Ontario Clean Water Agency
Agence Ontarienne Des Eaux

15 Government Rd. E.
Kirkland Lake, ON P2N 3J5
Fax: 705 567 7974
www.ocwa.com

February 11, 2025

Clerk Administrator Don McArthur and Council
The Corporation of the Village of South River
63 Marie Street,
South River, ON P0A 1X0

Re: 2024 Annual/Summary Report for the South River Drinking Water System

Dear Don McArthur and Council:

Ontario's Drinking-Water Systems Regulation (O. Reg. 170/03), made under the *Safe Drinking Water Act in 2002,* requires that the owner of a drinking water system prepare an Annual Report and an Annual Summary Report of the operation of the system and the quality of its water.

Annual Report

The annual report must cover the period of January 1st to December 31st in a year and must be prepared not later than February 28th of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2024 Annual Report for the South River Drinking Water System.

In accordance with Section 11 (6), the annual report must:

(a) contain a brief description of the drinking-water system, including a list of water treatment chemicals used by the system during the period covered by the report;

(b) summarize any reports made to the Ministry under subsection 18 (1) of the Act or section 16-4 of Schedule 16 during the period covered by the report;

(c) summarize the results of tests required under the Regulation, or an approval or order, including an OWRA order, during the period covered by the report and, if tests required under this Regulation in respect of a parameter were not required during that period, summarize the most recent results of tests of that parameter;

(d) describe any corrective actions taken under Schedule 17 or 18 during the period covered by the report;

(e) describe any major expenses incurred during the period covered by the report to install, repair or replace required equipment; and

(f) if the case of a large municipal residential system or a small municipal residential system, include a statement of where a report prepared under Schedule 22 will be available for inspection under subsection 12 (4) O. Reg. 170/03, s. 11 (6).

In addition, Section 11 (7) gives the direction that a copy of an annual report for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The reports should be made available at the office of the Village, or at a location that is accessible to the users of the water system.

Summary Report

The annual summary report must cover the period of January 1st to December 31st in a year and must be prepared not later than March 31st of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2024 Annual Summary for the South River Drinking Water System.

As required in *Schedule 22, Summary Reports for Municipalities*, the annual summary must:

(2) (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.

(3) The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the 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.

In addition, Section 12 (1) – 4 – gives the direction that a copy of the annual summary for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The reports should be made available at the office of the Village, or at a location that is accessible to the users of the water system.

These reports were prepared by the Ontario Clean Water Agency on behalf of the Village of South River and are based on information kept on record by OCWA at the South River WTP. The reports cover the period January 1st to December 31st 2024.

Please note that any Provincial Officers Orders or non-compliance issues that you have received directly from the MOE should be reviewed. Where non-compliance with the Order or Issue is evident and it is not included in the attached 2024 Annual/Summary Report, then we recommend that this information be added to the report.

After your review and inclusion of any additional information, this report is to be provided to the Council members representing the Village of South River before March 31, 2025. Please ensure this distribution.

Yours truly,
Ontario Clean Water Agency

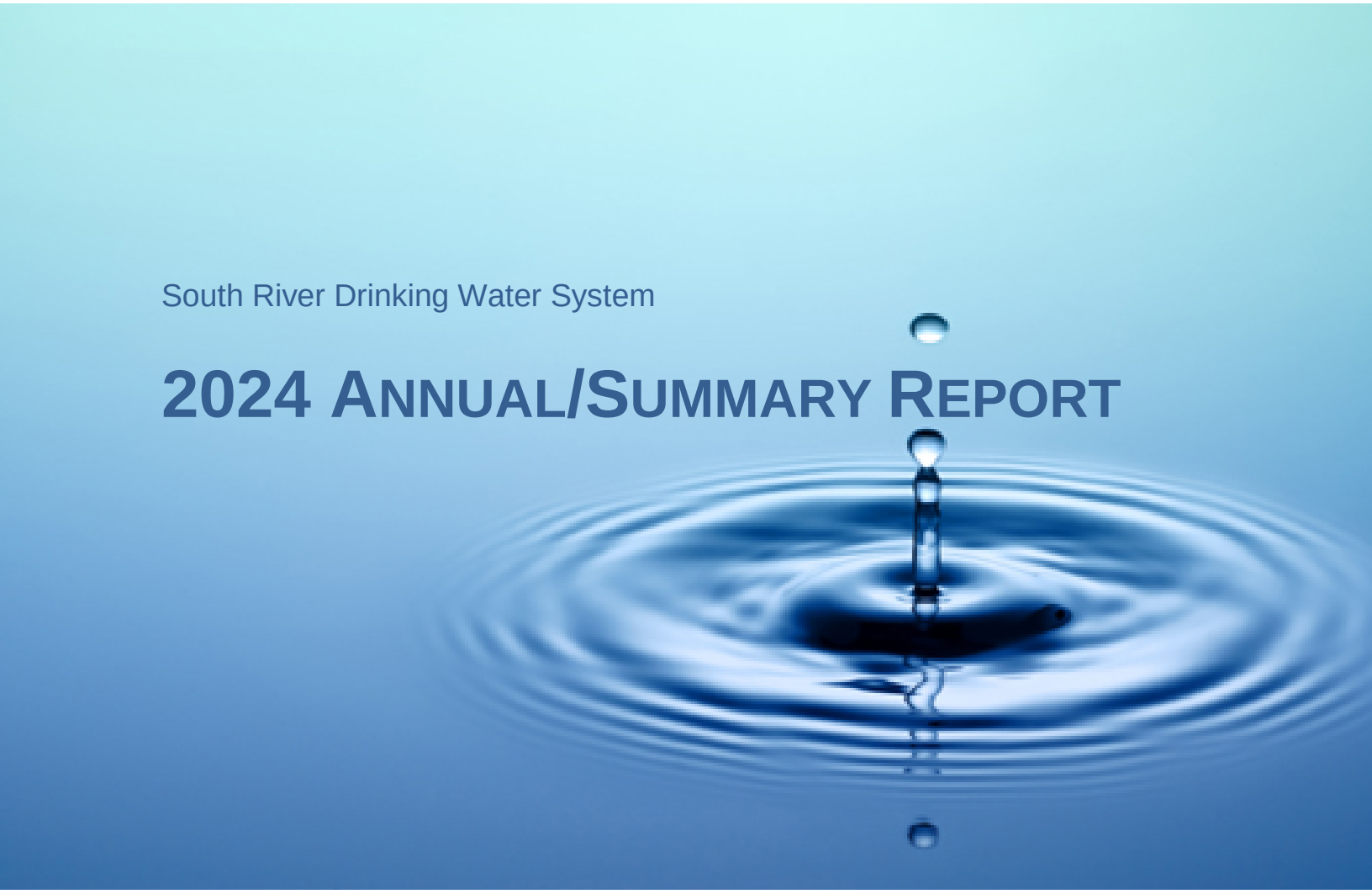
Monique Malette
Process and Compliance Technician

