

# North Stormont Township Office / Daycare Well Supply

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Waterworks # 260013221  
System Category: Small Municipal Non-Residential System (SMNRS)

## Annual Report

The Corporation of the Township of North Stormont

Reporting Period of January 1<sup>st</sup> – December 31<sup>st</sup> 2025

Issued: February 27, 2026

Revision: 1

Operating Authority:



This report has been prepared to satisfy the annual reporting requirements in O. Reg. 170/03 Section 11

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## Revision History

Date	Revision #	Revision Notes
February 25, 2026	0	Issued annual report
February 27, 2026	1	Added Berwick ball diamond to System Process Description

## Report Availability

This report will be posted on site.

## Compliance Report Card

Compliance Event	# of Events
Ministry of Environment Inspections	1
Ministry of Labour Inspections	0
AWQI's/BWA	2/0
Non-Compliance	1
Community Complaints	0
Spills	0

## System Process Description

The North Stormont Township Office/Daycare Drinking Water System began operation in March 2025. The system is supplied by a single groundwater well, located approximately 49 m south-west of the building in a well shed. The well is 6" in diameter and was drilled in 1998 to a depth of approximately 23 meters.

Groundwater is pumped from the source well to a 4.5 m<sup>3</sup> sedimentation and degasification chamber/ chlorine contact tank (clearwell) where sodium hypochlorite is injected to provide primary disinfection. Operation of the well pump is controlled by the water level in the clearwell.

Water is pumped from the clearwell to the treatment room where it enters a pressurized storage tank. The clearwell transfer pump is controlled by the pressure tank. From the pressurized tank, water passes through one of the two multi-media sand filters (duty/standby) prior to entering a secondary pressurized storage tank. Treated water is subsequently stored in two retention tanks before entering the distribution piping.

An in-line analyzer continuously monitors the chlorine residual leaving the tanks. The distribution system consists of the main building, which contains the office and daycare, as well as the adjacent Berwick ball diamond. The canteen and washroom facilities at the ball diamond are connected to the system but are operated only seasonally.

Treatment Chemicals used during the reporting year

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Jutzi

## Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI #	Location	Problem	Details	Corrective Action Taken	Legislation
June 23, 2025	168730	Treated Water	Sodium results > 20 mg/L	June 23 Sample Results: 106 mg/L	June 30 Resample Results: 84.8 mg/L Notice provided by EOHU advising consumers of the exceedance.	O. Reg 170/03
August 31, 2025	169716	Treated Water	Primary Disinfection	Free chlorine < 0.05 mg/L on August 31	Chlorine residual restored to meet proper disinfection of water at 12:27 pm on August 31. The system was flushed. Building remained closed for the duration of the even. No improperly disinfected water was directed to users.	O. Reg 170/03

Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
O. Reg 170/03	A distribution sample must be collected every two weeks* and tested for <i>E. Coli</i> , Total Coliforms and Heterotrophic Plate Count (HPC).  <i>*defined as within 10-20 days after the last sample was collected.</i>	There were 21 days between the distribution samples collected on March 10 and March 31.	A sample was collected on March 24; however, it was not received by the lab in time for analysis. Upon identification of the missed sample, a replacement sample was collected on March 31 and submitted to the lab.	Complete

Non-Compliance Identified in a Ministry Inspection

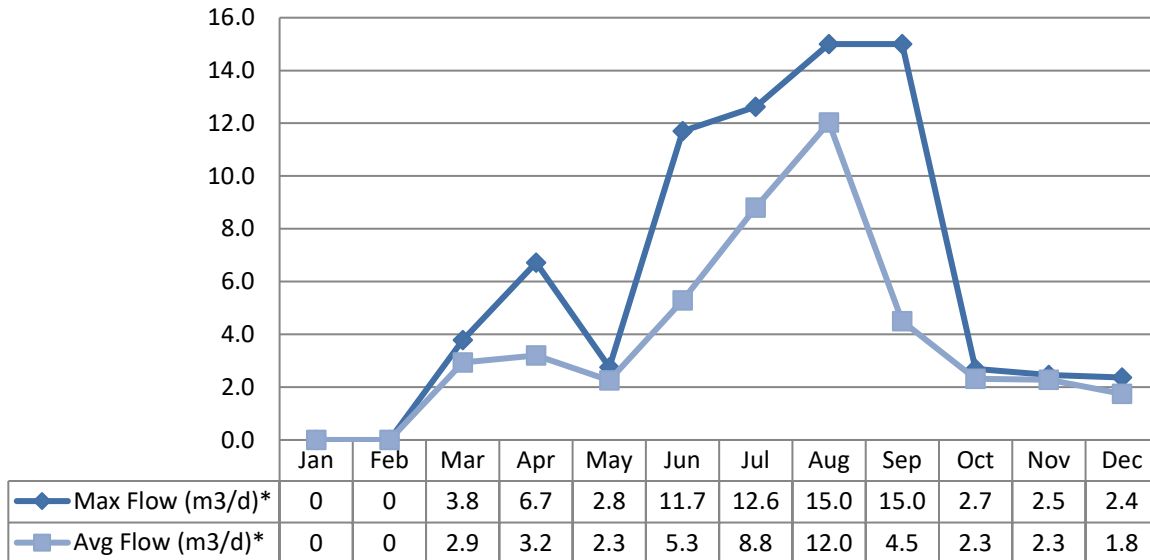
Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
O. Reg 903	The old decommissioned well has not been used or maintained for future use.	Unknown	Well No. 5800601 will be abandoned in accordance with O. Reg. 903. Upon completion of the work, the Township will provide the Ministry with a copy	In progress

