



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

**TOBERMORY PRIMARY PLACE DAYCARE
DRINKING WATER SYSTEM**

Small Municipal Non-Residential

**SECTION 11
ANNUAL REPORT**

**For the period of
JANUARY 1, 2022 TO DECEMBER 31, 2022**

Prepared by the Ontario Clean Water Agency
For the Municipality of Northern Bruce Peninsula

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:	260024596
Drinking Water System Name:	Tobermory Primary Place Daycare Drinking Water System
Drinking Water System Owner:	Municipality of Northern Bruce Peninsula
Drinking Water System Category:	Small Municipal Non-Residential
Reporting Period:	January 1, 2022 – December 31, 2022

Number of Designated Facilities served?

One (1)

Did you provide a copy of annual report to all Designated Facilities served?

Yes

Note: A copy of the Annual Report is required be provided to each designated facility served by the system if the system is not a large municipal or small municipal residential system. (O.Reg 170/03, Section 11.(2)(a))

Number of Interested Authorities you report to:

One (1)

Did you provide a copy of annual report to all Interested Authorities?

Yes

Note: A copy of the Annual Report is required be provided to the interested authority for each designated facility served by the system if the system is not a large municipal or small municipal residential system. (O.Reg 170/03, Section 11.(2)(b))

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

How system users are notified that the annual report is available, and is free of charge:

Public access/notice via the web

<input checked="" type="checkbox"/>	Public access/notice via Government Office
<input type="checkbox"/>	Public access/notice via a newspaper
<input type="checkbox"/>	Public access/notice via Public Request
<input type="checkbox"/>	Public access/notice via a Public Library
<input type="checkbox"/>	Public access/notice via other method: _____

Description of Drinking Water System (O.Reg 170/03, Section 11.(6)(a)):

<p>The Tobermory Primary Place Daycare Drinking Water System is supplied by a drilled GUDI well. The daycare building houses the filtration and treatment facilities which include:</p> <ul style="list-style-type: none">• Water Softener• Sediment Filtration System• Cartridge Filtration System (to assist with UV disinfection)• Online Filter Turbidity Analyzer• Ultra Violet Disinfection System• Sodium hypochlorite disinfection system• Contact tanks• Flow meter• Online Chlorine Analyzer <p>Treated water is then directed to satisfy demand from the daycare building plumbing.</p>
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List of water treatment chemicals used by the system during the reporting period (O.Reg 170/03, Section 11.(6)(a)):

<ul style="list-style-type: none">• Water softening salt• Sodium hypochlorite 6%

Significant expenses were incurred to:

<input type="checkbox"/>	Install required equipment
<input type="checkbox"/>	Repair required equipment
<input type="checkbox"/>	Replace required equipment
<input checked="" type="checkbox"/>	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)):

N/A

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

Table 1. Microbiological testing done under the Schedule 11 of Regulation 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.
Raw	12	0	NDOGT*	0	NDOGT*	N/A	N/A	N/A
Distribution	26	0	0	0	0	N/A	N/A	N/A

*NDOGT – No Data: Overgrown with Target Bacteria

Table 2. Operational testing done under Schedule 7, 8 or 9 of Regulation 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, Raw Water (NTU)	166	0.28	5.70
Turbidity, Filter (NTU)	8760	0.04	2.01*
Free Chlorine Residual, Treated Water (mg/L)	8760	0.00**	4.60

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

*High turbidity caused by routine maintenance. No adverse.

**Low chlorine caused by routine maintenance. No adverse.

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. (O. Reg 170/03, Section 11.(6)(c))

Legal Instrument & Issue Date (yyyy/mm/dd)	Parameter	Date Sampled	Annual Average	Allowable Annual Average	Annual Maximum	MDWL Allowable Maximum
N/A	N/A	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 (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (ug/L) - TW	2021/01/11	<MDL 0.9	6.0	No
Arsenic: As (ug/L) - TW	2021/01/11	0.4	10.0	No
Barium: Ba (ug/L) - TW	2021/01/11	19.4	1000.0	No
Boron: B (ug/L) - TW	2021/01/11	14.0	5000.0	No
Cadmium: Cd (ug/L) - TW	2021/01/11	0.019	5.0	No
Chromium: Cr (ug/L) - TW	2021/01/11	1.06	50.0	No
Mercury: Hg (ug/L) - TW	2021/01/11	<MDL 0.01	1.0	No
Selenium: Se (ug/L) - TW	2021/01/11	0.42	50.0	No
Uranium: U (ug/L) - TW	2021/01/11	0.432	20.0	No
Fluoride (mg/L) - TW	2021/01/11	<MDL 0.06	1.5	No
Nitrite (mg/L) - TW	2022/01/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2022/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2022/07/05	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2022/10/03	<MDL 0.003	1.0	No
Nitrate (mg/L) - TW	2022/01/04	2.07	10.0	No
Nitrate (mg/L) - TW	2022/04/04	0.3	10.0	No
Nitrate (mg/L) - TW	2022/07/05	2.04	10.0	No
Nitrate (mg/L) - TW	2022/10/03	2.6	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) - TW	2021/01/11 ^c	113	200 ^d	No	Yes
Sodium: Na (mg/L) - TW	2021/01/26 ^c	109	200 ^d	No	Yes

Note: MDL = Minimum Detection Limit

^cSodium is reportable every 60 months. Next set of sodium samples is scheduled to be sampled in 2026. **PPDC remains posted with an MOH Warning of High Sodium.**

^dThere 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.