Copy to: Erin Spires, Drinking Water Inspector, Ministry of the Environment, Conservation and Parks

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

South River Drinking Water System

2024 Annual/Summary Report



Prepared by the Ontario Clean Water Agency
on behalf of the Village of South River

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INTRODUCTION

Municipalities throughout Ontario have been required to comply with Ontario Regulation 170/03 made under the Safe Drinking Water Act (SDWA) since June 2003. The Act was enacted following recommendations made by Commissioner O'Conner after the Walkerton Inquiry. The Act's purpose is to protect human health through the control and regulation of drinking water systems. O. Reg. 170/03 regulates drinking water testing, use of licensed laboratories, treatment requirements and reporting requirements.

Section 11 of Regulation 170/03 requires the owner to produce an Annual Report. This report must include the following:

1. Description of system & chemical(s) used
2. Summary of any adverse water quality reports and corrective actions
3. Summary of all required testing
4. Description of any major expenses incurred to install, repair or replace equipment

This annual report must be completed by February 28th of each year.

Section 22 of the regulation also requires a Summary Report which must be presented & accepted by Council by March 31st of each year for the preceding calendar year.

The report must list the requirements of the Act, its regulations, the system's Drinking Water Works Permit (DWWP), Municipal Drinking Water Licence (MDWL), Certificate of Approval (if applicable), and any Provincial Officer Order the system failed to meet during the reporting period. The report must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.

The Safe Drinking Water Act (2002) and the drinking water regulations can be viewed at the following website: http://www.e-laws.gov.on.ca.

To enable the Owner to assess the rated capacity of their system to meet existing and future planned water uses, the following information is also required in the report.

1. A summary of the quantities and flow rates of water supplied during the reporting period, including the monthly average and the maximum daily flows,
2. A comparison of the summary to the rated capacity and flow rates approved in the systems approval, drinking water works permit or municipal drinking water licence or a written agreement if the system is receiving all its water from another system under an agreement.

The reports have been prepared by the Ontario Clean Water Agency (OCWA) on behalf of the Owner and presented to council as the 2024 Annual/Summary Report.

South River Drinking Water System

Section 11

2024 Annual Report

Section 11 - ANNUAL REPORT

1.0 Introduction

Drinking-Water System Name:	**SOUTH RIVER DRINKING WATER SYSTEM**
Drinking-Water System No.:	220013562
Drinking-Water System Owner:	The Corporation of the Village of South River
Drinking-Water System Category:	Large Municipal, Residential System
Period being reported:	January 1, 2024 to December 31, 2024

Does your Drinking Water System serve more than 10,000 people? No

Is your annual report available to the public at no charge on a web site on the Internet? Yes,
https://southriver.ca/en/community-services/water-department

Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

South River Municipal Office,
63 Marie Street,
South River, Ontario
P0A 1X0

Drinking Water Systems that receive drinking water from the South River Drinking Water System

The South River Drinking Water System (DWS) provides all drinking water to the community of South River.

The Annual Report was not provided to any other Drinking Water System Owners.

The Ontario Clean Water Agency prepared the 2024 Annual/Summary Report for the South River DWS and provided a copy to the system owner; the Corporation of the Village of South River. The South River DWS is a stand-alone system that does not receive water from or send water to another system.

Notification to system users that the Annual Report is available for viewing is accomplished through:

- A notice which is posted on the Village website that the annual report is available for viewing in the public binder at the municipal office.
- A newsletter is included Bi-monthly with the municipal utility billing.

- Discussions during public council meetings.

2.0 Description of the Drinking Water System (DWS No. 220013562)

The South River Drinking Water System (DWS) is owned by The Corporation of the Village of South River and consists of a Class 3 water treatment subsystem and a Class 1 water distribution subsystem. The Ontario Clean Water Agency is designated as the Overall Responsible Operator for the South River Water Treatment Plant (WTP) and the South River Water Distribution System.

The South River DWS has an approved rated capacity of 1680 m^3/day and provides a potable water supply to the Village of South River.

Raw Water Supply

The plant raw water intake consists of a 300 millimeter (mm) diameter intake pipe extending 232 meters (m) into Forest Lake, with a flared elbow in a wooden and concrete crib located at a depth of 4.5 m. The low lift pumping station is located approx. 170 m south of Howard Street off the gravel access road. The low lift pumping station consists of a raw water well, dual manual screens and three (3) submersible pumps (two duty pumps and one standby), each rated at 10.0 litres per second (L/s) at 11.0 m of total dynamic head (TDH) that pump water to the treatment plant. In accordance with the Permit To Take Water (PTTW), the allowable rate of water taking is 19.3 L/s with a maximum daily volume of 1680 cubic meters per day (m^3/d).