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
			of the required abandonment documentation along with post-abandonment photographs, in accordance with the inspection action items.	
O. Reg 170/03	Operators did not examine the continuous monitoring test results within the 72 hours on three occasions.	March 7 (7:40) to March 10 (8:01): 21 minutes late, May 30 (8:45) to June 2 (9:33): 47 minutes late, June 6 (7:55) to June 9 (8:12): 17 minutes late.	The Eastern Region Trending Review SOP was circulated to operations staff as a reminder to ensure reviews are completed within the 72-hour window.	Complete

## Flows

The raw water taking required to supply North Stormont Township Office / Daycare is less than 50 m<sup>3</sup> per day. Drinking water systems with flows less than 50 m<sup>3</sup> per day do not require a Permit to Take Water (PTTW) in Ontario.

### Daily Flows (m<sup>3</sup>/d)



\*The system commenced operation March 3, 2025

## Regulatory Sample Results Summary

### Microbiological Testing

	No. of Samples Collected	Range of E.Coli Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Results	
		Min	Max	Min	Max		Min	Max
Raw Water	25	0	0	0	2	0	N/A	N/A
Distribution Water	26	0	0	0	0	26	< 2	2

### Operational Testing

	No. of Samples Collected	Range of Results		
		Minimum	Average	Maximum
Turbidity, In-House (NTU) - RW	11	0.68	0.90	1.11
Free Chlorine Residual, On-Line (mg/L) – TW*	8760	0.00	1.58	4.63
Free Chlorine Residual, DW Field (mg/L) - DW	65	0.44	1.56	2.78

NOTE: Spikes recorded by on-line instrumentation may result from air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with O. Reg. 170/03.

\*See Summary of Non-Compliance Section for Minimum On-Line residual of 0.00 mg/L.

\* The system commenced operation March 3, 2025

### Inorganic Parameters

These parameters are tested as a requirement under O. Reg. 170/03. Sodium and Fluoride are required to be tested every 60 months. Nitrate and Nitrite are tested quarterly, and metals are tested every 60 months as required under O. Reg. 170/03. In the event any parameter exceeds half the maximum allowable concentration the parameter is required to be sampled quarterly.

- MAC = Maximum Allowable Concentration as per O. Reg. 169/03
- MDL = Below the laboratory detection level

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Antimony: Sb (ug/L) - TW	2025/06/23	< MDL 0.1	6	No	No
Arsenic: As (ug/L) - TW	2025/06/23	< MDL 0.1	10	No	No
Barium: Ba (ug/L) - TW	2025/06/23	51	1000	No	No
Boron: B (ug/L) - TW	2025/06/23	198	5000	No	No
Cadmium: Cd (ug/L) - TW	2025/06/23	< MDL 0.015	5	No	No
Chromium: Cr (ug/L) - TW	2025/06/23	< MDL 1	50	No	No
Mercury: Hg (ug/L) - TW	2025/06/23	< MDL 0.02	1	No	No
Selenium: Se (ug/L) - TW	2025/06/23	1	50	No	No
Uranium: U (ug/L) - TW	2025/06/23	< MDL 0.05	20	No	No
<b>Additional Inorganics</b>					
Fluoride (mg/L) - TW	2025/07/07	0.2	1.5	No	No

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Nitrate : (mg/L) - TW	2025/01/21	< MDL 0.05	10	No	No
Nitrate : (mg/L) - TW	2025/04/28	0.05	10	No	No
Nitrate : (mg/L) - TW	2025/07/28	< MDL 0.05	10	No	No
Nitrate : (mg/L) - TW	2025/10/27	< MDL 0.05	10	No	No
Nitrite : (mg/L) - TW	2025/01/21	0.07	1	No	No
Nitrite : (mg/L) - TW	2025/04/28	< MDL 0.05	1	No	No
Nitrite : (mg/L) - TW	2025/07/28	0.15	1	No	No
Nitrite : (mg/L) - TW	2025/10/27	0.09	1	No	No
Sodium / Na (mg/L) - TW	2025/06/23	106	20*	Yes	Yes

\*There is no "MAC" for Sodium. The aesthetic objective 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.

\*See Summary of Non-Compliance Section for sodium limit exceedance.

### Schedule 15.2 Sampling:

O. Reg. 170/03 - Schedule 15.2 requires at least one distribution sample be taken and tested for lead every 12-month period. However, considering the drinking water system serves a day care, O. Reg. 243/07 - Section 5 requires samples be collected annually between May 1 and Oct 31. Lead samples were collected on September 20, 2025.

