

**DATE:** February 20, 2024

**REPORT NO:** PW-07-2024

**SUBJECT:** **2023 Water Quality Annual Report**

**CONTACT:** Tray Benish, Manager of Operations, ORO  
Mike DiPaola, P. Eng. – Director, Public Works and Recreation

**OVERVIEW:**

- Under the requirements of O. Reg. 170 made under the Safe Drinking Water Act, the owner of a drinking water system is required to prepare an Annual Report and make it available free of charge to any persons requesting a copy. This report is being provided to Council supplementary to regulatory requirements, which can be found as Schedule A to this report.

**RECOMMENDATION:**

1. That, Information Report PW-07-2024, re: “2023 Water Quality Annual Report”, dated February 20, 2024, be received for information.

**ALIGNMENT TO STRATEGIC PLAN:**

- **Build** – A safe and connected, caring, and active community

**BACKGROUND:**

The delivery of potable water in Ontario is regulated by the Ministry of the Environment, Conservation and Parks (MECP) under the Safe Drinking Water Act, 2002. On June 1, 2003, O. Reg. 170/03, Drinking Water Systems, came into effect. This regulation prescribes requirements for owners and operators of municipal drinking water systems.

Under the requirements of O. Reg. 170/03 made under the Safe Drinking Water Act, the owner of a drinking water system is required to prepare an Annual Report no later than February 28 of each year and make it available free of charge to any persons requesting a copy.

This Regulation also requires the owner to produce an Annual Report. This report must include the following:

- Description of the system
- Summary of all required testing results
- Summary of any adverse water quality reports and corrective actions
- Description of any major expenses incurred to install, repair or replace required equipment

**CURRENT SITUATION:**

The Smithville Distribution System has 35 km of water mains, serving approximately 6150 residents; the system contains 264 hydrants and 341 valves.

The Township also owns and operates a bulk fill station to serve the rural population as well as a small container fill station. All Township owned services are protected by backflow devices.

Smithville receives its treated water from the Grimsby Water Treatment Plant which is owned by the Regional Municipality of Niagara (MOE waterworks #220007150).

Distribution Water is sampled for Microbiological and Chemical parameters and chlorine residuals. These samples are done weekly and quarterly by licensed Township water operators.

There were no adverse samples in 2023 within the distribution system. All samples taken were within ministry standards. The water operators follow all policies and procedures while sampling.

The Township of West Lincoln 2023 Water Quality Report is being provided to Council for information purposes.

The report has also been made available to the public.

**FINANCIAL IMPLICATIONS:**

There are no financial implications as a result of this report.

**INTER-DEPARTMENTAL COMMENTS:**

Not applicable.

**CONCLUSION:**

In conclusion, the 2023 Water Quality Annual Report is being provided to Council for information purposes and to advise them that the report has been made available to the public.

**SCHEDULE(S):**

Schedule A – 2023 Annual Drinking Water Report

**Prepared & Submitted by:**



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**Tray Benish, ORO**  
Manager of Operations

**Approved by:**



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**Donna DeFilippis**  
Interim CAO and Treasurer



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**Mike DiPaola, P. Eng.**  
Director, Public Works and Recreation



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	<b>260002876</b>
<b>Drinking-Water System Name:</b>	Smithville Water Distribution
<b>Drinking-Water System Owner:</b>	Township of West Lincoln
<b>Drinking-Water System Category:</b>	Class 1
<b>Period being reported:</b>	January 1 2023 – December 31 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 [ ] No [ x ]</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>Township of West Lincoln:              Administrative Building              318 Canborough Road              Smithville ON              L0R 2A0</p> <p>Website: www.westlincoln.ca</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; width: 100px; height: 20px; margin: 5px 0;"></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> <div style="border: 1px solid black; width: 100px; text-align: center; margin: 5px 0;">4</div></p> <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>
<b>Robert Land Academy Cistern System</b>	<b>260077350</b>
<b>Little House 3-864 Regional Rd 27 Cistern</b>	<b>260078416</b>
<b>Attercliffe Canadian Reformed elementary School Cistern System</b>	<b>260078884</b>



**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  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**

**Smithville Distribution System has 35 km of water mains, serving approximately 6150 residents.**

**The system contains 264 hydrants and 341 valves.**

**The municipality also has a bulk fill station with two top and two bottom feeds to serve the rural population as well as a small container fill station.**

**All Township owned services are protected by backflow devices.**

**The Township receives its water from the Grimsby Water Treatment Plant which is owned by the Regional Municipality of Niagara (MOE waterworks #220007150)**

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

**N/A**

**Were any significant expenses incurred to?**

**Install required equipment**

**Repair required equipment**

**Replace required equipment**

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

**The Township has a water meter program to replace old meters to reduce water loss at a cost of \$50 000.**



**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
NONE					

**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 #)
Raw					
Treated					
Distribution	244	0	0	244	0-90

**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 #)	Unit of Measure	<i>NOTE: For continuous monitors use 8760 as the number of samples.</i>
Turbidity				
Chlorine (free)	411	0.35-1.24	mg/l	
Fluoride (If the DWS provides fluoridation)				

**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				

<b>Cadmium</b>				
<b>Chromium</b>				
<b>*Lead</b>				
<b>Mercury</b>				
<b>Selenium</b>				
<b>Sodium</b>				
<b>Uranium</b>				
<b>Fluoride</b>				
<b>Nitrite</b>				
<b>Nitrate</b>				

\*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)

<b>Location Type</b>	<b>Number of Samples</b>	<b>Range of Lead Results (min#) – (max #)</b>	<b>Unit of Measure</b>	<b>Number of Exceedances</b>
<b>Plumbing</b>	<b>exempt</b>			
<b>Distribution</b>	<b>exempt</b>			

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Alachlor</b>				
<b>Aldicarb</b>				
<b>Aldrin + Dieldrin</b>				
<b>Atrazine + N-dealkylated metabolites</b>				
<b>Azinphos-methyl</b>				
<b>Bendiocarb</b>				
<b>Benzene</b>				
<b>Benzo(a)pyrene</b>				
<b>Bromoxynil</b>				
<b>Carbaryl</b>				
<b>Carbofuran</b>				
<b>Carbon Tetrachloride</b>				
<b>Chlordane (Total)</b>				
<b>Chlorpyrifos</b>				
<b>Cyanazine</b>				
<b>Diazinon</b>				
<b>Dicamba</b>				
<b>1,2-Dichlorobenzene</b>				
<b>1,4-Dichlorobenzene</b>				



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				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
HAA (NOTE: show latest annual average)	2023	0.01175	mg/l	0
THM (NOTE: show latest annual average)	2023	0.02916	mg/l	0
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				





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

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
N/A			