

St Andrews/ Rosedale Terrace Distribution System

Waterworks # 260001250
System Category – Large Municipal Residential

Annual Water Report

Prepared For: Township of South Stormont

Reporting Period of January 1st – December 31st 2024

Issued: February 28, 2025

Revision: 0

Operating Authority:



This report has been prepared to satisfy the annual reporting requirements in O.Reg 170/03 Section 11 and Schedule 22

Table of Contents

Annual Water Report	1
Revision History	1
Report Availability	1
Compliance Report Card	1
System Process Description	1
Raw Source	1
Treatment	2
Treatment Chemicals used during the reporting year:	2
Distribution	2
Summary of Non-Compliance	2
Adverse Water Quality Incidents.....	2
Non-Compliance	2
Non-Compliance Identified in a Ministry Inspection:.....	2
Flows	3
Treated Water Flows	3
Treated Flows.....	3
Regulatory Sample Results Summary	3
Microbiological Testing.....	3
Operational Testing	3
Inorganic Parameters	4
Schedule 15 Sampling:	4
Organic Parameters	4
Additional Legislated Samples.....	4
Major Maintenance Summary	4
Distribution Maintenance.....	4
Appendix A	A
St Andrews/Rosedale Terrace Flows	A

Revision History

Date	Revision #	Revision Notes
February 28, 2025	0	Issued Annual Report

Report Availability

This system does not serve more than 10,000 residence and the annual reports will be available to residents at the Township of South Stormont municipal office, located at 2 Mille Roches Road, Long Sault, ON. The report is also available on the Township website (www.southstormont.ca).

Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	- February 7, 2025. Awaiting report results.
Ministry of Labour Inspections	0
QEEMS External Audit	- May 24, 2024, Accreditation
AWQI's/BWA	- 3 AWQI/BWA
Non-Compliance	0
Community Complaints	0
Spills	0
Watermain Breaks	- 3 Watermain Breaks

System Process Description

Raw Source

The St. Andrew's/Rosedale system receives treated water from the City of Cornwall. Treated water enters the system from the Cornwall Distribution System at two points, one on Mack Street and one at the corner of Highway 138 and Cornwall Centre Road. Each of these locations contains a metering chamber, which is owned and monitored by the City of Cornwall. In each of these metering chambers, a system of check valves has been installed to prevent backflow into the Cornwall Distribution System.

Treatment

The booster station includes two (2) vertical in-line centrifugal pumps (one duty, one standby). Each pump is rated at approximately 10.4 l/s at a TDH of 12.5 m. Disinfection is provided by a sodium hypochlorite system, with automatic switchover consisting of two (2) solution feed pumps and tank with spill containment. Back-up power provided through a connection to portable diesel unit.

Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Sodrox

Distribution

The elevated storage tank is located on the south side of County Road 18. It has a ground elevation of 71.5 metres, an overflow elevation of 120.3 metres, and a diameter of 9.4 metres. The effective capacity is 770 m³. The tank is fed and emptied via a 200 mm diameter riser, and is equipped with a pressure sensor which sends signals to the lift station to turn the pumps on or off.

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Location	Problem	Details	Legislation	Corrective Action Taken
07-22-24	165725	Tower	Total Coliform	Sample with high TC	170-03	Resample
19-09-24	166388	Distribution	Water break	Precautionary BWA	170-03	Sample
17-10-24	166671	Tower	Total Coliform	High TC caused by leak	170-03	Resample

Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
None to report.				

Non-Compliance Identified in a Ministry Inspection:

Legislation	requirement(s) system failed to meet	duration of the failure	Corrective Action	Status
None to report.				

