



Township of Perth East
2025 Annual Drinking Water Report
Milverton Drinking Water System

The Corporation of the Township of Perth East

25 Mill Street East
P.O. Box 455
Milverton, Ontario
N0K 1M0

January 26, 2026

ATTN: Mr. Michael Givens, CAO

**Re: The Corporation of the Township of Perth East
2025 Milverton Drinking Water Annual & Summary Report**

Please find enclosed the Township of Perth East's 2025 Drinking Water Annual Report and Summary Report for the Milverton Drinking Water System. The reports are prepared in accordance with Ontario Regulation 170/03 of the Safe Drinking Water Act.

Under Ontario Regulation 170/03, the Annual Report must cover the period from January 1 to December 31 each year and must be prepared by February 28 of the subsequent year. The Annual Report is to be made available free of charge to anyone whom requests a copy.

Ontario Regulation 170/03 additionally requires the preparation of a Summary Report for the preceding year which must be presented to Council no later than March 31.

A copy of the reports will be available at the Township Office at 25 Mill Street East in Milverton in addition to the Township website at www.pertheast.ca.

Any questions or concerns regarding the reports can be directed to Public Works Department.

Sincerely,

A handwritten signature in cursive script that reads "Jake Collings".

Jake Collings, P. Eng.
Township of Perth East
Manager of Public Works



**The Corporation of the Township of Perth East
2025 Annual Report & Summary Report
Milverton Drinking Water System**

Date: January 26, 2026



Part 1 – ANNUAL REPORT (as required by O. Reg. 170/03, Section 11)

Drinking-Water System Number:	220000503
Drinking-Water System Name:	Milverton Drinking Water System
Drinking-Water System Owner:	Township of Perth East
Drinking-Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2025 to December 31, 2025

Complete if your Category is Large Municipal Residential or Small Municipal Residential		Complete for all other Categories	
<i>Does your Drinking-Water System serve more than 10,000 people?</i>	No	<i>Number of Designated Facilities served:</i>	0
<i>Is your Annual Report available to the public at no charge on a web site on the Internet?</i>	Yes	<i>Did you provide a copy of your Annual Report to all Designated Facilities you serve?</i>	N/A
<i>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection:</i>		<i>Number of Interested Authorities you report to:</i>	0
Township of Perth East, Municipal Office 25 Mill Street East, Milverton, Ontario PO Box 455 N0K 1M0		<i>Did you provide a copy of your Annual Report to all Interested Authorities you report to for each Designated Facility?</i>	N/A

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:	
Drinking Water System Name	Drinking Water System Number
N/A	N/A

Did you provide a copy of your Annual Report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
N/A



Indicate how you notified system users that your annual report is available and free of charge:					
Public access/ notice via the web	<input checked="" type="checkbox"/>	Public access/ notice via a newspaper		Public access/ notice via Public Request	<input checked="" type="checkbox"/>
Public access/ notice via Government Office	<input checked="" type="checkbox"/>	Public access/ notice via a Public Library		Public access/ notice via other method	

Describe your Drinking Water System
<p>The Milverton Drinking Water system is a Class II Distribution and Supply sub-system owned and operated by the Township of Perth East. The serviced population is approximately 2,036 and consists of eight (8) kilometers of distribution water mains.</p> <p>The well house facility is situated at 15 Spencer Street in Milverton, Ontario where raw water is conveyed to and stored on site in an underground cast in-place reservoir. The reservoir is made up of two chambers with a combined storage capacity of 1150m³. Water is firstly treated using liquid sodium hypochlorite which is injected using two chemical feed pumps rated at 29 L/h and one 200L storage tank. Water is then transferred to the reservoir for appropriate chlorine contact time. Two vertical high lift duty pumps, each rated at 16.5L/s pump water into the distribution system. Additionally, there are two vertical turbine fire pumps each rated at 94.7 L/s.</p> <p>The system water supply consists of two drilled groundwater wells. Well #4, which is considered the standby well, is located at 35 Whaley Avenue. The well is comprised of a 48.0 meter deep, 250mm diameter cast iron casing equipped with a submersible pump rated at 7.4 L/s. Raw water from this well is pumped through an underground line approximately northwest to the well house.</p> <p>Well #6, considered the production well, is located approximately 25 meters east of the Spencer Street treatment facility and is comprised of a 66.4 meter deep 200mm diameter steel casing, equipped with a 10 hp submersible pump rated at 16.5 L/s. Water is conveyed from the well directly to the well house.</p>