Water Treatment

The South River Water Treatment facility, owned by the Village of South River, was commissioned in May of 2000. The plant provides full conventional treatment to raw water drawn from Forest Lake, a dam controlled section of the South River. Treatment consists of chemically assisted coagulation, flocculation, clarification and filtration in dual package plants followed by disinfection with sodium hypochlorite before entering the distribution system. This is a pressurized system due to there being no elevated treated water storage reservoir in the community. The water treatment facility consists of two (2) Conventional Napier Reid package plants each rated at 840 m^3/d with flocculation tanks, up flow clarifiers, and filters each consisting of multi-media that includes Garnet Sand, Silica Sand, Greensand Plus and Granular Activated Carbon (GAC) both with surface areas of 4.49 square meters (m^2). The chemical feed system consists of two (2) coagulant (polyaluminum chloride (PACl)) metering pumps, one (1) duty and one (1) standby, each with the capacity of 30 litres per hour (L/hour), one (1) large 11,500 L storage tank and one (1) 450 L day tank; three (3) alkalinity and pH adjustment (soda ash) metering pumps one (1) pre-pH adjustment with a capacity of 30 L/hour and one (1) post-pH adjustment with a capacity of 60 L/hour and one (1) standby with one (1) storage tanks; two (2) post disinfection (sodium hypochlorite) metering pumps, each rated at 30 L/hour and two storage tanks; one (1) pre-oxidizer (potassium permanganate ($KMNO_4$)) metering pump with a capacity of 30 L/hour, one (1) filter backwash greensand regeneration $KMNO_4$ metering pump with a capacity of 120 L/hour and one (1) storage tank. Raw water entering the plant is injected with soda ash and PACl. Sodium hydroxide was replaced by Soda Ash August 10, 2016. Soda ash offers numerous advantages such as affordability, ease and safety of handling and transportation. Furthermore, Soda Ash is more effective at increasing alkalinity. Aluminum sulphate (Alum) was replaced by PACl June 7, 2017. PACl has greater flexibility, coagulates at a wider pH range, creates better floc formation at low temperatures, requires lower dosage,

reduces sludge production and reduces wear on pumping equipment due to the lower dosing rates. Following rapid mixing, the water flows into the flocculation tank. Treated water overflows from the clarifiers through two multimedia filters consisting of Garnet Sand, Silica Sand and GAC. Recently, Greensand Plus was incorporated to assist with iron and manganese removal. Filtered water is then injected with a 6% sodium hypochlorite solution and directed to a baffled clear well reservoir located beneath the plant. Treated water is pumped from the clearwell, and directed to the distribution system by a high lift pumping system. A second chlorination point and pH adjustment is available prior to the point of entry to the distribution system, if needed.

A six month trial using $KMNO_4$ began December 20, 2017. The six month trial involved injecting $KMNO_4$ at the raw water header. An existing pre-chlorination injection system originally incorporated at the facility on the raw water header intended for sodium hypochlorite was utilized for the $KMNO_4$. Sodium hypochlorite was trialed in 2016 at 12% concentration, but with near freezing surface water temperatures and detention time of the package plants the oxidation process was ineffective. In an attempt to improve treated water quality $KMNO_4$ was used as a pre-oxidizing agent. Based on a review of published jar testing reports with similar raw characteristics, it was proposed that depending on iron and manganese concentrations the dosage range for $KMNO_4$ would be approximately 1.5 to 4.0 milligrams per litre (mg/L). Continuous monitoring of the iron and manganese concentrations as well as subsequent jar testing was the basis for dosage. However, the intention was to slightly under-dose $KMNO_4$ which would oxidize most of the iron and manganese to eliminate potential colour related issues in the drinking water system rather than overshoot with potential for pink treated water occurrences. Using $KMNO_4$ suited the water quality in South River due to fluctuations of iron and manganese levels caused by thermal turnover. $KMNO_4$ trial successful as of June 20, 2018 and is now permanently being used as a pre-oxidizing agent.

Water Storage and Pumping Capabilities

An in ground clearwell reservoir located under the facility has the approximate capacity of 1,536 m^3 of useable storage. The water supply system is a pressurized system. High lift pumps at the treatment facility run continually to maintain water pressure in the water distribution system piping which delivers the treated water to the systems users. There are four high lift pumps, two (2) pumps each rated at 7 L/s at a TDH of 45 m; two (2) pumps each rated at 14 L/s at a TDH of 45 m. The high lift pumps are controlled by variable frequency drives and sequence automatically to maintain system pressure and flow demands. In addition there are two (2) high lift fire pumps each rated at 56 L/s at a TDH of 38 m.

Waste Management

A wastewater treatment system consists of a two cell backwash holding tank / settling tank with approximately 210 m^3 total capacity; one (1) sludge pump rated at 5.0 L/s pumping to a 4500 L sludge storage tank and a two (2) unit bag sludge dewatering system. Process waste is generated at the South River WTP from clarifier blowdown to remove sludge and filter backwashing. The sludge from the clarifier blow down is directed to the sludge thickening tank with the decant from this tank being directed to the clarification tank. The filter backwash water goes to the clarification tank with the sludge that is built up pumped to the sludge thickening tank. The supernatant from the clarification tank is decanted and discharged to a storm sewer which discharges to the lake. The sludge from the sludge thickening tank is pumped to the sludge bagging system 3-5 times/week for disposal. Composite samples of the effluent are required monthly; however, being collected weekly to get a more complete set of results.

Emergency Power

Standby emergency power is provided by one (1) 135 kilowatt (kW) radiator cooled diesel generator housed in a separate building. It has one (1) double walled external fuel tank with the capacity of 1135 L for diesel fuel storage.

Distribution System

The South River DWS is classified as a Large Municipal Residential Drinking Water System which serves a population of approximately 1100 consumers, with around 500 connections. The South River distribution system consists of a mixture of cast iron, ductile iron, asbestos and polyvinyl chloride (PVC) piping ranging in size from 300 mm in diameter down to 50 mm diameter. As of December 2010 there is: 250 m of 50 mm, 1984 m of 100 mm, 6657 m of 150 mm, 1401 m of 200 mm, 1451 m of 250 mm, and 685 m of 300 mm. The length of the entire system is therefore approximately 12.43 kilometers (km). There are 11 dead end locations and 66 fire hydrants. There is no water storage tower or reservoir in the distribution system. The distribution system typically undergoes routine flushing twice a year, in the spring and in the fall.

3.0 List of Water Treatment Chemicals Used Over the Reporting Period

The following chemicals were used in the treatment process at the South River Water Treatment Plant.