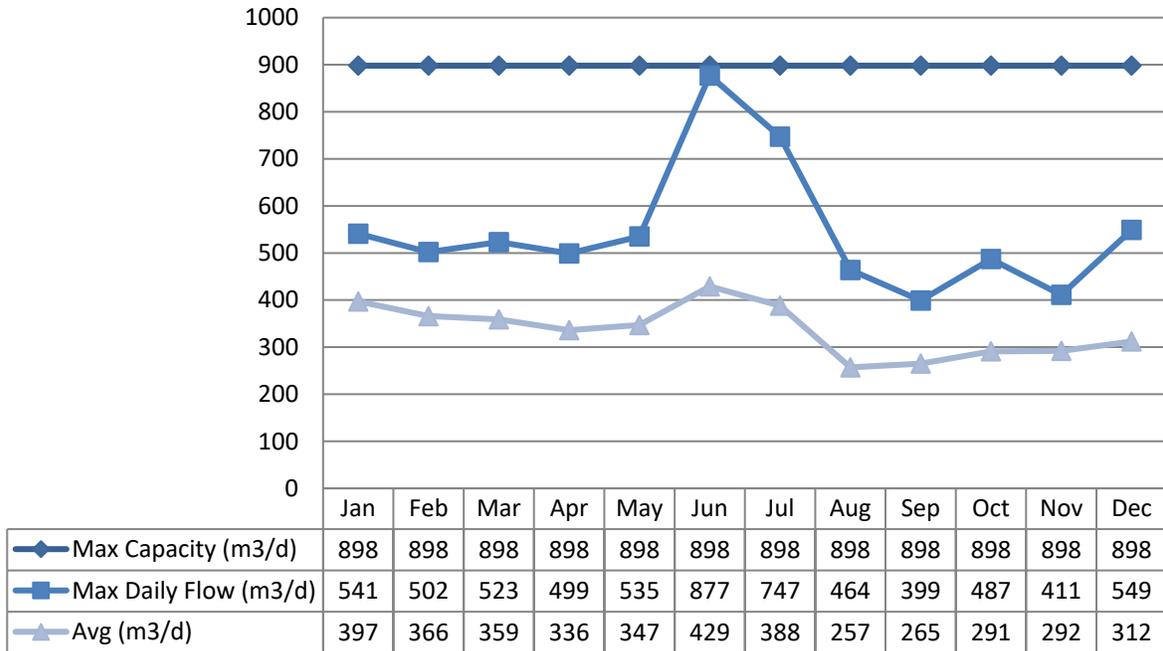
Flows

Treated Water Flows

The Treated Water flows are regulated under the Municipal Licence.

Treated Flows

Rated Capacity - MDWL



Regulatory Sample Results Summary

Microbiological Testing

	# Samples Collected	Range of E.Coli Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Results	
		Min	Max	Min	Max		Min	Max
Treated	120	0	0	0	0	53	<2	2

Operational Testing

Parameter & Sample Type	# of Samples Collected	Range of Results		
		Minimum	Average	Maximum
Free Chlorine Residual; In-House (mg/L)- TW	120	1.12	1.44	1.60
Free Chlorine Residual; Daily (mg/L)- TW	366	0.6	0.82	4.98

NOTE: spikes recorded by on-line instrumentation were a result of air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with O.Reg 170/03

Inorganic Parameters

These parameters are tested as a requirement under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

Schedule 15 Sampling:

The Schedule 15 Sampling is required under O.Reg 170/03.

Distribution System	Number of Sampling Points	Number of Samples	Range of Results		MAC (ug/L)	Number of Exceedances
			Minimum	Maximum		
Alkalinity (mg/L)	4	4	92	95	N/A	N/A
pH	4	4	7.60	8.14	N/A	N/A

Organic Parameters

These parameters are tested annually as a requirement under O.Reg 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

Treated Water	Sample Year	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
HAA Total (ug/L) Annual Average-DW	2024	14.97	80	No	No
Trihalomethane: Total (ug/L) Annual Average-DW	2024	56.25	100	No	Yes

Additional Legislated Samples

There was no additional sampling required.

Major Maintenance Summary

Date	Description
No major maintenance during reporting period.	

Distribution Maintenance

Date	Location Reference	Category	Details	Corrective Repair
07-02-24	5593 HWY 138	1	Leaking service	Repair clamp and service
17-06-24	5683 HWY 138	1	Broken fitting	Repair clamp
19-09-24	5511 HWY 138	2	Longitude Break	Replaced pipe section