Table 5: Summary of Lead* testing under O. Reg 243/07 Schools, Private Schools and Childcare Centres during this reporting period.

Location	Sample Date (yyyy/mm/dd)	Sample Result	Number of Lead Exceedances (MAC = 10 µg/L)
Lead (µg/L) – Kitchen #1 West Sink - Standing	2022/08/24	1.38	No
Lead (µg/L) – Kitchen #1 West Sink - Flushed	2022/08/24	2.31	No
Lead (µg/L) – Kitchen #2 East Sink - Standing	2022/08/17	5.02	No
Lead (µg/L) – Kitchen #2 East Sink - Flushed	2022/08/17	1.13	No

**Note: Annual lead testing is required under O.Reg 243/07 Schools, Private Schools, and Childcare Centres for every faucet that a child may drink from and/or that food is prepared with. There are two faucets that meet the requirements for sampling; labeled Kitchen #1 West Sink and Kitchen #2 East Sink.*

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
Alachlor (ug/L) - TW	2021/01/11	<MDL 0.02	5.0	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2021/01/11	<MDL 0.01	5.0	No
Azinphos-methyl (ug/L) - TW	2021/01/11	<MDL 0.05	20.0	No
Benzene (ug/L) - TW	2021/01/11	<MDL 0.32	1.0	No
Benzo(a)pyrene (ug/L) - TW	2021/01/11	<MDL 0.004	0.01	No
Bromoxynil (ug/L) - TW	2021/01/11	<MDL 0.33	5.0	No
Carbaryl (ug/L) - TW	2021/01/11	<MDL 0.05	90.0	No
Carbofuran (ug/L) - TW	2021/01/11	<MDL 0.01	90.0	No
Carbon Tetrachloride (ug/L) - TW	2021/01/11	<MDL 0.17	2.0	No
Chlorpyrifos (ug/L) - TW	2021/01/11	<MDL 0.02	90.0	No
Diazinon (ug/L) - TW	2021/01/11	<MDL 0.02	20.0	No
Dicamba (ug/L) - TW	2021/01/11	<MDL 0.2	120.0	No
1,2-Dichlorobenzene (ug/L) - TW	2021/01/11	<MDL 0.41	200.0	No
1,4-Dichlorobenzene (ug/L) - TW	2021/01/11	<MDL 0.36	5.0	No
1,2-Dichloroethane (ug/L) - TW	2021/01/11	<MDL 0.35	5.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
1,1-Dichloroethylene (ug/L) - TW	2021/01/11	<MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	2021/01/11	<MDL 0.35	50.0	No
2,4-Dichlorophenol (ug/L) - TW	2021/01/11	<MDL 0.15	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2021/01/11	<MDL 0.19	100.0	No
Diclofop-methyl (ug/L) - TW	2021/01/11	<MDL 0.4	9.0	No
Dimethoate (ug/L) - TW	2021/01/11	<MDL 0.06	20.0	No
Diquat (ug/L) - TW	2021/01/11	<MDL 1.0	70.0	No
Diuron (ug/L) - TW	2021/01/11	<MDL 0.03	150.0	No
Glyphosate (ug/L) - TW	2021/01/11	<MDL 1.0	280.0	No
Malathion (ug/L) - TW	2021/01/11	<MDL 0.02	190.0	No
Metolachlor (ug/L) - TW	2021/01/11	<MDL 0.01	50.0	No
Metribuzin (ug/L) - TW	2021/01/11	<MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	2021/01/11	<MDL 0.3	80.0	No
Paraquat (ug/L) - TW	2021/01/11	<MDL 1.0	10.0	No
PCB (ug/L) - TW	2021/01/11	<MDL 0.04	3.0	No
Pentachlorophenol (ug/L) - TW	2021/01/11	<MDL 0.15	60.0	No
Phorate (ug/L) - TW	2021/01/11	<MDL 0.01	2.0	No
Picloram (ug/L) - TW	2021/01/11	<MDL 1.0	190.0	No
Prometryne (ug/L) - TW	2021/01/11	<MDL 0.03	1.0	No
Simazine (ug/L) - TW	2021/01/11	<MDL 0.01	10.0	No
Terbufos (ug/L) - TW	2021/01/11	<MDL 0.01	1.0	No
Tetrachloroethylene (ug/L) - TW	2021/01/11	<MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2021/01/11	<MDL 0.2	100.0	No
Triallate (ug/L) - TW	2021/01/11	<MDL 0.01	230.0	No
Trichloroethylene (ug/L) - TW	2021/01/11	<MDL 0.44	5.0	No
2,4,6-Trichlorophenol (ug/L) - TW	2021/01/11	<MDL 0.25	5.0	No
Trifluralin (ug/L) - TW	2021/01/11	<MDL 0.02	45.0	No
Vinyl Chloride (ug/L) - TW	2021/01/11	<MDL 0.17	1.0	No

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

Schedule 23 & 24 samples are taken every 60 months. The next set are scheduled to be sampled in 2026.

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
Lead ($\mu\text{g/L}$) – Kitchen #2 East Sink - Standing	2022/08/17	5.02