



ANNUAL REPORT

Drinking-Water System Number:
Drinking-Water System Name:
Drinking-Water System Owner:
Drinking-Water System Category:
Period being reported:

Table with 1 column and 5 rows containing system details: 260003136, City of Sarnia Water Distribution System, Corporation of the City of Sarnia, Large Municipal Residential, January 1, 2023 – December 31, 2023

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

Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []

Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] 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:

Table with 2 columns: Drinking Water System Name, Drinking Water System Number. Row 1: 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 nor booster pumps within the SDS. Drinking water for the Sarnia Distribution System is supplied, in whole, by the Lambton Area Water Supply System (LAWSS) which is situated in the City of Sarnia on the southern tip of Lake Huron at the headwaters of the St. Clair River. SDS is interconnected with other local distribution systems (Plympton – Wyoming Water Distribution, Village of Point Edward Water Distribution, and St. Clair Township Water Distribution System) that receive drinking water from LAWSS. SDS is also interconnected with closed valves (emergency preparedness only) to Petrolia Brights Grove Water Treatment Plant and Township of Enniskillen Water Distribution System.

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:

2023 Capital Projects Cost		
Description	Construction Description	Amount Spent
Rapids Pkwy South	Storm sewer, Sanitary forcemain & Road	\$2,740,296.14
Brock and Vidal	Full Reconstruction (Water, Sewer Road) -Brock & Water, Sanitary sewer and Road – Vidal	\$2,577,436.46

Plank Road Phase 2	Watermain & Road	\$1,970,333.89
East St Reconstruction	Full Reconstruction (Water, Sewer Road)	\$1,034,579.30
Colborne Road	Watermain	\$911,523.74
Russell, Palmerston & Green St	Full Reconstruction (Water, Sewer Road)	\$1,739,688.55

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
N/A (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 #) 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	1048	0-0	0-0	263	<10 - 730



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	843	(0.61 – 1.92)	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.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results.

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

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			



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	(<0.02) - (1.38)	ppb	0

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

Note: Sarnia Distribution system is not required to conduct testing under this section, with the exception of 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)

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 2023	19.25	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 2023	13.55	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			

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			