List all water treatment chemicals used over this reporting period:
Liquid Chlorine (Sodium Hypochlorite) 12%

Were any significant expenses incurred to?	
Install required equipment:	No
Repair required equipment:	No
Replace required equipment:	No



Please provide a brief description and a breakdown of monetary expenses incurred:	
Description	Cost
N/A	

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or Section 16-4 of Schedule 16 of O. Reg. 170/03 and reported to Spills Action Center:					
Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
02/18/2025	Sodium	27.6	mg/L	Resample @ source, upstream & downstream.	02/19/2025
10/15/2024	Chlorine @ POE	0	mg/L	Restore Disinfection, Flush	10/15/2025

Microbiological testing done under Schedule 10, 11 or 12 of O. Reg. 170/03 during this reporting period:					
Description	Number of Samples	Range of E.coli Or Fecal Results (min. #) – (max. #)	Range of Total Coliform Results (min. #) – (max. #)	Range of HPC Results (min. #) – (max. #)	Range of Background Results (min. #) – (max. #)
Well # 4 - Raw	49	0-0	0-0	N/A	0-0
Well # 6 - Raw	52	0-0	0-0	N/A	0-0
Treated	52	0-0	0-0	0-20	0-0
Blow Off #1	52	0-0	0-0	0-110	0-0
Blow Off #2	52	0-0	0-0	0-10	0-0
Blow Off #3	52	0-0	0-0	0-320	0-0
Blow Off #4	15	0-0	0-0	0-10	0-0

Operational testing done under Schedule 7, 8 or 9 of O. Reg. 170/03 during the reporting period:		
Description	Number of Grab Samples	Range of Results (min. #) – (max. #)
Turbidity (NTU)		
Turbidity – Well #4	12	0.36 - 0.76 NTU
Turbidity – Well #6	12	0.10 - 0.39 NTU
Chlorine Residual (mg/L)		
Chlorine – Point of Entry (POE)	8760	0.00* - 5.00* mg/L

* Values due to operator maintenance on chlorine analyzer



Summary of additional testing & sampling carried out in accordance with the requirement of an approval, order or other legal instrument:

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results:

Milverton Reservoir – Treated Water

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Aug. 22/ 2023	<0.60	µg/L	No
Arsenic	Feb. 11/ 2025	7.5	µg/L	No
Arsenic	May 26/ 2025	7.7	µg/L	No
Arsenic	Aug. 11/ 2025	7.2	µg/L	No
Arsenic	Nov. 17/ 2025	8.3	µg/L	No
Barium	Aug. 22/ 2023	112	µg/L	No
Boron	Aug. 22/ 2023	70	µg/L	No
Cadmium	Aug. 22/ 2023	<0.10	µg/L	No
Chromium	Aug. 22/ 2023	<1.0	µg/L	No
Mercury	Aug. 22/ 2023	<0.10	µg/L	No
Selenium	Aug. 22/ 2023	<1.0	µg/L	No
Sodium	Feb. 11/ 2025	27.6	mg/L	Yes
Sodium (retest)	Feb. 18/ 2025	26.5	mg/L	Yes
Uranium	Aug. 22/ 2023	<2.0	µg/L	No
Fluoride	Feb. 11/ 2025	0.93	mg/L	No
Nitrite	Feb. 11/ 2025	0.003	mg/L	No
Nitrite	May 26/ 2025	0.003	mg/L	No
Nitrite	Aug. 11/ 2025	0.003	mg/L	No
Nitrite	Nov. 17/ 2025	0.003	mg/L	No
Nitrate	Feb. 11/ 2025	0.011	mg/L	No
Nitrate	May 26/ 2025	0.012	mg/L	No
Nitrate	Aug. 11/ 2025	0.011	mg/L	No
Nitrate	Nov. 17/ 2025	0.011	mg/L	No



Summary of Lead testing under Schedule 15.1 during this reporting period:			
Location Type	Number of Samples	Range of Lead Results (min. #) – (max. #)	Number of Exceedances
Plumbing	N/A	N/A	N/A
Distribution	N/A	N/A	N/A