- Polyaluminum Chloride (PACl) - Coagulation/Flocculation
- Potassium Permanganate ($KMNO_4$) – Iron and Manganese Control
- Magnafloc LT27AG Anionic Polymer – Sludge Waste System
- Sodium Carbonate (Soda Ash) – Alkalinity and pH Adjustment
- Sodium Hypochlorite – Disinfection

4.0 Significant Expenses Incurred in the Drinking Water System

OCWA is committed to maintaining the assets of the drinking water system and maintains a program of scheduled inspection and maintenance activities using a computerized Work Management System (WMS). OCWA implemented a new Workplace Management System (Maximo) in 2015, which better maintains and optimizes facility assets. All routine maintenance activities conducted at the water treatment plant were accomplished in 2024.

Significant expenses incurred in the drinking water system include:

- Septic tank and waste tanks pumped out.
- Backwash tank sludge vacuumed out.
- Various temporary watermain and new watermain installations completed throughout the Village. Form 1 completed and received, with drawings.
- Waste tank pump out.
- Ordered laboratory benchtop pH meter.
- Concrete formwork was constructed and concrete was poured for hypochlorite containment and tanks.
- Purchased new Swan free chlorine residual analyzer for point of entry.

- Remotely operated vehicle (ROV) clearwell inspection.

5.0 Drinking Water System Highlights

- The Ministry of the Environment, Conservation and Parks (MECP) inspection held on June 11, 2024. The inspection included a physical assessment of the South River WTP and a document review. Zero non-compliance items identified. The system received a risk rating of 0 % and a final inspection rating of 100%.

- SAI Global conducted an off-site external 12-month surveillance audit of the South River Drinking Water System's Quality and Environmental Management System (QEMS). The system and processes associated with the QEMS were evaluated on May 8, 2024 to ensure implementation of the Operational Plan and procedures and conformance to the Drinking Water Quality Management Standard. There was one Opportunity for Improvement and resolved. Re-accreditation achieved on June 9, 2022.

- Monitoring microcystins in raw samples from June to October. One (1) result in the raw was over the minimum detectable level, resample was below. One suspected harmful algae bloom incidents occurred during this algae season.

6.0 Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Action Center

Based on information kept on record by OCWA, one (1) adverse water quality incidents (AWQI) were reported to the Ministry of the Environment's Spills Action Centre (MOE SAC) in 2024.

AWQI 167031- Water main break caused a loss of pressure for 12 residents. Boil water advisory was implemented. On December 8, 2024 the watermain was flushed and 3 samples taken (at break 20 Mill Road, downstream Mill Road bleeder, and upstream 6 Marie Street). All samples were satisfactory with zero total coliforms and E.coli. On December 9, 2024 3 more samples were taken at same locations. The results came back satisfactory, zero total coliform and E.coli. On December 11, 2024 the North Bay Parry Sound Health Unit lifted boil water advisory.

7.0 Microbiological Testing Performed During the Reporting Period

Summary of Microbiological Data

Sample Type	No. of Samples	Range of *E. coli* Results *(min to max)*	Range of Total Coliform Results *(min to max)*	# of HPC Samples	Range of HPC Results *(min to max)*
Raw (Lake)	53	0 to 60	0 to 840	0	N/A
Treated	53	0 to 0	0 to 0	52	0 to 9
Distribution	161	0 to 0	0 to 0	54	0 to 1

Maximum Allowable Concentration (MAC) for *E. coli* = 0 Counts/100 mL
MAC for Total Coliforms = 0 Counts/100 mL
"<" denotes less than the laboratory's method detection limit.
Notes: One microbiological sample is collected and tested each week from the raw and treated water supply. A total of three microbiological samples are collected and tested each week from the South River distribution system.

Refer to *Appendix A* for a monthly summary of microbiological test results.

8.0 Operational Testing Performed During the Reporting Period

Continuous Monitoring in the Treatment Process

Parameter	No. of Samples	Range of Results *(min to max)*	Unit of Measure
Filter #1 Turbidity	8760	0.01 to 0.44	NTU
Filter #2 Turbidity	8760	0.01 to 0.48	NTU
Free Chlorine	8760	0.73 to 4.68	mg/L

Notes: For continuous monitors 8760 is used as the number of samples.

CT is the concentration of chlorine in the water times the time of contact that the chlorine has with the water. It is used to demonstrate the level of disinfection treatment in the water. CT calculations are performed and/or CT is verified via plant SCADA for the South River water plant if the free chlorine residual level drops below 1.25 mg/L to ensure primary disinfection is achieved.

Effective backwash procedures, including filter to waste are in place to ensure that the effluent turbidity requirements are met all times. The plant is configured to shut down and creates a callout whenever turbidity reaches 1.00 NTU for 0 seconds.

Summary of Chlorine Residual Data in the Distribution System

Parameter	No. of Samples	Range of Results *(min to max)*	Unit of Measure	Standard
Free Chlorine	364	0.06 to 3.3	mg/L	0.05

Note: A total of seven operational checks for chlorine residual in the distribution system are collected each week. Four (4) samples are tested one day and three (3) on a second day. The sample sets are collected at least 48-hours apart and samples collected on the same day are from different locations.

Refer to *Appendix B* for a monthly summary of the above operational data.

Summary of Nitrate & Nitrite Data *(sampled at the water treatment plant)*

Date of Sample	Nitrate Result Value	Nitrite Result Value	Unit of Measure	Exceedance
January 8	0.09	< 0.003	mg/L	No
April 15	0.112	<0.003	mg/L	No
July 15	0.121	<0.003	mg/L	No
October 15	0.044	<0.003	mg/L	No

Maximum Allowable Concentration (MAC) for Nitrate = 10 mg/L
MAC for Nitrite = 1 mg/L

Summary of Total Trihalomethane Data *(sampled in the distribution system)*

Date of Sample	Result Value	Unit of Measure	Running Average	Exceedance
Jan. 8	45.0	ug/L	Q1 = 49.75	No
Apr. 15	42.0		Q2 = 51.75	
July 15	126.0		Q3 = 65.75	
Oct. 15	57.0		Q4 = 67.50	

Maximum Allowable Concentration (MAC) for Total Trihalomethanes = 100 ug/L (Four Quarter Running Average)

Summary of Total Haloacetic Acids Data *(sampled in the distribution system)*

Date of Sample	Result Value	Unit of Measure	Running Average	Exceedance
Jan. 8	35.6	ug/L	Q1 = 31.68	No
Apr. 15	31.4		Q2 = 32.30	
July 15	80.4		Q3 = 42.85	
Oct. 15	29.1		Q4 = 44.13	

