



February 28, 2020

Chief Administrative Officer
Corporation Township of Adjala-Tosorontio
7855 Sideroad 30, RR#1
Alliston, ON
L9R 1V1

Re: Safe Drinking Water Act, O.Reg. 170/03 Schedule 22 Summary Report for Colgan DWS

Dear, CAO:

Attached is the 2019 Summary Report for the Colgan Drinking Water System (DWS). This report has been completed based on the information in our records and in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act, which requires a Summary Report to be prepared no later than March 31st of each year for the preceding calendar year. This report covers the period of January 1, 2019 to December 31, 2019.

Please remember that any Orders that the Town has received directly from the Ministry of the Environment, Conservation and Parks (MECP) should be reviewed. If there is a non-compliance with the Order, we recommend that the information be added to this report, if not already. After your review and inclusion of any additional information, this Summary Report is to be provided to the members of the Municipal Council. Please ensure its distribution to the Council Members and please provide proof of their review.

We emailed a copy of the 2019 Annual Report for the Colgan DWS to your office on February 28, 2020. The Annual Report must cover the period from January 1 to December 31 in a year and must be prepared in accordance with Section 11 of O. Reg 170/03 and submitted no later than February 28 of the following year.

Section 12 of O. Reg. 170/03 requires both the Summary Report and the Annual Report to be made available for inspection by any member of the public at the office of the municipality or at a location that is reasonably convenient to the users of the water system, as indicated in the Section 11 Annual Report, during normal business hours and without charge.

Please let me know if there are any questions or comments concerning the Summary and/or Annual Report(s).

Thanks,

Colin Smith

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SUMMARY REPORT

ONTARIO REGULATION 170/03
SCHEDULE 22

COLGAN DRINKING WATER SYSTEM



FOR THE PERIOD:
JANUARY 1, 2019 – DECEMBER 31, 2019

*Prepared for the Corporation of the Township of Adjala-Tosorontio
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.

Ontario Regulation 170/03: Drinking Water Systems

Schedule 22 Summary Report

JANUARY 01, 2019 – DECEMBER 31, 2019

DRINKING-WATER SYSTEM NAME:	COLGAN DRINKING WATER SYSTEM
DRINKING-WATER SYSTEM NUMBER:	220009933
DRINKING-WATER SYSTEM CATEGORY:	SMALL MUNICIPAL RESIDENTIAL
MUNICIPAL DRINKING WATER LICENCE #:	097-106, issued May 13, 2016
DRINKING-WATER WORKS PERMIT #:	097-206, issued May 13, 2016
PERMIT TO TAKE WATER #:	4352-AYULX7

REPORT

This report is a summary of water quantity data for the Colgan Drinking Water System (DWS) in the Township of Adjala-Tosorontio written in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation for the reporting period of January 1, 2019 to December 31, 2019. This report was prepared by the Ontario Clean Water Agency on behalf of the Corporation of the Township of Adjala-Tosorontio.

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 Reporting Period

Please refer to the Section 11 Annual Report for the Colgan DWS for information regarding Adverse Water Quality Incident(s) that may have occurred during the reporting period.

SYSTEM PERFORMANCE

The following tables (Tables 1 and 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 maximum daily volume and flow rates specified in the system approval:

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

Description	CW1 [^]	CW2 [^]	CW3 [^]
Maximum Allowable Daily Volume (m ³ /day)*	262.9	262.9	262.9
Maximum Allowable Flow Rate (L/s)**	7.6	7.6	7.6
Average Daily Flow (m ³ /day)	20.36	21.97	19.91
Percentage of Maximum Daily Volume*	7.74	8.36	7.57
Maximum Daily Flow (m ³ /day)	52.45	64.07	51.35
Percentage of Maximum Daily Volume**	19.95	24.37	19.53
Average Flow Rate (L/s)	5.42	8.46	5.32
Percentage of Maximum Allowable Flow Rate**	71.3	111.3	70.0
Maximum Instantaneous Peak Flow Rate (L/s)	8.54 ⁺	20.61 ⁺	23.26 ⁺
Percentage of Maximum Allowable Flow Rate**	112.3	271.2	306.0
Total Annual Volume (m ³)	7358.5	8024.9	6713.1

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Schedule 22 Summary Report

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[^]Conveyed to Waste or Treatment System.

*As specified in the Permit to Take Water, where the “maximum daily volume” is the “Maximum Taken per Day” per well expressed as litres per day and stipulates a “Total Taking” of 262.9 m³/day.

**As specified in the Permit to Take Water, where the “maximum flow rate” is the “Maximum Taken per Minute” per well expressed as litres per minute.

