



**Ontario Drinking-Water Systems Regulation O. Reg. 170/03**

**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	<b>260004969</b>
<b>Drinking-Water System Name:</b>	Town of Tecumseh Distribution System
<b>Drinking-Water System Owner:</b>	The Corporation of The Town of Tecumseh
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	01- January -2023 to 31- December – 2023

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ X ] No [ ]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [ X ] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of Tecumseh Municipal Office 917 Lesperance Road Tecumseh, Ontario N8N 1W9</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b></p> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 5px auto;">N/A</div> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b></p> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 5px auto;">2</div> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ X ] No [ ]</b></p>
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**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
Lakeshore Dist. System	260004982

**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? Yes [ X ] No [ ]**



Indicate how you notified system users that your annual report is available and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method \_\_\_\_\_

**Describe your Drinking-Water System**

**Water Distribution System**

The Town of Tecumseh, City of Windsor and the Windsor Utilities Commission (WUC) entered into a 50-year Service Agreement in November 2004. The Service Agreement was implemented on March 31, 2006 when four boundary metering chambers were installed and maintained by the Town of Tecumseh. Tecumseh’s drinking water system also includes a water tower located on Tecumseh Road, with no re-chlorination stations within the distribution system

Prior to August 1, 2008, WUC provided water to 2,400 residents in the former Township of Sandwich South, south of Highway 401 (“South Water Area”). The Town installed eight additional boundary meter chambers and assumed the responsibility for the operations and maintenance of the water distribution system from WUC in this South Water Area effective August 1, 2008.

The Town of Tecumseh and the Town of Lakeshore entered into an agreement on May 13, 2003 whereby the Tecumseh distribution system supplies drinking water to the Lakeshore distribution system. This agreement expired on December 31, 2007 and is currently being renegotiated; the status quo is maintained until a new agreement is signed.

**List all water treatment chemicals used over this reporting period**

N/A

**Were any significant expenses incurred to?**

- No  Yes  Install required equipment
- No  Yes  Repair required equipment
- No  Yes  Replace required equipment- PWES-2023-01

**Please provide a brief description and a breakdown of monetary expenses incurred:**

The PWES Capital works plan encompassed several key projects in 2023:

1. Replacement of 150mm Cast Iron Watermain:
  - Location: 12th Concession Road (north of Baseline Road to south of County Road 42)
  - Construction: Directionally drilled 150mm diameter PVC watermain
  - Total Project Cost: \$195,900 (excluding HST)
  
2. Water Distribution Model for North Water Area of Tecumseh:
  - Total Cost: \$45,550
  
3. Replacement of 10 Water Sampling Stations:
  - Total Cost: \$32,995
  
4. County Road 42 and County Road 43 Improvements, Phase 1:
  - Scope: Underground work along County Road 42 (between 11th Concession and Pike Creek)
  - Components: Storm and sanitary sewers, watermains, and restoration
  - Purpose: Facilitating utility relocations for upcoming road improvements and serving as the storm outlet for County Road 43 Diversion (Phase 2 in 2024)
  - Estimated Project Cost (Tecumseh's portion): \$6,476,000 (excluding HST)
    - Water Component: \$3,359,000
    - Wastewater Component: \$3,117,000
  
5. Meter Chamber MCT-04 (Mulberry) Inline Pressure Transmitter Replacement:
  - Total Cost: \$17,535 (excluding HST)
  
6. Water Tower ET 01 Rotork Valve Service:
  - Replacement: Valve position sensor
  - Total Cost: \$10,271.80 (excluding HST)

**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 Centre**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
June 21/23	O.Reg 170/03 sect 16-4	N/A	N/A	<b>Precautionary Boil Water</b> Contractor strike on water service line while working on sanitary sewer line to private property. Repair made by contractor prior to any water service operators being on-site to ensure proper disinfection practices. Samples collected.	June 23/23



				Results all clear.	
<b>October 3/23</b>	<b>O.Reg 170/03 sect 15.1</b>	<b>Shawnee 54.9</b> <b>Hennin 61.2</b>	<b>Ug/L</b> <b>Ug/L</b>	<b>Lead Exceedance</b> Original lead exceedance in summer session samples at 2 locations: 1792 Shawnee and 5175 Hennin. Locations were re-sampled and analyzed. Results received; all within regulated guidelines.	<b>October 13/23</b> Date re-sampled results received

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
<b>Raw</b>	N/A				
<b>Treated</b>	N/A				
<b>Distribution</b>	521	0 to 0	0 to 0	156	0 to 130

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
<b>Turbidity</b>	N/A	
<b>Chlorine Tecumseh Water Tower</b>	8760	Max 1.37 mg/L Min 0.41 mg/L
<b>Chlorine Distribution Free Chlorine Residuals</b>	1622	Max 1.70 mg/L Min 0.31 mg/L
<b>Fluoride</b> (If the DWS provides fluoridation)	N/A	

*NOTE: For continuous monitors use 8760 as the number of samples.*

*NOTE: Record the unit of measure if it is not milligrams per litre.*

**Summary of additional testing and 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**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

**Summary of lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Winter Session – Collection Date: March 20, 2023</b>						
12325 Meconi	1	78	0.00010	Mg/L	7.2	None
12319 Charlene	1	81	0.00002	Mg/L	7.13	
1904 St Anne	1	79	0.00008	Mg/L	7.13	
St Denis @ St Pierre	1	78	0.00003	Mg/L	7.13	

Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Summer Session – Collection Date: October 3, 2023</b>						
279 Edgewater	1	100	0.00372	Mg/L	7.05	2
145 David	1	103	0.00038	Mg/L	7.35	
1792 Shawnee	1	100	0.0549	Mg/L	7.03	
5175 Hennin	1	101	0.0613	Mg/L	7.06	



Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Summer Session – Collection Date: October 11, 2023</b>						
1792 Shawnee	1	101	<0.00002	Mg/L	6.84	0
5175 Hennin	1	98	0.00004	Mg/L	6.74	

**\*\*Resample results for elevated samples collected on October 3, 2023\*\***

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				



Glyphosate				
Haloacetic Acids (HAAs) (NOTE: show latest running annual average)	quarterly	16.2	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest running annual average)	quarterly	24.75	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

**Summary table for Running Annual Averages of Organic Parameters sampled during this reporting period.**

Parameter	Sample Date	Result	Running Annual Average	Unit of Measure	Number of Exceedances
HAA	Jan.9, 2023	5.3	16.2	µg/L	None
	Apr.11, 2023	20.5		µg/L	
	July 10, 2023	22.8		µg/L	
	Oct.10, 2023	16.2		µg/L	

Parameter	Sample Date	Average Result	Running Annual Average	Unit of Measure	Number of Exceedances
THM	Jan.13, 2023	15.0	24.75	µg/L	None
	Apr.11, 2023	21.7		µg/L	



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	July 10, 2023	33.3		µg/L	
	Oct.10, 2023	29		µg/L	

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
N/A			