2025 SECTION 11 ANNUAL REPORT

ELMVALE DRINKING WATER SYSTEM

For the period of
January 1st, 2025 to December 31st, 2025

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

Township of Springwater

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ONTARIO CLEAN WATER AGENCY
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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:

Drinking Water System Number:	220000700
Drinking Water System Name:	Elmvale Drinking Water System
Drinking Water System Owner:	The Corporation of the Township of Springwater
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2025 – 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 Springwater Municipal Office 2231 Nursery Road, Minesing
- https://www.springwater.ca/en/living-here/water-quality-and-testing.aspx

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))*

X	Public access/notice via the web
X	Public access/notice via Government Office
	Public access/notice via a newspaper

X	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 Elmvale Drinking Water System (DWS) is classified as a Class II Water Distribution and Supply Subsystem and categorized as a Large Municipal Residential Drinking Water System under O.Reg 170/03, servicing an approximate population of 3,175 persons. The system is comprised of two production wells, a treatment pumphouse, and a booster pumping station with two standpipes that feeds into the distribution system.

The raw water is supplied from two drilled groundwater wells (Well No. 1 and Well No. 2). The water pumped from the wells is treated with Sodium Hypochlorite (for primary and secondary disinfection). The treated water is stored in two storage tanks (standpipes) located at the booster pumping station, prior to entering the distribution system. Online equipment continuously monitors and records free chlorine and flows. The booster station is equipped with standby power in the event of a power failure, which also provides emergency power to the water treatment plant.

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

- Sodium Hypochlorite, 12%

Significant expenses were incurred to:

	Install required equipment
	Repair required equipment
X	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)):*

- Replacement of transducers at booster station

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	Reporting Summary, Corrective Actions & Resolution
N/A	N/A	N/A	• N/A

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.
RW – Well No. 1[1A]	52	0	0	0	0	N/A	N/A	N/A
RW – Well No. 2[1A]	52	0	0	0	0	N/A	N/A	N/A
Treated[1B]	52	0	0	0	0	52	<10	10
Distribution[1C]	144	0	0	0	0	52	<10	10

Note: RW = Raw Water, 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, units for HPC results are cfu/1mL

[1A]O.Reg 170/03, Schedule 10-4. (1)(3) requires for a large municipal residential system that a water sample is taken at least once every week from the drinking water system's raw water, before any treatment is applied to the water and tested for E.Coli and total coliforms.

[1B]O Reg 170/03, Schedule 10-3 requires for a large municipal residential system that a treated water sample is taken at least once every week and tested for E.Coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic count (HPC).

[1C]O.Reg. 170/03 Schedule 10-2.(1)(2)(3) requires that a system that serves 100,000 people or less, at least eight distribution samples, plus one additional sample for every 1,000 people served by the system to be taken every month, with at least one of the samples being taken in each week and be tested for E.Coli, Total Coliforms. At least 25 percent of the samples required must be tested for general bacteria population expressed as colony counts on heterotrophic plate count (HPC). The number of people served by the system is 3,175 (as confirmed with the Owner on December 12, 2024), and therefore requires at minimum eleven (11) distribution samples per month.

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.
Turbidity, In-House (NTU) – Well No. 1[2A]	12	0.09	0.68
Turbidity, In-House (NTU) – Well No. 2[2A]	12	0.09	0.23
Free Chlorine Residual, Continuous (mg/L) - Treated[2B]	8760	0.80	1.61
Free Chlorine Residual, Continuous (mg/L) - Distribution[2C]	8760	0.72	1.85

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

[2A]O.Reg 170/03 Schedule 7-3.(1)(1.1) requires a raw water sample be taken at least once every month from each well that is supplying water to the system and tested for turbidity.

[2B]O.Reg 170/03 Schedule 7-2.(1) requires a drinking water system that provides chlorination for primary disinfection to sample and test for free chlorine residual with continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed.

[2C]O.Reg 170/03 Schedule 7-2.(3) requires a large municipal residential system that provides secondary disinfection to take at least seven distribution samples each week and immediately tested for free chlorine residual, if the system provides chlorination and does not provide chloramination. Secondary disinfection sampling for distribution free chlorine residual at Elmvale Drinking Water is taken via continuous monitoring at the Elmvale Booster station, as permitted under the regulation.

