

# 2025 SECTION 11 ANNUAL REPORT

ROPE  
DRINKING WATER  
SYSTEM



For the period of  
January 1<sup>st</sup>, 2025 to December 31<sup>st</sup>, 2025

Prepared for the Corporation of the Township of Tay by the Ontario Clean Water Agency



This report was prepared in accordance with the requirements of [O.Reg 170/03, Section 11, Annual reports](#) for the following system and reporting period:

<b>Drinking Water System Number:</b>	220011323
<b>Drinking Water System Name:</b>	Rope Drinking Water System
<b>Drinking Water System Owner:</b>	The Corporation of the Township of Tay
<b>Drinking Water System Category:</b>	Small Municipal Residential
<b>Reporting Period:</b>	January 1, 2025 to December 31, 2025

**Does the Drinking Water System serve more than 10,000 people?**

No

**Is the Annual Report available to the public at no charge on a website on the Internet?**

Yes

*Note: If a large municipal residential system serves more than 10,000 people, the owner of the system shall ensure that a copy of every report prepared under this section is available to the public at no charge on a website on the Internet. O. Reg. 170/03, Section 11. (10)*

**Location where Summary Report required under O. Reg 170/03, Schedule 22 will be available for inspection. (O. Reg 170/03, Section 11.(6)(f)):**

- Township of Tay Municipal Office at 450 Park Street, Victoria Harbour, Tay Township
- <https://www.tay.ca/living-here/water-and-wastewater/water-plans-and-reports/>

*Note: This is required for large municipal residential systems or small municipal residential systems.*

**List all Drinking Water Systems (if any), which receive all of their drinking water from the system:**

Drinking Water System Name	Drinking Water System Number
N/A	N/A

**Is a copy of the annual report provided to all Drinking Water System owners that are connected to this system and to whom this system provides all of its drinking water?**

N/A

**How system users are notified that the annual report is available, and is free of charge. (O.Reg 170/03, Section 11.(7))**

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Public access/notice via the web           |
| <input type="checkbox"/>            | Public access/notice via Government Office |
| <input type="checkbox"/>            | Public access/notice via a newspaper       |
| <input checked="" type="checkbox"/> | Public access/notice via Public Request    |

Public access/notice via a Public Library

Public access/notice via other method: \_\_\_\_\_

*Note: The owner of a drinking water system shall ensure that a copy of an annual report for the system is given, without charge, to every person who requests a copy. ((O.Reg 170/03, Section 11.(7)):*

**Description of Drinking Water System (O.Reg 170/03, Section 11.(6)(a)):**

The Rope Drinking Water System (DWS) is classified as a Class II Water Treatment and Class I Water Distribution and Supply Subsystem. It is categorized under O.Reg 170/03 as a Small Municipal Residential Drinking Water System servicing an approximate population of 91 persons via 26 service connections. The system is comprised of the Rope Water Treatment Plant, treated water clearwell and distribution watermain.

The raw water is drawn from Georgian Bay to the water treatment plant and treated with Sodium Hypochlorite (for Zebra Mussel control, as required), Polyaluminum Chloride (for removal of excess organics), passes through Zenon Environmental EC-04 & MDW-4 Filter System (for removal of particulates), UV (for primary disinfection) and treated with Sodium Hypochlorite (for primary and secondary treatment). The treated water is stored in a clearwell reservoir within the treatment plant prior to distribution. The treated water is distributed to the Rope subdivision. Online equipment continuously monitors filter effluent turbidity, free chlorine residual and flows. The water treatment plant is equipped with standby power in the event of a power failure.

**List of water treatment chemicals used by the system during the reporting period (O.Reg 170/03, Section 11.(6)(a)):**

- Sodium Hypochlorite 12% Solution
- Stern PAC Aluminum Chloride Hydroxide Sulfate 30-35%
- Citric Acid 50%

**Significant expenses were incurred to:**

- Install required equipment  
 Repair required equipment  
 Replace required equipment  
 No significant expenses were incurred

**Description of major expenses during the reporting period to install, repair or replace required equipment (O.Reg 170/03, Section 11.(6)(e)):**

- Clearwell Cleanout
- Clearwell Discharge Piping Repairs
- Fire Hydrant Installation
- Chemical Pump Rebuild Kits Purchase and Installation

**Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg 170/03 during the reporting period, including a description of any corrective actions taken under Schedule 17 or 18 (O. Reg 170/03, Section 11.(6)(b),(d):**

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit of Measure	Reporting Summary, Corrective Actions & Resolution
2025/10/28	Potential Observation of Improperly Disinfected Water Directed to Users	N/A	<p>AWQI #170560 – ‘Potential Observation of Improperly Disinfected Water Directed to Users’ during planned maintenance activities.</p> <p>The Ministry of the Environment, Conservation and Parks (MECP) and the Simcoe Muskoka District Health Unit (SMDHU) were consulted prior to commencing the planned maintenance activities. In accordance with the direction provided by MECP and SMDHU, an AWQI and a Precautionary Boil Water Advisory (BWA) were issued as precautionary measures associated with the planned maintenance, which involved draining the clearwell and a temporary interruption to water service.</p> <ul style="list-style-type: none"> <li>From October 23 to 24, 2025 OCWA discussed the planned maintenance and associated interruption to water service with the MECP and SMDHU. SMDHU confirmed that a Precautionary Boil Water Advisory would be required.</li> <li>On October 27, 2025, in accordance with the direction from the MECP and SMDHU, and in consultation with the Owner, OCWA issued a verbal and written notification of ‘Potential Observation of Improperly Disinfected Water Directed to Users’ to the MECP, SMDHU and MECP Spills Action Centre (SAC). No additional actions requested.</li> <li>On October 27, 2025, OCWA provided hand-delivered advance notice to users of the Rope DWS regarding the planned interruption to water services scheduled for October 28, 2025. Users were advised that a Precautionary BWA would be in place beginning October 28, 2025 until satisfactory bacteriological sample results were confirmed by the laboratory. Notification</li> </ul>

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit of Measure	Reporting Summary, Corrective Actions & Resolution
			<p>was also posted on the Township Municipal website.</p> <ul style="list-style-type: none"> <li>On October 28, 2025 between 0820 to 1522 hours, OCWA operations staff and contractors completed the planned maintenance at the Rope Water Treatment Plan (WTP). The system was returned to service at 2307 hours.</li> <li>On October 30, 2025, OCWA received sample results received from the laboratory. Results were within regulatory requirements and negative for bacteriological presence. OCWA provided an update regarding the sample results to the SMDHU and MECP. No further action was requested.</li> <li>On October 30, 2025 a written notification that the Precautionary BWA was lifted was provided to all affected users.</li> </ul>

**Table 1. Microbiological testing done under the Schedule 10, 11 or 12 (as applicable) of O.Reg 170/03 during this reporting period (O.Reg 170/03, Section 11.(6)(c)).**

Location	Number of Samples	Range of E. Coli or Fecal Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
Raw Water - RW	23 <sup>1A</sup>	0	8	0	81	N/A	N/A	N/A
Distribution	31 <sup>1B</sup>	0	0	0	0	28	0	10

Note: HPC = Heterotrophic Plate Count

Note: Units for E.Coli or Fecal Results are cfu/100 mL, units for Total Coliform Results are cfu/100 mL, and units for HPC results are cfu/1 mL

<sup>1A</sup>The owner of a small municipal residential system that obtains raw water supply from surface water shall ensure that at least once every month a sample from the raw water that is supplying the system and tested for E.Coli and Total Coliforms (O.Reg. 170/03, Schedule 11-3.(1)(3)(a)(b))

<sup>1B</sup> O.Reg 170/03 Schedule 11-2.(1)(2) requires at least one distribution sample be taken every two weeks and be tested for E.Coli, Total Coliforms and HPC.

**Table 2. Operational testing done under Schedule 7, 8 or 9 (as applicable) O. Reg 170/03 during the period covered by this Annual Report (O. Reg 170/03, Section 11.(6)(c)).**

Parameter & Location	Number of Samples	Range of Results	
		Min.	Max.
Filter Effluent Turbidity, Filter 1 (Continuous) [NTU]	8760	0.00	2.00 <sup>2A</sup>
Filter Effluent Turbidity, Filter 2 (Continuous) [NTU]	8760	0.00	2.00 <sup>2A</sup>
Free Chlorine Residual, Treated (Continuous) [mg/L]	8760	0.00 <sup>2B</sup>	2.88
Free Chlorine Residual, Distribution (Grab) [mg/L]	491	0.14	1.42

Note: The number of samples used for continuous monitoring units is 8760.