Maximum Allowable Concentration (MAC) for Total Haloacetic Acids= 80 ug/L (Four Quarter Running Average)

Summary of Most Recent Lead Data

(Applicable to the following drinking water systems; large municipal residential systems, small, municipal residential systems, and non-municipal year-round residential systems)

The South River DWS was eligible to follow the "Exemption from Plumbing Sampling" as described in section 15.1-5(9) and 15.1-5(10) of Schedule 15.1 of Ontario Regulation 170/03. The exemption applies to a drinking water system if, in two consecutive periods at reduced sampling, not more than 10% of all samples from plumbing exceed the maximum allowable concentration (MAC) of 10 ug/L for lead. As such, the system was required to test for lead, total alkalinity and pH in two distribution sample collected during the periods of December 15 to April 15 (winter period) and June 15 to October 15 (summer period). This testing is required in every 12-month period with lead testing in every third 12-month period. Two rounds of lead, alkalinity and pH testing were carried out on April 4th and September 9th of 2024. Results are summarized in the table below.

Summary of Lead, pH & Alkalinity Data

Date of Sample	No. of Samples	Sample Location/ID	Lead (mg\L)	Field pH	Alkalinity (mg/L)
April 4	1	Hydrant at Marie and Hunter Street	N/A	7.21	20
April 4	1	Hydrant at 148 Ottawa	N/A	7.33	22
Sept. 9	1	Hydrant @ 6-56	N/A	7.23	29
Sept. 9	1	Hydrant 6-43	N/A	7.28	28

Most Recent Schedule 23 Inorganic Data Tested at the Water Treatment Plant

Parameter	Result Value	Unit of Measure	Standard	Exceedance
Antimony	<MDL 0.6	ug/L	6	No
Arsenic	<MDL 0.2	ug/L	10	No
Barium	17.2	ug/L	1000	No
Boron	7.0	ug/L	5000	No
Cadmium	<MDL 0.003	ug/L	5	No
Chromium	0.73	ug/L	50	No
Mercury	<MDL 0.01	ug/L	1	No
Selenium	<MDL 0.04	ug/L	50	No
Uranium	0.005	ug/L	20	No

Note: Sample required every 12 months (sample date = *January 8, 2024)*

Most Recent Schedule 24 Organic Data Tested at Water Treatment Plant

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
1,1-Dichloroethylene (ug/L)-TW	2024/01/08	< MDL 0.33	14	No	No
1,2-Dichlorobenzene (ug/L)-TW	2024/01/08	< MDL 0.41	200	No	No
1,2-Dichloroethane (ug/L)-TW	2024/01/08	< MDL 0.35	5	No	No
1,4-Dichlorobenzene (ug/L)-TW	2024/01/08	< MDL 0.36	5	No	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW	2024/01/08	< MDL 0.2	100	No	No
2,4,6-Trichlorophenol (ug/L)-TW	2024/01/08	< MDL 0.25	5	No	No
2,4-Dichlorophenol (ug/L)-TW	2024/01/08	< MDL 0.15	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW	2024/01/08	< MDL 0.19	100	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW	2024/01/08	< MDL 0.12	100	No	No
Alachlor (ug/L) -TW	2024/01/08	< MDL 0.02	5	No	No
Atrazine + N-dealkylated metabolites (ug/L)-TW	2024/01/08	< MDL 0.01	5	No	No
Azinphos-methyl (ug/L)-TW	2024/01/08	< MDL 0.05	20	No	No
Benzene (ug/L)-TW	2024/01/08	< MDL 0.32	1	No	No
Benzo(a)pyrene (ug/L)-TW	2024/01/08	< MDL 0.004	0.01	No	No
Bromoxynil (ug/L)-TW	2024/01/08	< MDL 0.33	5	No	No
Carbaryl (ug/L)-TW	2024/01/08	< MDL 0.05	90	No	No
Carbofuran (ug/L) -TW	2024/01/08	< MDL 0.01	90	No	No
Carbon Tetrachloride (ug/L) -TW	2024/01/08	< MDL 0.17	2	No	No
Chlorpyrifos (ug/L) -TW	2024/01/08	< MDL 0.02	90	No	No
Diazinon (ug/L)-TW	2024/01/08	< MDL 0.02	20	No	No
Dicamba (ug/L)-TW	2024/01/08	< MDL 0.2	120	No	No
Dichloromethane (Methylene Chloride) (ug/L)-TW	2024/01/08	< MDL 0.35	50	No	No
Diclofop-methyl (ug/L)-TW	2024/01/08	< MDL 0.4	9	No	No
Dimethoate (ug/L)-TW	2024/01/08	< MDL 0.06	20	No	No
Diquat (ug/L)-TW	2024/01/08	< MDL 1	70	No	No
Diuron (ug/L)-TW	2024/01/08	< MDL 0.03	150	No	No
Glyphosate (ug/L)-TW	2024/01/08	< MDL 1	280	No	No
Malathion (ug/L)-TW	2024/01/08	< MDL 0.02	190	No	No
Metolachlor (ug/L)-TW	2024/01/08	< MDL 0.01	50	No	No
Metribuzin (ug/L)-TW	2024/01/08	< MDL 0.02	80	No	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW	2024/01/08	< MDL 0.3	80	No	No
Paraquat (ug/L)-TW	2024/01/08	< MDL 1	10	No	No
PCB (ug/L)-TW	2024/01/08	< MDL 0.04	3	No	No
Pentachlorophenol (ug/L)-TW	2024/01/08	< MDL 0.15	60	No	No
Phorate (ug/L)-TW	2024/01/08	< MDL 0.01	2	No	No
Picloram (ug/L)-TW	2024/01/08	< MDL 1	190	No	No
Prometryne (ug/L)-TW	2024/01/08	< MDL 0.03	1	No	No
Simazine (ug/L)-TW	2024/01/08	< MDL 0.01	10	No	No
Terbufos (ug/L)-TW	2024/01/08	< MDL 0.01	1	No	No
Tetrachloroethylene (ug/L)-TW	2024/01/08	< MDL 0.35	10	No	No
Triallate (ug/L) -TW	2024/01/08	< MDL 0.01	230	No	No
Trichloroethylene (ug/L)-TW	2024/01/08	< MDL 0.44	5	No	No
Trifluralin (ug/L)-TW	2024/01/08	< MDL 0.02	45	No	No
Vinyl Chloride (ug/L)-TW	2024/01/08	< MDL 0.17	1	No	No

Note: Sample required every 12 months (sample date = *January 8, 2024)*

Inorganic or Organic Test Results that Exceeded Half the Standard Prescribed in Schedule 2 of the Ontario Drinking Water Quality Standards.