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

Table 2: Colgan DWS – Well Pumphouse Treated Water (TW) Summary for Reporting Period

Description	Well Pumphouse TW
Rated Capacity (m ³ /day)*	263.0
Average Daily Flow (m ³ /day)	50.86
Percentage of Rated Capacity*	19.3
Maximum Daily Flow (m ³ /day)	98.26
Percentage of Rated Capacity*	37.4
Total Annual Volume (m ³)	18566.6

*As specified in the Municipal Drinking Water Licence, where the “rated capacity” is the “the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system,” expressed in cubic metres per day.

A review of flow information for the period of January 1, 2019 to December 31, 2019 indicates that the maximum daily volume specified in the PTTW was not exceeded on any well. Also, the drinking water system did not exceed the MDWL Rated Capacity for treated water that flows from the treatment subsystem to the distribution system. The instances of exceeding the allowable PTTW maximum flow rate are explained by instantaneous flow rate measurements and well pump start-ups. Instantaneous flow rate exceedances do not result in non-compliances because the PTTW dictates daily and total water taking volumes only.

The following tables (Tables 3 to 6) outline a more detailed flow summary for each Well and the Well Pumphouse.

Ontario Regulation 170/03: Drinking Water Systems

Schedule 22 Summary Report

JANUARY 01, 2019 – DECEMBER 31, 2019

Table 3: Colgan DWS – Facility Flow Summary for Raw Water Source CW1

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	601.13	19.39	52.45	5.080	8.150	31
Feb	495.12	17.68	27.54	4.991	7.990	28
Mar	631.37	20.37	38.28	5.704	8.050	31
Apr	528.16	17.61	34.99	5.515	8.070	30
May	399.91	12.9	37.97	5.126	7.880	31
Jun	662.2	22.07	47.19	5.637	8.030	30
Jul	639.52	20.63	32.24	5.511	7.770	31
Aug	795.49	25.66	46.31	5.461	7.830	31
Sep	918.08	30.6	47.24	5.514	7.960	30
Oct	651.81	21.03	34.63	5.273	8.540	31
Nov	515.22	19.08	32.77	5.657	7.930	27
Dec	520.48	17.35	41.17	5.629	7.970	30
Total	7358.49	-	-	-	-	361
Avg.	-	20.36	-	5.42	-	-
Max.	-	-	52.45	-	8.54	-

Table 4: Colgan DWS – Facility Flow Summary for Raw Water Source CW2

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	520.54	16.79	37.34	8.613	13.11	31
Feb	480.15	17.15	28.48	9.431	13.16	28
Mar	437.10	14.10	46.66	7.789	13.01	31
Apr	500.30	16.68	30.05	7.117	13.42	30
May	757.20	24.43	64.07	8.658	15.98	31
Jun	690.14	23.00	45.30	8.564	20.29	30
Jul	728.20	23.49	31.70	8.661	20.61	31
Aug	916.07	29.55	44.90	8.868	19.67	31
Sep	905.20	30.17	51.45	7.886	12.83	30
Oct	717.42	23.14	36.35	8.530	19.86	31
Nov	748.57	24.95	45.91	8.689	19.88	30
Dec	624.04	20.13	46.05	8.709	12.97	31
Total	8024.93	-	-	-	-	365
Avg.	-	21.97	-	8.46	-	-
Max.	-	-	64.07	-	20.61	-

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Table 5: Colgan DWS – Facility Flow Summary for Raw Water Source CW3

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	665.88	21.48	47.62	5.656	8.20	31
Feb	579.39	20.69	50.43	5.856	8.12	28
Mar	619.51	19.98	42.05	5.273	18.08	31
Apr	613.95	20.47	31.84	5.741	8.11	30
May	616.49	19.89	30.06	5.594	21.93	31
Jun	512.75	17.09	51.35	5.449	23.15	30
Jul	737.81	23.80	50.17	5.085	22.86	31
Aug	545.17	17.59	35.20	4.339	23.26	31
Sep	347.60	24.83	49.53	5.006	8.07	14
Oct	575.09	19.83	33.38	5.157	23.01	29
Nov	546.75	20.25	45.82	5.190	22.64	27
Dec	352.69	13.06	40.65	5.322	7.43	27
Total	6713.1	-	-	-	-	340
Avg.	-	19.91	-	5.32	-	-
Max.	-	-	51.35	-	23.26	-

Table 6: Colgan DWS – Facility Flow Summary for Treated Water from Well Pumphouse

Month	Monthly Flow Total (m ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)
Jan	1353.8	43.67	49.09
Feb	1311.15	46.83	62.09
Mar	1431.07	46.16	56.39
Apr	1381.03	46.03	56.73
May	1502.3	48.46	86.07
Jun	1687.6	56.25	88.55
Jul	1816.06	58.58	84.04
Aug	1785.8	57.61	85.79
Sep	1752.56	58.42	78.59
Oct	1730.12	55.81	60.1
Nov	1543.72	51.46	68.68
Dec	1271.36	41.01	98.26
Total	18566.57	-	-
Avg.	-	50.86	-
Max.	-	-	98.26