Note: If a drinking water system obtains water from a raw water supply that is surface water and the system provides filtration, the owner of a system shall ensure that sampling and testing for turbidity is carried out by continuous monitoring equipment on each filter effluent line (O.Reg.170/03, Schedule 7-3.(2)(b))

<sup>2A</sup>Turbidity values are continuously monitored during production, maintenance and start up activities. Filter-to-waste is implemented to ensure effluent turbidity requirements are met at all times and membrane integrity is monitored on a monthly basis. No AWQIs have occurred for turbidity during the reporting period, filtered water turbidity is less than or equal to 0.1 NTU in 99% of the measurements each month for each filter train.

<sup>2B</sup>Occurred on October 28, 2025 during the clear well clean out and maintenance activities. The system was already under a Precautionary Boil Water Advisory and AWQI #170560 for the potential observation of improperly disinfect water. See table "Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre" for more information.

**Table 3. Summary of additional testing and sampling results carried out in accordance with the requirement of an approval, municipal drinking water license or order (including OWRA) or other legal instrument during the reporting period 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 (O. Reg 170/03, Section 11.(6)(c)):**

Legal Instrument & Issue Date (yyyy/mm/dd)	Sample Location & Parameter	Sampling Frequency	Allowable Result	Sample Date (yyyy/mm/dd)	Sample Result(s)
MDWL #129-101, Issue 6 (2022/12/28)	Wastewater Holding Tank: Total Suspended Solids	Monthly	15 mg/L Annual Average	2025 (Monthly)	7.96 mg/L Annual Average

**Table 4. Summary of Inorganic parameters tested during this reporting period or the most recent sample results (O.Reg 170/03, Section 11.(6)(c))**

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (µg/L) - TW	2023/01/09	<MDL 0.6	6.0	No
Arsenic: As (µg/L) - TW	2023/01/09	0.2	10.0	No
Barium: Ba (µg/L) - TW	2023/01/09	20.8	1000.0	No
Boron: B (µg/L) - TW	2023/01/09	27.0	5000.0	No
Cadmium: Cd (µg/L) - TW	2023/01/09	0.005	5.0	No
Chromium: Cr (µg/L) - TW	2023/01/09	0.14	50.0	No
Mercury: Hg (µg/L) - TW	2023/01/09	<MDL 0.01	1.0	No
Selenium: Se (µg/L) - TW	2023/01/09	<MDL 0.04	50.0	No
Uranium: U (µg/L) - TW	2023/01/09	0.003	20.0	No
Fluoride (mg/L) - TW	2022/01/04 <sup>4A</sup>	<MDL 0.06	1.5	No
Nitrite (mg/L) - TW	2025/01/06	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/04/07	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/07/07	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/10/06	<MDL 0.003	1.0	No
Nitrate (mg/L) - TW	2025/01/06	0.062	10.0	No
Nitrate (mg/L) - TW	2025/04/07	0.118	10.0	No
Nitrate (mg/L) - TW	2025/07/07	0.011	10.0	No
Nitrate (mg/L) - TW	2025/10/06	0.013	10.0	No

Note: TW = Treated Water

Note: The owner of a small municipal residential system or non-municipal year-round residential system and the operating authority for the system shall ensure that at least one water sample is taken every 60 months (O.Reg 170/03, Schedule 13-2(3)). The last set of samples were collected and tested in 2023, the next set of samples are scheduled to be collected and tested in 2028.

<sup>4A</sup>Fluoride is reportable every 60 months. The most recent fluoride sample was collected in January, 2022, and the next fluoride sample is scheduled to be collected in January, 2027.

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) - TW	2022/01/04 <sup>4B</sup>	20.2	200	No	Yes <sup>4C</sup>

Note: MDL = Minimum Detection Limit, TW = Treated Water

Note: There is no regulatory Maximum Allowable Concentration (MAC) Sodium. The aesthetic objective (AO) for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

<sup>4B</sup>Sodium is reportable every 60 months. The most recent sodium sample was collected in January, 2022, and the next sodium sample is scheduled to be collected in January, 2027.

