

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	220002468
<b>Drinking-Water System Name:</b>	Belmont Water System
<b>Drinking-Water System Owner:</b>	Municipality of Central Elgin
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2024, to December 31, 2024

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No [ ]</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;">                 Central Elgin Administration Office                  450 Sunset Drive St. Thomas                  Ontario, Canada                  N5R 5V1             </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</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:

Drinking Water System Name	Drinking Water System Number
-	-

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.**

The Belmont water system is a Large Municipal Residential system located in the Village of Belmont within the Municipality of Central Elgin. The drinking water is drawn from two artesian ground water wells. Sodium hypochlorite is used for disinfection and sodium silicate is added for iron sequestration. Each well pumps water through a water treatment facility where these chemicals are added. The well pumps also provide the hydraulic force required to pump the disinfected water through a large 750mm diameter by 136 meter long chlorine contact pipe and into the distribution system and eventually into the elevated water tower. The contact pipe provides adequate contact time between the water and the chlorine that is added to ensure proper disinfection before water enters the distribution system. The elevated water tower stores 2,100 cubic meters of water for peak demand and fire flows. The Water Treatment facility and Water Tower utilize a Supervisory Control and Data Acquisition system (S.C.A.D.A.). The treatment facility is located at 200 Caesar Road in the Village of Belmont and serves a population of approximately 2,330.

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

There are two chemicals used in the treatment process in the Belmont Water System. They are Sodium Hypochlorite for disinfection and Sodium Silicate for iron sequestration. The amounts of these chemicals used in 2024 are as follows:

Sodium Hypochlorite: 4,257 Litres  
Sodium Silicate: 3,980 Litres

# Drinking-Water Systems Regulation O. Reg. 170/03

**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.**

There was no Significant Expenses incurred in 2024

**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
July 30, 2024	Total Coliform	1	Count Per 100 mL	Re-Sample	July 31,2024 Aug. 1, 2024

**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 #)	Number of Back Ground Samples	Range of Background Results (min #)-(max #)
Raw	106	0 to 0	0 to 0	0	-	106	0 to 525
Treated	53	0 to 0	0 to 0	53	<10 to 20	53	0 to 1
Distribution	322	0 to 0	0 to 1	292	<10 to 70	292	0 to 51

**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 of Grab Samples (min#)-(max#)	Number of Continuous Monitoring Samples	Range of Results of Continuous Monitoring (min#)-(max#)	Average of Continuous Monitoring Samples
Turbidity (Raw)	151	0.09 to 1.50 NTU	0	N/A	N/A
Turbidity (Treated)	366	0.037 to 0.82 NTU	8760	0.043 to 1.209 NTU	0.18
Turbidity (Distribution)	964	0.06 to 1.25 NTU	0	N/A	N/A
pH (Raw)	0	N/A	0	N/A	N/A
pH (Treated)	0	N/A	8760	7.72 to 8.38	7.86
pH (Distribution)	4	7.36 to 7.89	8760	7.68 to 8.26	7.97
Free Chlorine (Treated)	366	0.31 to 2.05 mg/L	8760	0.23 to 2.44 mg/L	1.20 mg/L
Free Chlorine (Distribution)	964	0.60 to 1.47 mg/L	8760	0.57 to 1.98 mg/L	0.98 mg/L
Total Chlorine (Treated)	365	0.36 to 2.80 mg/L	8760	0.26 to 2.00 mg/L	1.32 mg/L
Total Chlorine (Distribution)	964	0.64 to 1.57 mg/L	0	N/A	N/A
Temperature (Raw)	0	N/A	0	N/A	N/A
Temperature (Distribution)	0	N/A	0	N/A	N/A

**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

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

Parameter	Sample Date	M.A.C.	Result Value	Unit of Measure	Exceedance
Antimony	Mar. 6/24	0.006	<0.0006	Mg/L	No
Arsenic	Mar. 6/24	0.010	0.005	Mg/L	No
Barium	Mar. 6/24	1.0	0.190	Mg/L	No
Boron	Mar. 6/24	5	0.069	Mg/L	No
Cadmium	Mar. 6/24	0.005	<0.000003	Mg/L	No
Chromium	Mar. 6/24	0.050	0.00014	Mg/L	No
Lead	See	Table	Below		
Mercury	Mar. 6/24	0.001	<0.00001	Mg/L	No
Selenium	Mar. 6/24	0.050	<0.00004	Mg/L	No
Sodium	Mar. 1/21	20.0	19.9	Mg/L	No
Uranium	Mar. 6/24	0.02	0.000108	Mg/L	No
Fluoride	Mar. 1/23	1.5	0.82	Mg/L	No
Nitrite	2024 RAA	1	<0.003	Mg/L	No
Nitrate	2024 RAA	10	<0.006	Mg/L	No
Nitrite	Mar. 6/24	1	<0.003	Mg/L	No
Nitrate	Mar. 6/24	10	<0.006	Mg/L	No
Nitrite	June 5/24	1	<0.003	Mg/L	No
Nitrate	June 5/24	10	<0.006	Mg/L	No
Nitrite	Sept. 10/24	1	<0.003	Mg/L	No
Nitrate	Sept. 10/24	10	<0.006	Mg/L	No
Nitrite	Dec. 4/24	1	<0.003	Mg/L	No
Nitrate	Dec. 4/24	10	<0.006	Mg/L	No