Summary of Organic parameters tested during this reporting period or the most recent sample results:					
Milverton – Treated Water					
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance	
Alachlor	Aug. 22/ 2023	<0.10	µg/L	No	
Atrazine + N-dealkylated metabolites	Aug. 22/ 2023	<0.20	µg/L	No	
Azinphos-methyl	Aug. 22/ 2023	<0.10	µg/L	No	
Benzene	Aug. 22/ 2023	<0.50	µg/L	No	
Benzo(a)pyrene	Aug. 22/ 2023	<0.0050	µg/L	No	
Bromoxynil	Aug. 22/ 2023	<0.20	µg/L	No	
Carbaryl	Aug. 22/ 2023	<0.20	µg/L	No	
Carbofuran	Aug. 22/ 2023	<0.20	µg/L	No	
Carbon Tetrachloride	Aug. 22/ 2023	<0.20	µg/L	No	
Chlorpyrifos	Aug. 22/ 2023	<0.10	µg/L	No	
Diazinon	Aug. 22/ 2023	<0.10	µg/L	No	
Dicamba	Aug. 22/ 2023	<0.20	µg/L	No	
1,2-Dichlorobenzene	Aug. 22/ 2023	<0.50	µg/L	No	
1,4-Dichlorobenzene	Aug. 22/ 2023	<0.50	µg/L	No	
1,2-Dichloroethane	Aug. 22/ 2023	<0.50	µg/L	No	
1,1-Dichloroethylene (vinylidene chloride)	Aug. 22/ 2023	<0.50	µg/L	No	
Dichloromethane	Aug. 22/ 2023	<5.0	µg/L	No	
2,4-Dichlorophenol	Aug. 22/ 2023	<0.30	µg/L	No	
2,4-Dichlorophenoxy acetic acid (2,4-D)	Aug. 22/ 2023	<0.20	µg/L	No	
Diclofop-methyl	Aug. 22/ 2023	<0.20	µg/L	No	
Dimethoate	Aug. 22/ 2023	<0.10	µg/L	No	
Diquat	Aug. 22/ 2023	<1.0	µg/L	No	
Diuron	Aug. 22/ 2023	<1.0	µg/L	No	
Glyphosate	Aug. 22/ 2023	<5.0	µg/L	No	



Malathion	Aug. 22/ 2023	<0.10	µg/L	No
2 Methyl-4-chlorophenoxyacetic acid (MCPA)	Aug. 22/ 2023	<0.20	µg/L	No
Metolachlor	Aug. 22/ 2023	<0.10	µg/L	No
Metribuzin	Aug. 22/ 2023	<0.10	µg/L	No
Monochlorobenzene	Aug. 22/ 2023	<0.50	µg/L	No
Paraquat	Aug. 22/ 2023	<1.0	µg/L	No
Pentachlorophenol	Aug. 22/ 2023	<0.50	µg/L	No
Phorate	Aug. 22/ 2023	<0.10	µg/L	No
Picloram	Aug. 22/ 2023	<0.20	µg/L	No
Polychlorinated Biphenyls (PCB)	Aug. 22/ 2023	<0.035	µg/L	No
Prometryne	Aug. 22/ 2023	<0.10	µg/L	No
Simazine	Aug. 22/ 2023	<0.10	µg/L	No
Terbufos	Aug. 22/ 2023	<0.20	µg/L	No
Tetrachloroethylene (perchloroethylene)	Aug. 22/ 2023	<0.50	µg/L	No
2,3,4,6-Tetrachlorophenol	Aug. 22/ 2023	<0.50	µg/L	No
Triallate	Aug. 22/ 2023	<0.10	µg/L	No
Trichloroethylene	Aug. 22/ 2023	<0.50	µg/L	No
2,4,6-Trichlorophenol	Aug. 22/ 2023	<0.50	µg/L	No
Trifluralin	Aug. 22/ 2023	<0.10	µg/L	No
Vinyl Chloride	Aug. 22/ 2023	<0.20	µg/L	No

Haloacetic Acids (HAAs)				
HAAs (Running Annual Average) Quarter 1	Feb. 11/ 2025	7.5	µg/L	No
HAAs (Running Annual Average) Quarter 2	May 26/ 2025	8.0	µg/L	No
HAAs (Running Annual Average) Quarter 3	Aug. 11/ 2025	6.7	µg/L	No
HAAs (Running Annual Average) Quarter 4	Nov. 17/ 2025	8.4	µg/L	No

Trihalomethanes (THMs)				
THMs (Running Annual Average) Quarter 1	Feb. 11/ 2025	19.9	µg/L	No
THMs (Running Annual Average) Quarter 2	May 26/ 2025	20.0	µg/L	No
THMs (Running Annual Average) Quarter 3	Aug. 11/ 2025	19.3	µg/L	No
THMs (Running Annual Average) Quarter 4	Nov. 17/ 2025	19.5	µg/L	No



