



2022 SCHEDULE 22 SUMMARY REPORT

ROSEMONT
DRINKING WATER
SYSTEM

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

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:	220003859
Drinking-Water System Name:	Rosemont 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, 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 June 21, 2022 for the period covering July 21, 2021 to June 21, 2022. On September 1, 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
Continuous monitoring data for Well #2 (PW3A) water level data was not recorded from September 9 to October 31, 2022. Continuous water level data for using dataloggers for production well 3A was not recording correctly due to well probe failure, monitoring conditions of PTTW #3823-	September 9 to October 31, 2022	<ul style="list-style-type: none"> Well probe required replacement While awaiting new probe and installation, OCWA monitored the static well level manually on a weekly basis. New well probe was installed on October 21, 2022 and monitoring data was being recorded as intended. No further action required.

Incident	Duration	Corrective Actions
C7ZPGH, Section 4.2 were not met.		

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Rosemont 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):	097-105 (Issue Number: 4)
Allowable Rated Capacity:	85 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 2022

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	25.89	30.46%	37.52	44.14%	802.65
February	20.62	24.26%	30.57	35.96%	577.34
March	20.68	24.33%	33.85	39.82%	641.07
April	21.69	25.52%	32.55	38.29%	650.79
May	28.00	32.94%	34.05	40.06%	868.01
June	27.47	32.32%	35.20	41.41%	824.02
July	29.49	34.69%	34.23	40.27%	914.04

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)
August	28.72	33.79%	31.52	37.08%	890.42
September	24.01	28.25%	29.13	34.27%	720.26
October	23.05	27.12%	34.88	41.04%	714.42
November	21.06	24.78%	25.43	29.92%	631.67
December	21.80	25.65%	28.71	33.78%	654.04
2022	40.31	28.73%	37.52	44.14%	8,888.73

^{3A}Treated water flows for the Rosemont DWS are based on the combined raw water well water flows for Well #1 (PW1A) and Well #2 (PW3A). There is only one set of pumps (one 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, 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):	3283-C7ZPGH
Allowable Maximum Raw Water Volume - Well #1: PW1A	33 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #1: PW1A	0.38 L/sec
Allowable Maximum Raw Water Volume - Well #2: PW3A	52 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #2: PW3A	0.60 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(PW1A) Monthly Average, Maximum Flow and Total Volume for 2022

Raw Water Flow – Well #1 (PW1A)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	12.38	37.52%	17.69	53.61%	383.82
February	10.02	30.35%	14.79	44.82%	280.44
March	10.19	30.89%	16.63	50.39%	316.03

Raw Water Flow – Well #1 (PW1A)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
April	10.86	32.90%	16.27	49.30%	325.69
May	14.04	42.56%	19.31	58.52%	435.35
June	16.38	49.63%	21.32	64.61%	491.37
July	18.51	56.08%	21.11	63.97%	573.68
August	18.85	57.11%	20.27	61.42%	584.28
September	16.16	48.98%	20.43	61.91%	484.91
October	17.21	52.15%	26.99	81.79%	499.03
November	15.40	46.65%	18.66	56.55%	461.86
December	16.88	51.15%	21.61	65.48%	523.22
2022	14.74	44.66%	26.99	81.79%	5,359.68

A review of flow information for the reporting period indicates that Well #1- PW1A operated within the PTTW's maximum allowable daily raw water volume.

Table 5. Raw Water Well #1 (PW1A) Annual and Monthly Average and Maximum Flowrates for 2022

Raw Water Flowrate – Well #1 (PW1A)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	0.19	0.23
February	0.18	0.23
March	0.18	0.22
April	0.18	0.22
May	0.19	0.35
June	0.23	0.28
July	0.23	0.77 ^{6B}
August	0.22	0.27
September	0.22	0.26
October	0.20	N/A ^{5A}
November	0.20	N/A ^{5A}
December	0.20	N/A ^{5A}
2022	0.20	0.77

^{5A}Maximum Flowrate data for Rosemont Well #1 PW1A unavailable from September 23 to the end of December, 2022 due to flowmeter error. The flow meter was unable to record peak flowrate data (average and daily flow as calculated). Not a non-compliance issue, as per PTTW 3283-C7ZPGHon the day the water is taken, a record of the date, volume, and the rate at which it is taken need to be recorded by a flow meter or calculated. Confirmed with the MECP- local district office on September 23, 2022. During the time period general alarms and low chlorine alarms were functional. Low chlorine alarms are set to lock out the wells from production at 0.50 mg/L. Well #1 (PW1A) at full maximum performance (peak flows) would still be adequately disinfected. A review of free chlorine residuals during this

timeframe (See Rosemont Section 11- Annual report for more details) shows no low chlorine values during the timeframe.

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 (PW 1A) with the exception of:

- ^{6B}July 27, 2022 – Flowrate exceedances due to external third party flow measuring device verification and calibration.

Table 6. Raw Water Well #2 (PW3A) Monthly Average, Maximum Flow and Total Volume for 2022

Raw Water Flow – Well #2 (PW3A)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	13.51	25.98%	19.83	38.13%	418.83
February	10.60	20.39%	15.78	30.35%	296.90
March	10.49	20.16%	17.35	33.37%	325.04
April	10.84	20.84%	16.28	31.31%	325.10
May	13.96	26.84%	15.79	30.37%	432.66
June	11.09	21.32%	14.48	27.85%	332.65
July	10.98	21.11%	13.45	25.87%	340.36
August	9.88	18.99%	11.31	21.75%	306.14
September	7.85	15.09%	9.56	18.38%	235.35
October	6.95	13.36%	8.45	16.25%	215.39
November	5.66	10.89%	7.39	14.21%	169.81
December	5.27	10.13%	7.10	13.65%	147.54
2022	9.75	18.76%	19.83	38.13%	3,543.77

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 (PW3A).

Table 7. Raw Water Well #2(PW3A) Annual and Monthly Average and Maximum Flowrates for 2022

Raw Water Flowrate – Well #2 (PW3A)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	0.23	0.24
February	0.21	0.22
March	0.20	0.21
April	0.19	0.20
May	0.18	0.19
June	0.17	0.17
July	0.15	0.16

Raw Water Flowrate – Well #2 (PW3A)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
August	0.13	0.24
September	0.11	0.12
October	0.09	0.15
November	0.08	0.09
December	0.06	0.08
2022	0.15	0.24

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 (PW3A).