No inorganic or organic parameter(s) listed in Schedule 23 and 24 of Ontario Regulation 170/03 exceeded half the standard found in Schedule 2 of the Ontario Drinking Water Standard (O. Reg. 169/03) during the reporting period.

Most Recent Sodium Data Sampled at the Water Treatment Plant

Date of Sample	No. of Samples	Result Value	Unit of Measure	Standard	Exceedance
January 23, 2023(Compliance)	1	64.3	mg/L	20	Yes (AWQI #161242)
January 30, 2023 (resample)	1	62.4			Yes (AWQI #161242)

Note: Sample required every 60 months. Next sampling scheduled for January 2028.

The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste. It is required that the local Medical Officer of Health be notified when the concentration exceeds 20 mg/L so that persons on sodium restricted diets can be notified by their physicians. The adverse sodium result was reported to MOE SAC and the NBPSDHU on January 27, 2023 as required under Schedule 16 of O. Reg. 170/03 (AWQI# 161242).

Most Recent Fluoride Data Sampled at the Water Treatment Plant

Date of Sample	No. of Samples	Result Value	Unit of Measure	Standard	Exceedance
January 18, 2021	1	<0.06	mg/L	1.5	No

Note: Sample required every 60 months. Next sampling scheduled for January 2026.

Summary of Additional Testing Performed in Accordance with a Legal Instrument.

Condition 1.5 of Schedule C to Municipal Drinking Water Licence (MDWL) #200-101 requires that the annual average concentration of total suspended solids (TSS) from the effluent discharged to Forest Lake not exceed 25 mg/L. Further, Condition 4.4 of Schedule C to the MDWL requires that composite samples are collected every month. Started weekly sampling in late 2022 to get a more complete set of data and capture shifts in concentrations.

The South River Water Treatment Plant did not exceed this limit in 2024.

Summary of Total Suspended Solids Data from the Effluent Discharge

Date of Sample	No. of Samples	Result Value	Unit of Measure	Annual Average	Limit
January	5	8,21, 4, 6, 4	mg/L	11. 70	25
February	4	7, 46, 3, 7			
March	4	4, 5, 3, 3			
April	3	7, 7, 5			
May	2	15, 2			
June	2	2, 7			
July	2	11, 69			
August	2	4, 2			
September	3	53, 4, 12			

October	2	11, 15			
November	2	6, 2			
December	2	19, 12			

South River Drinking Water System

Schedule 22

2024 SUMMARY REPORT

FOR MUNICIPALITIES

Schedule 22 - SUMMARY REPORTS FOR MUNICIPALITIES

1.0 Introduction

Drinking-Water System Name:	**SOUTH RIVER DRINKING WATER SYSTEM**
Municipal Drinking Water Licence (MDWL) No.:	200-101-4 (issued January 15, 2021)
Drinking Water Work Permit (DWWP) No.:	200-201-4 (issued January 15, 2021)
Permit to Take Water (PTTW) No.:	4340-BA6RUQ (issued March 14, 2019)
Period being reported:	January 1, 2024 to December 31, 2024

2.0 Requirements the System Failed to Meet

According to information kept on record by OCWA, the South River Drinking Water System has complied with all the requirements set out in the system's MDWL, its DWWP, the Act and its Regulations. With the exceptions noted below.

The latest MECP inspection report dated June 11, 2024 identified zero non-compliance items

According to the information kept on record by OCWA; there was zero non-compliance issue during 2024.

Also, it should be noted that, one (1) adverse water quality incidents were reported to the MOE's Spills Action Center. Refer to *Section 6.0 – Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Actions Center* on page 7 of this report for details.

3.0 Summary of Quantities and Flow Rates

Flow Monitoring

MDWL No. 200-101requires the owner to install a sufficient number of flow measuring devices to permit the continuous measurement and recording of:

- the flow rate and daily volume of treated water that flows from the treatment subsystem the distribution system, and
- the flow rate and daily volume of water that flows into the treatment subsystem.

The flow monitoring equipment identified in the MDWL is present and operating as required. These flow meters are calibrated on an annual basis as specified in the manufacturers' instructions.

Water Usage

The following water usage tables summarize the quantities and flow rates of water taken and produced during the 2024 reporting period, including total monthly volumes, average monthly volumes, maximum monthly volumes, and maximum flow rates.

Raw Water

2024 - Monthly Summary of Water Takings from the Source (Forest Lake)

Regulated by Permit to Take Water (PTTW) #4340-BA6RUQ , issued March 14, 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Total Volume (m^3)	13292	12707	12568	14982	13186	12925	14078	14627	13258	14383	13330	14819	164153
Average Volume (m^3/d)	429	438	405	499	425	431	454	472	442	464	444	478	449
Maximum Volume (m^3/d)	549	599	564	994	549	643	568	665	525	848	512	675	994
PTTW - Maximum Allowable Volume (m^3/day)	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680
Maximum Flow Rate (L/min)	493	532	544	862	653	520	580	568	540	615	523	750	862
PTTW - Maximum Allowable Flow Rate (L/min)	1160	1160	1160	1160	1160	1160	1160	1160	1160	1160	1160	1160	1160

The system's Permit to Take Water #4340-BA6RUQ allows the municipality to withdraw a maximum volume of 1680 cubic meters from Forest Lake each day. A review of the raw water flow data indicates that the system never exceeded this allowable limit having a maximum volume of 994 m^3 in April 2024. The Permit also allows a maximum flow rate of 1160 litres per minute (L/min). At no point during the reporting period did the system exceed this rate having a maximum recorded flow of 862 L/min in April 2024.

