2023 Schedule 22 Annual Summary Report

Rosslyn Village Subdivision Drinking-Water System

February 2024

Prepared by the



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Section 1: Introduction

This report is a summary of water quality information for the Rosslyn Village Subdivision Well Supply System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1st to December 31st 2023. The Rosslyn Village Subdivision Well Supply System is categorized as a Small Municipal Residential Drinking Water System.

This report is prepared by The Ontario Clean Water Agency on behalf of the Municipality of the Oliver Paipoonge. A copy of the Summary Report is to be provided to the members of the municipal council by March 31st 2024.

Section 2: What Does This Report Contain?

"The report must,

- (a) list the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and,
- (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure."

- O. Reg. 170/03 s. 22 (2)

"The report must also include the following information for the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and planned uses of the system:

- 1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
- 2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement."

- O. Reg. 170/03 s. 22 (3)

Section 3: Daily Flow Rates

In accordance with the *Municipal Drinking Water Licence 293-101 Schedule C: System Specific Conditions 1.0 Performance Limits,* the Rosslyn Village Subdivision Well Supply system shall be operated not to exceed the rated capacity for the maximum flow rate from the treatment subsystem to the distribution system of **249.12 m³/ day**.

The drinking-water system may be operated temporarily at a rate above the rated capacity where necessary for:

- i) the purposes of fighting a large fire or,
- ii) the maintenance of the drinking-water system

In 2023, the average monthly raw flow rate was 578.08 m³; the average daily flow rate was 21.16 m³, with a maximum raw daily flow rate of 65.92 m³.

In 2023, the average monthly treated flow rate was 201.26m³; the average daily treated flow was 16.77 m³ and the maximum daily treated flow for the year was 48.35 m³; this represents 19 % of the design rated capacity.

A summary of raw and treated flows, including maximum raw flow into the treatment system as well as treated average, maximum and total flow rates are included in the tables below.

The quantity of raw water supplied during the reporting period did not exceed the daily maximum liters of the *Permit to Take Water* nor did the treated flows directed to the distribution system exceed the rated capacity for this system. The flow rates in the permit are in liters per minute while the plant flows are recorded in liters per second. The permit flow rates were converted to liters per second.

Month	Average Daily Raw Flow Rate (m³/d)	Maximum Daily Raw Flow Rate (m ³ /d)	Average Daily Treated Flow Rate (m³/d)	Maximum Daily Treated Flow Rate (m³/d)	Total Monthly Treated Flow Rate (m ³ /month)
January	16.62	25.4	13.65	20.97	423.17
February	16.50	18.4	13.15	15.25	368.18
March	16.98	20.5	12.60	14.17	390.48
April	18.25	36.5	13.01	15.40	390.16
May	22.19	35.7	18.42	32.95	571.14
June	29.98	46.5	25.46	40.75	763.65
July	26.48	65.9	29.85	44.85	925.28
August	27.77	53.8	23.21	48.35	719.66
September	18.16	27.8	13.80	23.63	413.91
October	16.71	35.5	12.25	15.50	379.88
November	16.60	18.7	12.31	15.83	369.22
December	17.98	21.0	13.56	18.37	420.37
		2023 Total Tr	2023 Total Treated Flows (m ³)		35.10

Monthly Raw & Treated Flow Rates for 2023



Section 4: System Failures and Correction

The Ministry of Environment conducted an inspection of the Rosslyn Village Subdivision Well Supply System on June 28 2023. The final inspection report identified 6 non-conformance as summarized in the table below.

The 2023 final inspection rating record for Rosslyn Village Subdivision Well Supply System was 88.62%.

Item	Non-Compliance Identified	Compliance Date	Action Being Taken to Address item	Status
1	Appropriate records of flows and any capacity exceedances were not made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA.	2023-10-31	OCWA will ensure that flow data will be continuously monitored and recorded.	Complete
2	Corrective actions (as per Schedule 18), including any other steps that were directed by the Medical Officer of Health, had not been taken to address adverse conditions.	2023-10-31	OCWA will train operators on the "Reporting Adverse Water Quality" SOP	
3	All required written notices of adverse water quality incidents were not provided as per O. Reg. 170/03 16-7.	2023-10-31	OCWA will train operators on the "Reporting Adverse Water Quality" SOP	
4	All required written notices of issue resolution were not provided as per O. Reg. 170/03 16-9.	2023-10-31	OCWA will train operators on the "Reporting Adverse Water Quality" SOP	
5	The owner was not in compliance with all conditions of the PTTW.	2023-10-31	OCWA will update the daily rounds sheet to include a field for recording the max raw water flow rate in L/min	
6	All parts of the drinking water system were not disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.	2023-10-31	OCWA will train the operators on the DWWP requirements to ensure that appropriate disinfection protocols are followed when there is any activity that could introduce contamination. OCWA will provide training on the 2020 version of the Ontario's Watermain Disinfection Procedure, the "Watermain Breaks and Emergency Repairs" SOP and the use of the "watermain Disinfection form"	

Section 5: Conclusion

In the reporting year of 2023, there were sixteen adverse water quality incident (AWQI) reports filed as summarized in the table below.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2023-03-02	Arsenic Exceedance	11	ug/L	Flush for 30min and resample	2023-04-14
2023-03-03	Loss of Pressure in Distribution			MOH issued BWA and requested Bacti Sampling First Middle and last users	2023-03-07
2023-03-17	Arsenic Exceedance	13	ug/L	DWA issued,	2023-04-14
2023-03-27	Arsenic Exceedance	13	ug/L	DWA issued,	2023-04-14
2023-04-02	Low CL2 due to chlorine pump failure	0.27	mg/l	Restore pump operation and disinfection	2023-04-04
2023-04-04	High Treated Water Chlorine	4.6	mg/L		2023-04-04
2023-04-06	Loss of Pressure			Collect bacti sample	2023-04-13
2023-04-08	Loss of Pressure			Collect bacti sample	2023-04-13
2023-04-11	Arsenic Exceedance	20	ug/L		2023-04-14
2023-04-14	Arsenic Exceedance	18	ug/L		2023-04-14
2023-05-11	Arsenic Exceedance	18	ug/L		2023-06-09
2023-06-22	Main Break			Repair and collect bacti sample	2023-07-04
2023-06-30	Low Chlorine	0.02	mg/L	Collect bacti sample	2023-07-07
2023-07-04	Written 2b submitted past 7 day window				
2023-09-26	TC Exceedance	2	cfu/100 ml	Collect 2 sets of bacti samples	2023-10-04
2023-11-21	EC/TC Exceedance	1	cfu/100 ml	Collect 2 sets of bacti samples	2023-11-24

The drinking water inspection found the plant to be producing good quality water. A review of the treated water samples showed the plant met or exceeded the requirements of ODWS (Ontario's Drinking-Water Standards). Treated water samples at the plant and in the distribution system were shown to be free of bacteriological contaminants, with the exceptions being noted above.

For the operating year of 2023, the Rosslyn Village Subdivision Well Supply System was able to meet the demand of water use within the town without exceeding the Municipal Drinking Water Licence and Permit to Take Water max daily liters.