Table 3. Summary of additional testing and sampling results carried out in accordance with the requirement of an approval, municipal drinking water licence 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)	Parameter	Date Sampled (yyyy/mm/dd)	Result	Unit of Measure
N/A	N/A	N/A	N/A	N/A

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[4A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (µg/L) - TW	2024/02/20	< MDL 0.6	6.0	No
Arsenic: As (µg/L) - TW	2024/02/20	0.5	10.0	No
Barium: Ba (µg/L) - TW	2024/02/20	119	1000.0	No
Boron: B (µg/L) - TW	2024/02/20	30	5000.0	No

Parameter & Location	Sample Date[4A] (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Cadmium: Cd (µg/L) - TW	2024/02/20	< MDL 0.003	5.0	No
Chromium: Cr (µg/L) - TW	2024/02/20	0.19	50.0	No
Mercury: Hg (µg/L) - TW	2024/02/20	< MDL 0.01	1.0	No
Selenium: Se (µg/L) - TW	2024/02/20	< MDL 0.04	50.0	No
Uranium: U (µg/L) - TW	2024/02/20	1.83	20.0	No
Fluoride (mg/L) - TW	2023/05/15[4B]	0.2	1.5	No
Nitrite (mg/L) - TW	2025/02/11	< MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/05/20	< MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/08/12	< MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2025/11/10	< MDL 0.003	1.0	No
Nitrate (mg/L) - TW	2025/02/11	0.049	10.0	No
Nitrate (mg/L) - TW	2025/05/20	0.04	10.0	No
Nitrate (mg/L) - TW	2025/08/12	0.055	10.0	No
Nitrate (mg/L) - TW	2025/11/10	0.037	10.0	No

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

[4A]The owner of a large municipal residential system shall ensure that at least one water sample for inorganics is taken every 36 months, if the system obtains water from a raw water supply that is ground water (O.Reg 170/03, Schedule 13-2(1)(b)) The last set of samples were collected and tested in 2024, the next set of samples are scheduled to be collected and tested in 2027.

[4B]Fluoride is reportable every 60 months. The most recent Fluoride samples were tested in 2023, the next set of samples is scheduled to be tested in 2028.

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) - TW	2023/05/15[4C]	11.6	200	No	No

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.

[4C]Sodium is reportable every 60 months. The most recent Sodium samples were tested in 2023, the next set of samples is scheduled to be tested in 2028.

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[5A]	Range of Results		Number of Lead Exceedances
		Min.	Max.	MAC = 10 µg/L
Period: January 1 to April 15				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as $CaCO_3$)	2	173	175	N/A
Distribution – pH	2	6.90	7.10	N/A
Period: June 15 to October 15				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as $CaCO_3$)	2	181	182	N/A
Distribution – pH	2	7.80	7.90	N/A
Period: December 15 to 31				
Plumbing – Lead (µg/L)[5B]	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L)[5C]	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as $CaCO_3$)	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)).

[5A]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 3,109 persons (as confirmed with the Owner on December 13 2023) and therefore requires two (2) distribution sampling points per sampling period.

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

[5C]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, 2023 to April 15, 2024 and summer period of June 15, 2024 to October 15, 2024. The next set of distribution lead samples is scheduled to be collected within the winter period of December 15, 2026 to April 15, 2027 and summer period of June 15, 2027 to October 15, 2027.

