

SUMMARY REPORT

ONTARIO REGULATION 170/03
SECTION 22

ROPE DRINKING WATER SYSTEM



**FOR THE PERIOD:
JANUARY 1, 2021 – DECEMBER 31, 2021**

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

SCHEDULE 22
SUMMARY REPORTS FOR MUNICIPALITIES

Municipal: Large Residential
Small Residential

Application

22-1. This Schedule applies to the following drinking water systems:

1. Large municipal residential systems.
2. Small municipal residential systems.

Report

22-2. (1) The owner of a drinking water system shall ensure that, not later than March 31 of each year after 2003, a report is prepared in accordance with subsections (2) and (3) for the preceding calendar year and is given to,

- (a) in the case of a drinking water system owned by a municipality, the members of the municipal council;
- (b) in the case of a drinking water system owned by a municipal service board established under section 195 of the *Municipal Act, 2001*, the members of the municipal service board; or
- (c) in the case of a drinking water system owned by a corporation, the board of directors of the corporation.

(2) 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.

(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.

(4) If a report is prepared under subsection (1) for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31.

(5) Revoked: O. Reg. 253/05, s. 18.

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DRINKING-WATER SYSTEM NAME:	Rope Drinking Water System
DRINKING-WATER SYSTEM NUMBER:	220011323
DRINKING-WATER SYSTEM CATEGORY:	SMALL MUNICIPAL RESIDENTIAL
MUNICIPAL DRINKING WATER LICENCE #:	129-101 (issued on December 28, 2020)
DRINKING-WATER WORKS PERMIT #:	129-201 (issued on December 28, 2020)
PERMIT TO TAKE WATER #:	2756-8UKPGS

REPORT

This report is a summary of water quantity data for the Rope Drinking Water System (DWS) in the Township of Tay written in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation for the reporting period of January 1, 2021 to December 31, 2021. The Rope DWS is categorized as a Large Municipal Residential Drinking Water System. This report was prepared by the Ontario Clean Water Agency on behalf of the Corporation of the Township of Tay.

ISSUES OF NON-COMPLIANCE

The following outlines any instances when the DWS failed to meet the requirements of the Act, Regulations, System Approval(s) and any Order during this reporting period and the measures taken to correct each failure.

Not Applicable for the Reporting Period
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Please refer to the Annual Report (Section 11) for the Rope DWS for information regarding Adverse Water Quality Incident(s) that may have occurred during the reporting period.

SYSTEM PERFORMANCE

The following tables (Table 1 and Table 2) summarize the quantities and flow rates of the raw water taken and treated water supplied during the period covered by this report, including monthly average and maximum day flows, and daily instantaneous peak flow rates, as well as a comparison with the allowable maximum daily volume and flow rates for the system.

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Table 1: Rope DWS – Raw Water (RW) Summary for Reporting Period

Description	Raw Water Intake
Maximum Daily Volume(m ³ /day)*	273.8
Maximum Flow Rates (L/s)	4.8
Average Day Flow (m ³ /day)	35.1
% of Maximum Daily Volume	12.8
Maximum Day Flow (m ³ /day)	85.3
% of Maximum Daily Volume	31.2
Average Daily Flow Rate	1.2
% of Approved Flow Rate	25.0
Daily Instantaneous Peak Flow Rate (L/s)	4.6
% of Approved Flow Rate	95.8
Total Annual Flow (m ³)	12,879.6

**As specified in the Permit to Take Water, where the “maximum daily volume” is expressed as the “Total Taking” in cubic metres per day.*

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Table 2: Rope DWS – Treated Water (TW) Summary for Reporting Period

Description	Treated Water Production
Maximum Daily Volume(m ³ /day)*	216.0
Maximum Flow Rates (Rated Capacity) (L/s)**	3.2
Average Day Flow (m ³ /day)	26.0
% of Maximum Daily Volume	12.0
Maximum Day Flow (m ³ /day)	60.8
% of Maximum Daily Volume	28.1
Average Daily Flow Rate	1.1
% of Approved Flow Rate	34.4
Daily Instantaneous Peak Flow Rate (L/s)+	10.6
% of Approved Flow Rate	331.3
Total Annual Flow (m ³)	9,560

*As specified in the Permit to Take Water, where the “maximum daily volume” is expressed as the “Total Taking” in cubic metres per day.

**Rated Capacity as per the Municipal Drinking Water License, UV System Unit Max used as reference.

+Exceedances are due to power bumps, pump start-ups, and their instantaneous flow rate measurements.

A review of Rope DWS flow information for the period of January 1, 2021 to December 31, 2021 indicates that there were no exceedances of the MDWL Rated Capacity at the Pumphouse, which also means there were no exceedances of the maximum daily volume as per the PTTW.

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The following tables (Table 3 and Table 4) outline a more detailed flow summary for the Raw and Treated Water Flows

Table 3: Rope DWS – Facility Flow Summary for Raw Water Intake (RW)

Month	Monthly Flow Total (m ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)	Daily Average Flow Rate (L/sec)	Daily Peak Flow Rate (L/sec)	Number of Days of Water Taking
Jan	901.7	29.1	54.3	0.7	3.6	31
Feb	910.2	31.4	58.6	1.3	4.0	28
Mar	873.1	28.2	32.5	1.1	4.6	31
Apr	971.4	32.4	40.6	1.2	4.5	30
May	1,434.1	46.3	69.4	1.2	2.6	31
Jun	1,517.5	50.6	85.3	1.3	4.0	30
Jul	1,224.0	39.5	56.5	1.6	2.2	31
Aug	1,312.3	42.3	61.4	1.6	2.5	31
Sep	1,047.1	33.8	50.4	1.4	2.8	30
Oct	1,001.5	32.3	44.4	1.5	2.4	31
Nov	843.6	28.1	38.8	0.7	1.2	30
Dec	843.1	27.2	52.7	0.7	4.6	31
Total	12,879.6	-	-	-	-	365
Avg.	-	35.1	-	1.2	-	-
Max.	-	-	85.3	-	4.6	-

Table 4: Rope DWS – Facility Flow Summary for Treated Water (TW)

Month	Monthly Flow Total (m ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)	Daily Average Flow Rate (L/sec)	Daily Peak Flow Rate (L/sec)	Number of Days of Water Taking
Jan	575.7	18.6	23.7	1.0	4.6	31
Feb	568.8	19.6	27.6	1.0	8.4	28
Mar	642.2	20.7	23.8	1.0	7.6	31
Apr	722.5	24.1	31.0	1.1	5.4	30
May	1,058.3	34.1	51.8	1.3	5.7	31
Jun	1,177.6	39.3	60.8	1.4	7.0	30
Jul	970.9	31.3	47.5	1.2	8.0	31
Aug	1,042.9	33.6	50.5	1.2	5.8	31
Sep	794.8	26.5	39.0	1.1	5.3	30
Oct	721.7	23.3	28.9	1.0	10.6	31
Nov	622.3	20.1	28.1	1.0	4.7	30
Dec	662.0	21.4	41.8	1.0	7.6	31
Total	9559.7	-	-	-	-	365
Avg.	-	26.0	-	1.1	-	-
Max.	-	-	60.8	-	10.6	-

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For additional information on the treated water flows from the Rope DWS, please refer to the following graphical representations:

- Graph 1: Treated Water Flows for 2021

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Graph 1: Treated Water Flows for Reporting Period



Rope DWS - Total Treated Flows (2021)

