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:	220005438
Drinking-Water System Name:	Lisle Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Adjala-Tosorontio
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1, 2023 – December 31, 2023

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on May 4, 2023 for the period covering April 12, 2022 to May 4, 2023. On June 8, 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 2022/2023 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
<p>Non-compliance with Section 11-3 of Schedule 11 of O.Reg. 170/03 requires the collection of a raw microbiological sample from each source well monthly. Section 6-1.1(3) of Schedule 6 requires the monthly samples be collected 20 to 40 days apart.</p> <p>While monthly raw water samples were taken as required, the samples were collected outside of the 20 to 40 day window from the source wells on May 1, 2023 sample and June 13, 2023 (43 days between sampling)</p>	N/A	<ul style="list-style-type: none"> OCWA identified this issue and has made corrections to their sampling plan to prevent future recurrences. Notice of non-compliance submitted to MECP on June 14, 2023. No further actions required by the MECP.

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

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 7) 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):	097-104 (Issue Number: 4)
Allowable Rated Capacity:	657 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 2023

Treated Water Flow ^{3A}					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	36.25	5.52%	76.36	11.62%	1,123.70
February	36.65	5.78%	50.50	7.69%	1,026.26
March	34.79	5.30%	43.04	6.55%	1,078.57
April	32.51	4.95%	42.77	6.51%	975.34
May	39.03	5.94%	70.58	10.74%	1,209.93
June	40.97	6.24%	76.73	11.68%	1,229.08
July	37.09	5.64%	56.84	8.65%	1,149.84
August	36.59	5.57%	75.53	11.50%	1,134.31
September	34.62	5.27%	56.12	8.54%	1,038.62
October	33.71	5.13%	41.29	6.28%	1,044.95
November	35.94	5.47%	43.99	6.70%	1,078.08

Treated Water Flow ^{3A}					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
December	38.85	5.91%	53.40	8.13%	1,204.41
2023	36.42	5.54%	76.73	11.68%	13,293.09

^{3A}Treated water flow and flowrate data for Lisle Pumphouse is based off the raw water flow and flowrate data for the combined takings of Well #1 and Well #2. There is only one set of pumps (per well) responsible for the raw water taking, water that flows into the treatment system and water that flows from the treatment system into the distribution system.

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL (657 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 and Table 7. 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):	2516-BY6PCJ
Allowable Maximum Raw Water Volume - Well #1:	656.64 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #1:	456 L/min (7.6 L/sec)
Allowable Maximum Raw Water Volume - Well #2:	656.64 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #2:	456 L/min (7.6 L/sec)

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.

Table 4. Raw Water (Well #1) Monthly Average, Maximum Flow and Total Volume for 2023

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	18.14	2.76%	22.62	3.44%	562.40
February	19.10	2.91%	27.10	4.13%	534.70
March	17.89	2.72%	22.91	3.49%	554.61
April	16.22	2.47%	21.01	3.20%	486.46
May	19.22	2.93%	39.87	6.07%	595.65
June	19.23	2.93%	31.59	4.81%	576.81

Raw Water Flow – Well #1					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
July	17.73	2.70%	26.82	4.08%	549.75
August	17.48	2.66%	38.76	5.90%	542.01
September	16.45	2.50%	27.16	4.13%	493.49
October	16.01	2.44%	19.62	2.99%	496.24
November	16.98	2.59%	20.70	3.15%	509.46
December	18.38	2.80%	24.92	3.80%	569.79
2023	17.74	2.70%	39.87	6.07%	6,471.37

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 (656.64 m³/day)

Table 5. Raw Water (Well #1 PW1) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate – Well #1		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	2.82	5.87
February	2.84	5.71
March	2.99	6.73
April	3.21	5.68
May	3.84	6.85
June	3.75	6.15
July	3.63	6.13
August	3.64	6.04
September	3.52	22.81 ^{5A}
October	3.35	6.78
November	3.60	6.47
December	3.44	6.98
2023	3.39	22.81^{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 (7.6 L/sec) with the exception of:

- ^{5A}September 6, 2023 flow meter calibration caused an inaccurate peak flow rate.

Table 6. Raw Water (Well #2) Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Well #2					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	18.11	2.76%	60.87	9.27%	561.30
February	17.56	2.67%	23.40	3.56%	491.56
March	16.90	2.57%	20.22	3.08%	523.96
April	16.30	2.48%	21.83	3.32%	488.88
May	19.82	3.02%	37.60	5.73%	614.28
June	21.74	3.31%	45.14	6.87%	652.27
July	19.36	2.95%	30.02	4.57%	600.09
August	19.11	2.91%	36.77	5.60%	592.30
September	18.17	2.77%	28.96	4.41%	545.13
October	17.70	2.70%	21.67	3.30%	548.71
November	18.95	2.89%	23.47	3.57%	568.62
December	20.47	3.12%	28.48	4.34%	634.62
2023	18.68	2.85%	60.87	9.27%	6,821.72

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 (656.64 m³/day)

Table 7. Raw Water (Well #2) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate – Well #2		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	3.35	6.22
February	3.29	3.85
March	3.44	4.02
April	3.35	3.85
May	3.44	9.78 ^{7A}
June	3.35	6.36
July	3.31	3.91
August	3.39	7.18
September	3.28	24.83 ^{7B}
October	3.30	6.79
November	3.27	3.79
December	3.29	7.43
2023	3.34	24.83^{7B}

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 #2 (7.6 L/sec) with the exception of:

- ^{7A}May 16, 2023 flowrate exceedance as a result of AWQI #161858. Refer to Summary of reports/notices provided to the Ministry and/or SAC in the 2023 Section 11- Annual Report
- ^{7B}September 6, 2023 flow meter calibration caused an inaccurate maximum flow rate.