



ANNUAL REPORT

Drinking-Water System Number:

Drinking-Water System Name:

Drinking-Water System Owner:

Drinking-Water System Category:

Period being reported:

260003136

City of Sarnia Water Distribution System

Corporation of the City of Sarnia

Large Municipal Residential

January 1, 2024 – December 31, 2024

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes ☒ No ☐

Is your annual report available to the public at no charge on a web site on the Internet? Yes ☒ No ☐

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

City of Sarnia Website: www.sarnia.ca

and;

Public Works Division

City of Sarnia,

651 Devine Street

Sarnia, ON N7T 1W9



Complete for all other Categories.

Number of Designated Facilities served:

N/A

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

Yes ☐ No ☐ N/A ☐

Number of Interested Authorities you report to:

N/A

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes ☐ No ☐ 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	

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 ☐ N/A ☐

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 Public Request

Describe your Drinking-Water System:

The **Sarnia Distribution System (SDS)** consists of approximately 496 km of watermains, ranging in size from 50mm to 600mm. The system includes approximately 2,700 hydrants, and five automatic flushers. There are no storage tanks or booster pumps within the SDS. Drinking water for the distribution system is supplied, in whole, by the Lambton Area Water Supply System (LAWSS) located in the City of Sarnia on the southern tip of Lake Huron at the headwaters of the St. Clair River.

Sarnia Distribution System is interconnected with neighbouring distribution systems that receive drinking water from LAWSS through closed valves that serve for emergency preparedness (Plympton – Wyoming Water Distribution, Village of Point Edward Water Distribution, and St. Clair Township Water Distribution System). Interconnections with St. Clair Township allow both distribution systems to continuously feed each other when supplementary pressure is required.

Additional interconnections through closed valves to Petrolia Brights Grove Water Treatment Plant and Township of Enniskillen Water Distribution System server for emergency preparedness only.

List all water treatment chemicals used over this reporting period:

N/A: No additional chemicals are added to the treated water supplied by LAWSS.

Note: NSF/ANSI approved Sodium Hypochlorite is utilized for disinfection during maintenance and development.

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:

Capital Projects - The following amounts relate to various projects during 2024 and do not represent the total project costs. These numbers do not include the normal operating and maintenance costs.



2024 Capital Projects Cost		
Description	Construction Description	Amount Spent
Tecumseh and Rose St Reconstruction	Full Reconstruction (Water, Sewer & Road)	\$2,081,113.36
Wellington, Queen & Victoria St Reconstruction	Full Reconstruction (Water, Sewer & Road)	\$4,820,709.54
Plank Road Phase 3	Watermain & Road	\$3,231,637.74
Telfer Road Watermain	Watermain	\$630,291.72
Stuart Street Reconstruction	Full Reconstruction (Water, Sewer & Road)	\$899,823.38
Vidal Street South Watermain	Watermain & Road	\$836,497.35

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
No incidents reported	N/A	N/A	N/A	N/A	N/A

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 #) cfu/100mL	Range of Total Coliform Results (min #)-(max #) cfu/100mL	Number of HPC Samples	Range of HPC Results (min #)-(max #) cfu/100mL
Raw	N/A				
Treated	N/A				
Distribution	1060	0-0	0-0	265	<10 - 120



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
Turbidity	N/A		
Chlorine	1922	(0.31 – 1.87)	mg/L
Fluoride (If the DWS provides fluoridation)	N/A		

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

Additional sampling is carried out in accordance with the Lead Reduction Plan for the City of Sarnia Dated November 2022.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Lead - Plumbing	15	(<0.01) – (10)	ug/L
Lead – Post Replacement	40	(0.04) – (19.9)	ug/L

Note: Lead samples collected for the purpose of the Lead Reduction Program are considered non-reportable. Lambton Public Health is notified of properties with sample results >10 ug/L.

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	N/A			
Arsenic	N/A			
Barium	N/A			
Boron	N/A			
Cadmium	N/A			
Chromium	N/A			
Mercury	N/A			

Selenium	N/A			
Sodium	N/A			
Uranium	N/A			
Fluoride	N/A			
Nitrite	N/A			
Nitrate	N/A			

Note: Sarnia Distribution system is not required to conduct testing under this section. Lambton Area Water Supply System (LAWSS) has the required parameter results for Sarnia Distribution System source water. This information can be viewed in the LAWSS Annual Report and can be found on the City of Sarnia Website.

(www.sarnia.ca)

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	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Distribution	16	(<0.01) - (0.31)	ppb	0

Note: Sarnia Distribution System receives regulatory relief from Schedule 15.1 Lead Sampling requirements in exchange for the implementation of the Lead Reduction Program.

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	N/A			
Aldicarb	N/A			
Aldrin + Dieldrin	N/A			
Atrazine + N-dealkylated metabolites	N/A			
Azinphos-methyl	N/A			
Bendiocarb	N/A			
Benzene	N/A			
Benzo(a)pyrene	N/A			
Bromoxynil	N/A			
Carbaryl	N/A			
Carbofuran	N/A			
Carbon Tetrachloride	N/A			
Chlordane (Total)	N/A			
Chlorpyrifos	N/A			



Cyanazine	N/A			
Diazinon	N/A			
Dicamba	N/A			
1,2-Dichlorobenzene	N/A			
1,4-Dichlorobenzene	N/A			
Dichlorodiphenyltrichloroethane (DDT) +	N/A			
1,2-Dichloroethane	N/A			
1,1-Dichloroethylene (vinylidene chloride)	N/A			
Dichloromethane	N/A			
2-4 Dichlorophenol	N/A			
2,4-Dichlorophenoxy acetic acid (2,4-	N/A			
Diclofop-methyl	N/A			
Dimethoate	N/A			
Dinoseb	N/A			
Diquat	N/A			
Diuron	N/A			
Glyphosate	N/A			
HAA (NOTE: show latest annual average)	Jan – Dec 2024	11.98	ug/L	N/A
Heptachlor + Heptachlor Epoxide	N/A			
Lindane (Total)	N/A			
Malathion	N/A			
Methoxychlor	N/A			
Metolachlor	N/A			
Metribuzin	N/A			
Monochlorobenzene	N/A			
Paraquat	N/A			
Parathion	N/A			
Pentachlorophenol	N/A			
Phorate	N/A			
Picloram	N/A			
Polychlorinated Biphenyls(PCB)	N/A			
Prometryne	N/A			
Simazine	N/A			
THM (NOTE: show latest annual average)	Jan – Dec 2024	25.50	ug/L	N/A
Temephos	N/A			
Terbufos	N/A			
Tetrachloroethylene	N/A			
2,3,4,6-Tetrachlorophenol	N/A			
Triallate	N/A			
Trichloroethylene	N/A			
2,4,6-Trichlorophenol	N/A			
2,4,5-Trichlorophenoxy acetic acid	N/A			
Trifluralin	N/A			
Vinyl Chloride	N/A			



Note: Sarnia Distribution system is not required to conduct testing under this section, except for THM/HAA parameters. Lambton Area Water Supply System (LAWSS) has the required parameter results for Sarnia Distribution System source water. This information can be viewed in the LAWSS Annual Report and can be found through the City of Sarnia Website. (www.sarnia.ca)

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			