Treated Water

***Table B* - Treated Water Usage**

2024 - Monthly Summary of Treated Water Supplied to the Distribution System

Regulated by Municipal Drinking Water Licence (MDWL) #200-101 - Issue 4, issued Jan. 15, 2021

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Total Volume (m^3)	9785	9105	9506	10930	10097	9961	10756	11031	9901	10778	9568	10148	121566
Average Volume (m^3/d)	316	314	307	364	326	332	347	356	330	348	319	327	332
Maximum Volume (m^3/d)	386	364	330	743	396	387	456	401	453	615	369	447	743
MDWL - Rated Capacity (m^3/day)	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680	1680

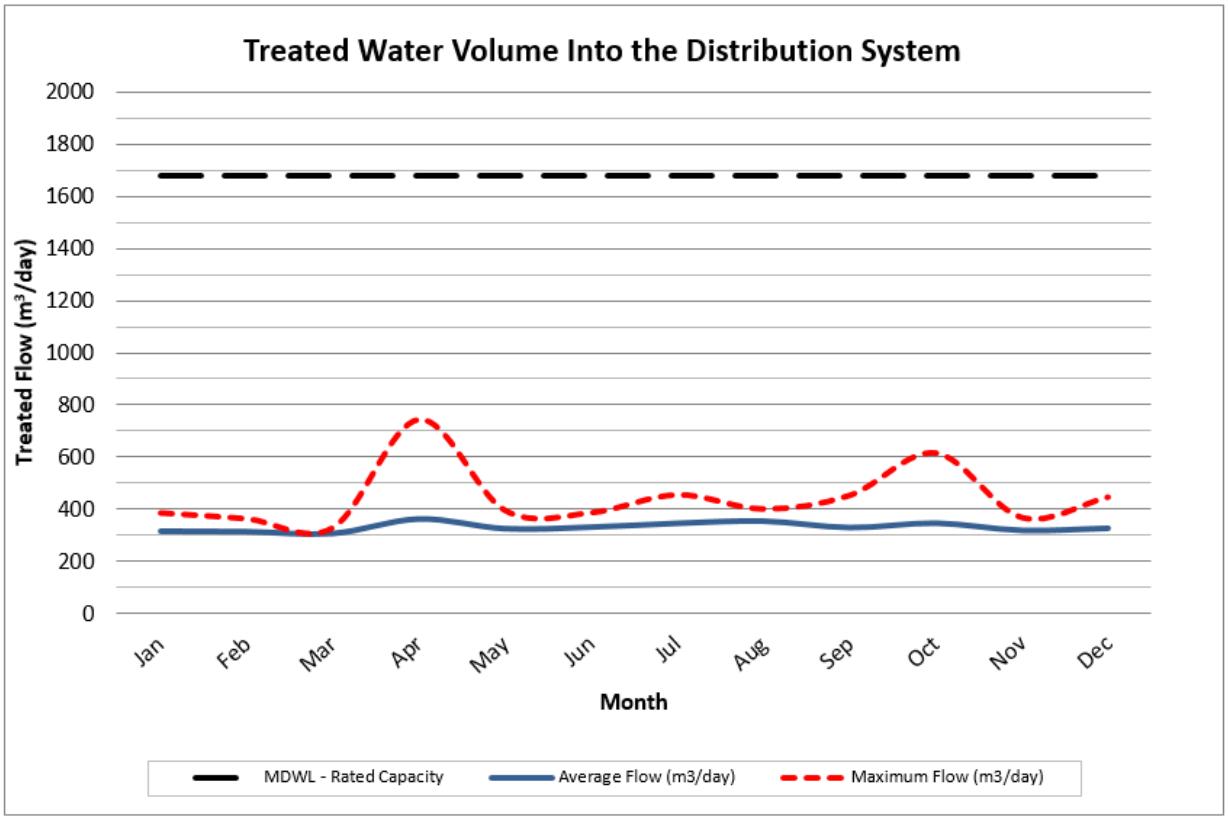
Schedule C, Section 1.1 of MDWL No. 200-101 states that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a maximum flow rate of 1680 m^3 on any calendar day. The South River DWS complied with this limit having a recorded maximum volume of 743 m^3/day in April 2024, which is 44.2% of the rated capacity.

Figure 1 compares the average and maximum flow rates into the distribution system to the rated capacity of the system identified in the MDWL. This information enables the Owner to assess the system's existing and future planned water usage needs.

Comparison of the Flow Summary to Systems Licence & Permit

Rated Capacity of the Plant (MDWL)	1680 m^3/day	
Average Daily Flow for 2024	332 m^3/day	19.8% of the rated capacity
Maximum Daily Flow for 2024	743 m^3/day	44.2% of the rated capacity
Total Treated Water Produced in 2024	121,566 m^3	

The South River WTP is rated to produce 1680 cubic meters of water per day as specified in the system's Municipal Drinking Water Licence. The average daily flow was 332 m^3 per day, which is 19.8% of the rated capacity. This information clearly shows that the plant is well within its rated capacity and is able to meet current demands of consumers.



CONCLUSION

In 2024, according to information kept on record by OCWA; the South River DWS met the terms and conditions outlined in its site specific drinking water works permit and municipal drinking water licence having twenty-three adverse water quality incidents and one incident of non-compliance during the reporting period. The system was able to operate within the water taking limits of the permit and in accordance with the rated capacity of the licence while meeting the community's demand for water use.