<sup>4C</sup>If a concentration of sodium exceeds 20 mg/L is detected, the owner of the drinking water system shall ensure that a resample is collected and tested as soon as reasonably possible, and other steps as directed by the medical officer of health if a report under subsection 18 (1) of the Act has not been made in respect of sodium in the preceding 57 months (O.Reg. 170/03, Schedule 16-3.(1)(8)). A sample collected in 2018 exceeded 20 mg/L and was reported as an AWQI; therefore, no notification was required for the 2022 sample, as it has not exceeded 57 months since the last report was made.

**Table 5: Summary of lead testing under Schedule 15.1 during this reporting period (O.Reg 170/03, Section 11.(6)(g))**

Location/Type & Parameter	Number of Samples <sup>4A</sup>	Range of Results		Number of Lead Exceedances
		Min.	Max.	MAC = 10 µg/L
<b>Period: January 1 to April 15</b>				
Plumbing – Lead (µg/L) <sup>4B</sup>	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) <sup>4C</sup>	1	0.04	0.04	0
Distribution – Alkalinity (mg/L as CaCO <sub>3</sub> )	1	50	50	N/A
Distribution – pH	1	7.24	7.24	N/A
<b>Period: June 15 to October 15</b>				
Plumbing – Lead (µg/L) <sup>4B</sup>	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) <sup>4C</sup>	2	0.04	0.05	0
Distribution – Alkalinity (mg/L as CaCO <sub>3</sub> )	2	34	39	N/A
Distribution – pH	2	7.47	7.63	N/A
<b>Period: December 15 to 31</b>				
Plumbing – Lead (µg/L) <sup>4B</sup>	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) <sup>4C</sup>	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as CaCO <sub>3</sub> )	N/A	N/A	N/A	N/A
Distribution - pH	N/A	N/A	N/A	N/A

Note: this is required for large municipal residential systems, small municipal residential systems or non-municipal year-round residential system. (O.Reg 170/03, Section 11.(6)(g))

<sup>5A</sup>This system follows a reduced sampling schedule (O.Reg. 170/03, Section 15.1.5). The number of sampling points for the system is based on the population served by the system. The number of people served by the system is 91 (as confirmed with the Owner on November 12, 2024), and therefore requires one (1) distribution sampling point per sampling period.

<sup>5B</sup>Plumbing samples are not applicable as this system qualifies for the plumbing exemption per O. Reg 170/03 Schedule 15.1-5 (9)(10).

<sup>5C</sup>This system follows a reduced sampling schedule (O.Reg 170/03, Section 15.1.5). Distribution lead samples are collected every 36 months. The most recent set of distribution lead samples were collected within the winter period of December 15, 2024 to April 15, 2025 and summer period of June 15, 2025 to October 15, 2025. The next set of distribution lead samples is scheduled to be collected within the winter period of December 15, 2027 to April 15, 2028 and summer period of June 15, 2028 to October 15, 2028.

**Table 6: Summary of Organic parameters sampled during this reporting period or the most recent sample results<sup>5A</sup> (O.Reg 170/03, Section 11.(6)(c)).**