Table 6: Summary of Organic parameters sampled 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
1,1-Dichloroethylene (ug/L)-TW	2024/02/20	< MDL 0.33	14	No
1,2-Dichlorobenzene (ug/L)-TW	2024/02/20	< MDL 0.41	200	No
1,2-Dichloroethane (ug/L)-TW	2024/02/20	< MDL 0.35	5	No
1,4-Dichlorobenzene (ug/L)-TW	2024/02/20	< MDL 0.36	5	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
2,3,4,6-Tetrachlorophenol (ug/L)-TW	2024/02/20	< MDL 0.2	100	No
2,4,6-Trichlorophenol (ug/L)-TW	2024/02/20	< MDL 0.25	5	No
2,4-Dichlorophenol (ug/L)-TW	2024/02/20	< MDL 0.15	900	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW	2024/02/20	< MDL 0.19	100	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW	2024/02/20	< MDL 0.12	100	No
Alachlor (ug/L) -TW	2024/02/20	< MDL 0.02	5	No
Atrazine + N-dealkylated metabolites (ug/L)-TW	2024/02/20	< MDL 0.01	5	No
Azinphos-methyl (ug/L)-TW	2024/02/20	< MDL 0.05	20	No
Benzene (ug/L)-TW	2024/02/20	< MDL 0.32	1	No
Benzo(a)pyrene (ug/L)-TW	2024/02/20	< MDL 0.004	0.01	No
Bromoxynil (ug/L)-TW	2024/02/20	< MDL 0.33	5	No
Carbaryl (ug/L)-TW	2024/02/20	< MDL 0.05	90	No
Carbofuran (ug/L) -TW	2024/02/20	< MDL 0.01	90	No
Carbon Tetrachloride (ug/L) -TW	2024/02/20	< MDL 0.17	2	No
Chlorpyrifos (ug/L) -TW	2024/02/20	< MDL 0.02	90	No
Diazinon (ug/L)-TW	2024/02/20	< MDL 0.02	20	No
Dicamba (ug/L)-TW	2024/02/20	< MDL 0.2	120	No
Dichloromethane (Methylene Chloride) (ug/L)-TW	2024/02/20	< MDL 0.35	50	No
Diclofop-methyl (ug/L)-TW	2024/02/20	< MDL 0.4	9	No
Dimethoate (ug/L)-TW	2024/02/20	< MDL 0.06	20	No
Diquat (ug/L)-TW	2024/02/20	< MDL 1	70	No
Diuron (ug/L)-TW	2024/02/20	< MDL 0.03	150	No
Glyphosate (ug/L)-TW	2024/02/20	< MDL 1	280	No
Malathion (ug/L)-TW	2024/02/20	< MDL 0.02	190	No
Metolachlor (ug/L)-TW	2024/02/20	< MDL 0.01	50	No
Metribuzin (ug/L)-TW	2024/02/20	< MDL 0.02	80	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW	2024/02/20	< MDL 0.3	80	No
Paraquat (ug/L)-TW	2024/02/20	< MDL 1	10	No
PCB (ug/L)-TW	2024/02/20	< MDL 0.04	3	No
Pentachlorophenol (ug/L)-TW	2024/02/20	< MDL 0.15	60	No
Phorate (ug/L)-TW	2024/02/20	< MDL 0.01	2	No
Picloram (ug/L)-TW	2024/02/20	< MDL 1	190	No
Prometryne (ug/L)-TW	2024/02/20	< MDL 0.03	1	No
Simazine (ug/L)-TW	2024/02/20	< MDL 0.01	10	No
Terbufos (ug/L)-TW	2024/02/20	< MDL 0.01	1	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Tetrachloroethylene (ug/L)-TW	2024/02/20	< MDL 0.35	10	No
Triallate (ug/L) -TW	2024/02/20	< MDL 0.01	230	No
Trichloroethylene (ug/L)-TW	2024/02/20	< MDL 0.44	5	No
Trifluralin (ug/L)-TW	2024/02/20	< MDL 0.02	45	No
Vinyl Chloride (ug/L)-TW	2024/02/20	< MDL 0.17	1	No
Trihalomethane: Total (ug/L) Annual Average-DW	2025 (Quarterly)	6.73	100	No
HAA Total (ug/L) Annual Average-DW	2025 (Quarterly)	< MDL 5.3	80	No

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

Note: The owner of a large municipal residential system shall ensure that at least one water sample for organics is taken every 36 months, if the system obtains water from a raw water supply that is ground water (O.Reg 170/03, Schedule 13-4(1)(b)). The last set of samples were collected and tested in 2024, the next set of samples are scheduled to be collected and tested in 2027.

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
N/A	N/A	N/A