APPENDIX A

Monthly Summary of Microbiological Test Results

Customized Monthly Report

From 01/01/2024 to 12/31/2024

Facility Name: SOUTH RIVER DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5083
Facility Owner: Municipality: The Corporation of the Municipality of South River
Service Population: 1049

Works: 220013562
Facility Classification: Class 3 Water Treatment
Total Design Capacity: 1680 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

														2024			
Distribution Water	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
E. Coli - cfu/100mL																
Count	15.00	12.00	12.00	15.00	14.00	12.00	15.00	12.00	15.00	12.00	12.00	15.00	161.00			
Lab Count	15.00	12.00	12.00	15.00	14.00	12.00	15.00	12.00	15.00	12.00	12.00	15.00	161.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	54.00			
Lab Count	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	54.00			
Lab Month.Max	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00			1.00	
Lab Month.Mean	0.00	0.00	0.50	0.20	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.00		0.09		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Total Coliform: TC - cfu/100mL																
Count	15.00	12.00	12.00	15.00	14.00	12.00	15.00	12.00	15.00	12.00	12.00	15.00	161.00			
Lab Count	15.00	12.00	12.00	15.00	14.00	12.00	15.00	12.00	15.00	12.00	12.00	15.00	161.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00

													2024			
Raw Water	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
E. Coli: EC - cfu/100mL																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	2.00	3.00	40.00	20.00	20.00	60.00	20.00	20.00	< 20.00	< 20.00	< 20.00	< 10.00			60.00	
Lab Month.Mean	1.00	1.00	< 25.00	4.80	< 15.00	< 20.25	6.00	5.75	< 12.40	< 11.50	< 6.00	< 2.40		< 8.89		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00				0.00
Total Coliform: TC - cfu/100mL																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	100.00	101.00	380.00	520.00	460.00	500.00	27.00	60.00	300.00	840.00	300.00	240.00			840.00	
Lab Month.Mean	70.00	82.00	230.50	153.40	216.25	271.75	18.40	26.00	131.80	304.50	132.75	100.60		140.11		
Lab Month.Min	53.00	67.00	22.00	42.00	25.00	28.00	12.00	8.00	77.00	0.00	45.00	42.00				0.00

Customized Monthly Report

From 01/01/2024 to 12/31/2024

Facility Name: SOUTH RIVER DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5083
Facility Owner: Municipality: The Corporation of the Municipality of South River
Service Population: 1049

Works: 220013562
Facility Classification: Class 3 Water Treatment
Total Design Capacity: 1680 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Treated Water	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	2024 Total	2024 Avg	2024 Max	2024 Min
E. Coli: EC - cfu/100mL																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	3.00	5.00	52.00			
Lab Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	0.00	2.00	0.00	9.00	1.00	1.00	1.00	0.00	3.00	0.00	0.00	1.00			9.00	
Lab Month.Mean	0.00	0.50	0.00	2.40	0.25	0.25	0.20	0.00	0.60	0.00	0.00	0.20		0.40		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Total Coliform: TC - cfu/100mL																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00

APPENDIX B

Monthly Summary of Operational Data

Customized Monthly Report

From 01/01/2024 to 12/31/2024

Facility Name: SOUTH RIVER DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5083
Facility Owner: Municipality: The Corporation of the Municipality of South River
Service Population: 1049

Works: 220013562
Facility Classification: Class 3 Water Treatment
Total Design Capacity: 1680 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

														2024			
Distribution Water	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
Cl Residual: Free DW1 - mg/L																
Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Month.Max	2.70	2.70	2.60	2.50	2.70	2.50	2.70	2.80	2.40	2.80	2.90	3.10			3.10	
IH Month.Mean	2.23	2.08	2.08	1.97	2.07	2.21	2.13	2.21	1.96	2.29	2.27	2.53		2.17		
IH Month.Min	1.77	1.71	1.05	1.42	1.38	1.77	1.71	1.52	1.16	1.87	1.45	1.65				1.05
Cl Residual: Free DW2 - mg/L																
Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Month.Max	2.50	2.40	2.70	2.60	2.20	1.99	2.14	2.50	1.91	2.50	3.00	3.00			3.00	
IH Month.Mean	1.66	1.98	2.15	1.84	1.80	1.50	1.51	1.90	1.59	1.97	2.14	2.27		1.86		
IH Month.Min	1.05	1.64	1.68	1.01	1.42	0.71	0.94	0.96	1.24	1.28	1.26	1.67				0.71
Cl Residual: Free DW3 - mg/L																
Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	9.00	8.00	10.00	8.00	9.00	9.00	8.00	9.00	105.00			
IH Month.Max	2.40	3.10	2.60	2.70	2.20	2.14	1.94	2.60	2.80	2.50	3.00	3.20			3.20	
IH Month.Mean	1.78	2.24	2.34	2.01	1.81	1.82	1.52	1.89	1.97	1.89	2.11	2.24		1.96		
IH Month.Min	0.97	1.47	2.15	1.40	1.44	1.57	1.27	1.52	1.63	1.56	1.47	1.40				0.97
Cl Residual: Free DW4 - mg/L																
Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
IH Edited Count	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	53.00			
IH Month.Max	2.30	2.90	2.60	2.20	1.76	1.61	2.20	1.87	1.63	2.20	2.60	3.00			3.00	
IH Month.Mean	1.74	2.43	2.11	1.48	1.40	1.44	1.41	1.54	1.32	1.78	1.95	2.68		1.77		
IH Month.Min	1.21	2.01	0.93	1.02	0.88	1.28	0.91	0.94	0.70	1.39	1.60	2.20				0.70

														2024			
Filter 1	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
Turbidity - NTU																
OL Month.Max	0.11	0.17	0.15	0.13	0.10	0.25	0.28	0.07	0.07	0.08	0.03	0.44			0.44	
OL Month.Mean	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03		0.03		
OL Month.Min	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.02				0.01

														2024			
Filter 2	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
Turbidity - NTU																
OL Month.Max	0.10	0.31	0.20	0.41	0.15	0.21	0.23	0.12	0.08	0.07	0.48	0.45			0.48	
OL Month.Mean	0.03	0.03	0.03	0.04	0.04	0.02	0.03	0.02	0.02	0.02	0.03	0.02		0.03		
OL Month.Min	0.03	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02				0.01

														2024			
Treated Water	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Total	Avg	Max	Min
Cl Residual: Free (Min = 1.25 mg/L) - mg/L																
OL Month.Max	2.67	3.00	3.14	3.66	2.79	2.65	2.77	3.24	2.81	2.95	4.68	3.79			4.68	
OL Month.Mean	2.24	2.32	2.51	2.44	2.31	2.31	2.30	2.55	2.41	2.50	2.74	2.68		2.44		
OL Month.Min	1.68	1.39	1.92	1.73	1.94	1.44	1.78	1.77	2.03	1.91	0.73	1.71				0.73