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Alachlor (µg/L) – TW	2023/01/09	<MDL 0.02	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) – TW	2023/01/09	<MDL 0.01	5.0	No
Azinphos-methyl (µg/L) – TW	2023/01/09	<MDL 0.05	20.0	No
Benzene (µg/L) – TW	2023/01/09	<MDL 0.32	1.0	No
Benzo(a)pyrene (µg/L) – TW	2023/01/09	<MDL 0.004	0.01	No
Bromoxynil (µg/L) – TW	2023/01/09	<MDL 0.33	5.0	No
Carbaryl (µg/L) – TW	2023/01/09	<MDL 0.05	90.0	No
Carbofuran (µg/L) – TW	2023/01/09	<MDL 0.01	90.0	No
Carbon Tetrachloride (µg/L) – TW	2023/01/09	<MDL 0.17	2.0	No
Chlorpyrifos (µg/L) – TW	2023/01/09	<MDL 0.02	90.0	No
Diazinon (µg/L) – TW	2023/01/09	<MDL 0.02	20.0	No
Dicamba (µg/L) – TW	2023/01/09	<MDL 0.2	120.0	No
1,2-Dichlorobenzene (µg/L) – TW	2023/01/09	<MDL 0.41	200.0	No
1,4-Dichlorobenzene (µg/L) – TW	2023/01/09	<MDL 0.36	5.0	No
1,2-Dichloroethane (µg/L) – TW	2023/01/09	<MDL 0.35	5.0	No
1,1-Dichloroethylene (µg/L) – TW	2023/01/09	<MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (µg/L) – TW	2023/01/09	<MDL 0.35	50.0	No
2,4-Dichlorophenol (µg/L) – TW	2023/01/09	<MDL 0.15	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) – TW	2023/01/09	<MDL 0.19	100.0	No
Diclofop-methyl (µg/L) – TW	2023/01/09	<MDL 0.4	9.0	No
Dimethoate (µg/L) – TW	2023/01/09	<MDL 0.06	20.0	No
Diquat (µg/L) – TW	2023/01/09	<MDL 1.0	70.0	No
Diuron (µg/L) – TW	2023/01/09	<MDL 0.03	150.0	No
Glyphosate (µg/L) – TW	2023/01/09	<MDL 1.0	280.0	No
Malathion (µg/L) – TW	2023/01/09	<MDL 0.02	190.0	No
Metolachlor (µg/L) – TW	2023/01/09	<MDL 0.01	50.0	No
Metribuzin (µg/L) – TW	2023/01/09	<MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) – TW	2023/01/09	<MDL 0.3	80.0	No
Paraquat (µg/L) – TW	2023/01/09	<MDL 1.0	10.0	No
PCB (µg/L) – TW	2023/01/09	<MDL 0.04	3.0	No
Pentachlorophenol (µg/L) – TW	2023/01/09	<MDL 0.15	60.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Phorate (µg/L) – TW	2023/01/09	<MDL 0.01	2.0	No
Picloram (µg/L) – TW	2023/01/09	<MDL 1.0	190.0	No
Prometryne (µg/L) – TW	2023/01/09	<MDL 0.03	1.0	No
Simazine (µg/L) – TW	2023/01/09	<MDL 0.01	10.0	No
Terbufos (µg/L) – TW	2023/01/09	<MDL 0.01	1.0	No
Tetrachloroethylene (µg/L) – TW	2023/01/09	<MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (µg/L) – TW	2023/01/09	<MDL 0.2	100.0	No
Triallate (µg/L) – TW	2023/01/09	<MDL 0.01	230.0	No
Trichloroethylene (µg/L) – TW	2023/01/09	<MDL 0.44	5.0	No
2,4,6-Trichlorophenol (µg/L) – TW	2023/01/09	<MDL 0.25	5.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) – TW	2023/01/09	<MDL 0.12	100.0	No
Trifluralin (µg/L) – TW	2023/01/09	<MDL 0.02	45.0	No
Vinyl Chloride (µg/L) – TW	2023/01/09	<MDL 0.17	1.0	No
Trihalomethane: Total Annual Average (µg/L) – DW	2025 <sup>6A</sup>	63.88	100.0	No
Haloacetic Acid: Total Annual Average (µg/L) – DW	2025 <sup>6A</sup>	45.06	80.0	No

Note: TW = Treated Water, DW = Distribution Water, MDL = Minimum Detection Limit, MAC = Maximum Allowable Concentration, HAA = Haloacetic Acids

Note: The owner of a small municipal residential system shall ensure that at least one water sample is taken every 60 months and tested for every parameter set out in Schedule 23 and 24 (O.Reg 170/03, Schedule 13-2.(3), O.Reg 170/03, Schedule 13-3.(3)). The last set of samples were collected and tested in January, 2023, the next set of samples are scheduled to be collected and tested in January, 2028.

<sup>6A</sup>As of January, 2025 at the request of the MECP and Ministry of Health (SMDHU), sampling for THMs and HAAs was increased from one to three sampling locations (West Blowoff, East Blowoff and Booth Sample tap) and from a quarterly to a monthly frequency. This sampling regime exceeds the minimum number of samples required under O.Reg 170/03 Schedule 13.6 and 13.6.1 All single sample results have been taken into consideration to produce the Total Annual Average for both parameters.

**Table 7: List of Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards for the reporting period.**

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result
Trihalomethane: Total Annual Average (µg/L) - DW	2025	63.88
Haloacetic Acid: Total Annual Average (µg/L) - DW	2025	45.06