Distribution System	Number of Sampling Points	Number of Samples	Range of Results		MAC (ug/L)	Number of Exceedances
			Minimum	Maximum		
Lead (ug/l)	4	8	0.42	0.79	10	0

### Organic Parameters

These parameters are tested every 60 months as a requirement under O. Reg. 170/03. In the event any parameter exceeds half the maximum allowable concentration, the parameter is required to be sampled quarterly. Distribution samples are tested quarterly for THM's and HAA's in accordance with O. Reg. 170/03.

- MAC = Maximum Allowable Concentration as per O. Reg. 169/03
- MDL = Below the laboratory detection level

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Alachlor (ug/L) -TW	2025/06/23	< MDL 0.3	5	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2025/06/23	< MDL 0.5	5.0	No	No
Azinphos-methyl (ug/L)-TW	2025/06/23	< MDL 1	20	No	No
Benzene (ug/L)-TW	2025/06/23	< MDL 0.5	1	No	No
Benzo(a)pyrene (ug/L)-TW	2025/06/23	< MDL 0.006	0.01	No	No

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Bromoxynil (ug/L)-TW	2025/06/23	< MDL 0.5	5	No	No
Carbaryl (ug/L)-TW	2025/06/23	< MDL 3	90	No	No
Carbofuran (ug/L) -TW	2025/06/23	< MDL 1	90	No	No
Carbon Tetrachloride (ug/L) -TW	2025/06/23	< MDL 0.2	2	No	No
Chlorpyrifos (ug/L) -TW	2025/06/23	< MDL 0.5	90	No	No
Diazinon (ug/L)-TW	2025/06/23	< MDL 1	20	No	No
Dicamba (ug/L)-TW	2025/06/23	< MDL 1	120	No	No
1,1-Dichloroethylene (ug/L)-TW	2025/06/23	< MDL 0.5	14	No	No
1,2-Dichlorobenzene (ug/L)-TW	2025/06/23	< MDL 0.5	200	No	No
1,2-Dichloroethane (ug/L)-TW	2025/06/23	< MDL 0.5	5	No	No
1,4-Dichlorobenzene (ug/L)-TW	2025/06/23	< MDL 0.5	5	No	No
Dichloromethane (Methylene Chloride) (ug/L)-TW	2025/06/23	< MDL 5	50	No	No
2,4-Dichlorophenol (ug/L)-TW	2025/06/23	< MDL 0.2	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW	2025/06/23	< MDL 1	100	No	No
Diclofop-methyl (ug/L)-TW	2025/06/23	< MDL 0.9	9	No	No
Dimethoate (ug/L)-TW	2025/06/23	< MDL 1	20	No	No
Diquat (ug/L)-TW	2025/06/23	< MDL 5	70	No	No
Diuron (ug/L)-TW	2025/06/23	< MDL 5	150	No	No
Glyphosate (ug/L)-TW	2025/06/23	< MDL 25	280	No	No
Malathion (ug/L)-TW	2025/06/23	< MDL 5	190	No	No
Metolachlor (ug/L)-TW	2025/06/23	< MDL 3	50	No	No
Metribuzin (ug/L)-TW	2025/06/23	< MDL 3	80	No	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW	2025/06/23	< MDL 0.5	80	No	No
Paraquat (ug/L)-TW	2025/06/23	< MDL 1	10	No	No
PCB (ug/L)-TW	2025/06/23	< MDL 0.05	3	No	No
Pentachlorophenol (ug/L)-TW	2025/06/23	< MDL 0.2	60	No	No
Phorate (ug/L)-TW	2025/06/23	< MDL 0.3	2	No	No
Picloram (ug/L)-TW	2025/06/23	< MDL 5	190	No	No
Prometryne (ug/L)-TW	2025/06/23	< MDL 0.1	1	No	No
Simazine (ug/L)-TW	2025/06/23	< MDL 0.5	10	No	No
Terbufos (ug/L)-TW	2025/06/23	< MDL 0.5	1	No	No
Tetrachloroethylene (ug/L)-TW	2025/06/23	< MDL 0.5	10	No	No

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
2,3,4,6-Tetrachlorophenol (ug/L)-TW	2025/06/23	< MDL 0.2	100	No	No
Triallate (ug/L) -TW	2025/06/23	< MDL 10	230	No	No
Trichloroethylene (ug/L)-TW	2025/06/23	< MDL 0.5	5	No	No
2,4,6-Trichlorophenol (ug/L)-TW	2025/06/23	< MDL 0.2	5	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW	2025/06/23	< MDL 10	100	No	No
Trifluralin (ug/L)-TW	2025/06/23	< MDL 0.5	45	No	No
Vinyl Chloride (ug/L)-TW	2025/06/23	< MDL 0.2	1	No	No
<b>Distribution Water</b>					
Trihalomethane (THM): Total (ug/L) RAA* - DW	2025	22.5	100	No	No
Haloacetic Acid (HAA): Total (ug/L) RAA* - DW	2025	7.4	80	No	No

\*RAA = Annual Running Average

**Additional Legislated Samples**

No additional sampling required.

**Major Maintenance Summary**

Description
<ul style="list-style-type: none"> <li>- Routine preventive maintenance work orders were completed as scheduled</li> </ul>