List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Arsenic	7.5	mg/L	Feb. 11/ 2025
Arsenic	7.7	mg/L	May 26/ 2025
Arsenic	7.2	mg/L	Aug. 11/ 2025
Arsenic	8.3	mg/L	Nov. 17/ 2025
Fluoride	0.93	mg/L	Feb. 11/ 2025
Sodium	27.6	mg/L	Feb. 11/ 2025
Sodium	26.5	mg/L	Feb. 18/ 2025



Part 2 – SUMMARY REPORT (as required by O. Reg. 170/03, Schedule 22)

Non-Compliance with Legislations, Regulations, Approvals & Orders		
<p>The MECP conducted an announced routine inspection of the Milverton Drinking Water System on September 17, 2025. During this period, it was determined that the Facility was operated in full compliance with the Act, the regulations and the Facility’s Municipal Drinking Water Licence, Drinking Water Works Permit and Permit to Take Water, save and except for the following:</p>		
<i>Requirement</i>	<i>Duration of Failure</i>	<i>Measures to Correct the Failure</i>
<p><i>The owner was not maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.</i></p>	<p><i>Reporting Period</i></p>	<p><i>Authority shall forthwith abandon the well as prescribed by Ontario Regulation 903 – Section 21.</i></p>



Well #4						
System Capability Assessment						
Month	Average Flow (m ³ /day)	Maximum Flow (m ³ /day)	Total Monthly Flow (m ³)	Maximum Flow Rate (L/min)	Approved Flow Rate (L/min)	Rated System Capacity (m ³ /day)
January	0.26	3.77	8.05	358.33	500	1425
February	0.27	4.20	7.45	383.33		
March	0.23	2.04	6.98	340.48		
April	0.23	2.27	6.75	336.67		
May	0.32	3.32	10.06	356.67		
June	0.37	3.17	11.24	372.22		
July	0.43	4.53	13.37	330.30		
August	0.34	4.09	10.51	333.33		
September	0.44	3.20	13.32	335.71		
October	0.41	4.53	12.68	338.89		
November	0.26	4.03	7.91	333.33		
December	0.06	1.12	1.97	354.17		
<i>Average</i>	0.30		9.19	347.79		
<i>Maximum</i>		4.53	13.37	383.33		
<i>% of Rated Capacity</i>	0.02	0.32				



Well #6						
System Capability Assessment						
Month	Average Flow (m ³ /day)	Maximum Flow (m ³ /day)	Total Monthly Flow (m ³)	Maximum Flow Rate (L/min)	Approved Flow Rate (L/min)	Rated System Capacity (m ³ /day)
January	416.42	617.04	12908.87	813.78	990	1425
February	442.33	610.03	12385.28	850.53		
March	439.34	598.54	13619.49	815.11		
April	448.30	773.21	13448.95	819.67		
May	498.69	888.14	15459.26	814.81		
June	482.15	1003.20	14464.47	812.93		
July	463.81	627.17	14378.09	810.00		
August	449.00	612.44	13919.02	802.13		
September	454.39	658.50	13631.78	798.97		
October	484.21	841.13	15010.38	794.55		
November	447.35	705.20	13420.60	796.59		
December	441.75	615.39	13694.23	797.33		
<i>Average</i>	455.65		13861.70	810.53		
<i>Maximum</i>		1003.20	15459.26	850.53		
<i>% of Rated Capacity</i>	31.98	70.40				



Combined					
Month	Average Flow (m ³ /day)	Maximum Flow (m ³ /day)	Total Monthly Flow (m ³)	Approved Flow Rate (L/min)	Rated System Capacity (m ³ /day)
January	416.68	620.81	12916.92	990	1425
February	442.6	614.23	12392.73		
March	439.57	600.58	13626.47		
April	448.53	775.48	13455.7		
May	499.01	891.46	15469.32		
June	482.52	1006.37	14475.71		
July	464.24	631.7	14391.46		
August	449.34	616.53	13929.53		
September	454.83	661.7	13645.1		
October	484.62	845.66	15023.06		
November	447.61	709.23	13428.51		
December	441.81	616.51	13696.2		
<i>Average</i>	455.95		13870.89		
<i>Maximum</i>		1006.37	15469.32		
<i>% of Rated Capacity</i>	32.00%	70.62%			