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

Location Type	Number of Samples	M.A.C.	Range of Lead Results	Number of Exceedances
Plumbing	0	0.10 mg/L	N/A	N/A
Distribution	0	0.10 mg/L	N/A	N/A

**Summary of alkalinity testing under Schedule 15.1 during this reporting period.**

Location Type	Number of Samples	M.A.C.	Range of alkalinity Results	Number of Exceedances
Distribution	4	N/A	176 to 191 mg/L	N/A

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

Parameter	Sample Date	M.A.C.	Result Value	Unit of Measure	Exceedance
Alachlor	Mar. 6/24	0.005	<0.00002	Mg/L	No
Atrazine + N-dealkylated metabolites	Mar. 6/24	0.005	<0.00001	Mg/L	No
Azinphos-methyl	Mar. 6/24	0.02	<0.00005	Mg/L	No
Benzene	Mar. 6/24	0.001	<0.00032	Mg/L	No
Benzo(a)pyrene	Mar. 6/24	0.00001	<0.000004	Mg/L	No
Bromoxynil	Mar. 6/24	0.005	<0.00033	Mg/L	No
Carbaryl	Mar. 6/24	0.09	<0.00005	Mg/L	No
Carbofuran	Mar. 6/24	0.09	<0.00001	Mg/L	No
Carbon Tetrachloride	Mar. 6/24	0.002	<0.00017	Mg/L	No
Chlorpyrifos	Mar. 6/24	0.09	<0.00002	Mg/L	No
Diazinon	Mar. 6/24	0.02	<0.00002	Mg/L	No
Dicamba	Mar. 6/24	0.120	<0.0002	Mg/L	No
1,2-Dichlorobenzene	Mar. 6/24	0.2	<0.00041	Mg/L	No
1,4-Dichlorobenzene	Mar. 6/24	0.005	<0.00036	Mg/L	No
1,2-Dichloroethane	Mar. 6/24	0.005	<0.00035	Mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Mar. 6/24	0.014	<0.00033	Mg/L	No
Dichloromethane	Mar. 6/24	0.05	<0.00035	Mg/L	No
2,4 Dichlorophenol	Mar. 6/24	0.9	<0.00015	Mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Mar. 6/24	0.1	<0.00019	Mg/L	No
Diclofop-methyl	Mar. 6/24	0.009	<0.0004	Mg/L	No
Dimethoate	Mar. 6/24	0.02	<0.00006	Mg/L	No
Diquat	Mar. 6/24	0.07	<0.001	Mg/L	No
Diuron	Mar. 6/24	0.15	<0.00003	Mg/L	No
Glyphosate	Mar. 6/24	0.28	<0.001	Mg/L	No
Total Haloacetic Acids (HAA5)	2024 Avg.	R.A.A. 0.08	R.A.A. <0.0053	mg/L	No
Malathion	Mar. 6/24	0.19	<0.00002	Mg/L	No
Metolachlor	Mar. 6/24	0.05	<0.00001	Mg/L	No
Metribuzin	Mar. 6/24	0.08	<0.00002	Mg/L	No
Monochlorobenzene	Mar. 6/24	0.08	<0.0003	Mg/L	No
Paraquat	Mar. 6/24	0.01	<0.001	Mg/L	No
Pentachlorophenol	Mar. 6/24	0.06	<0.00015	Mg/L	No
Phorate	Mar. 6/24	0.002	<0.00001	Mg/L	No
Picloram	Mar. 6/24	0.19	<0.001	Mg/L	No
Polychlorinated Biphenyls (PCB)	Mar. 6/24	0.003	<0.00004	Mg/L	No
Prometryne	Mar. 6/24	0.001	<0.00003	Mg/L	No
Simazine	Mar. 6/24	0.01	<0.00001	Mg/L	No

<b>THM (Total)</b> (NOTE: show latest annual average)	<b>2024 Avg.</b>	<b>R.A.A.</b> <b>0.10</b>	<b>R.A.A.</b> <b>0.01875</b>	<b>Mg/L</b>	<b>No</b>
<b>Terbufos</b>	<b>Mar. 6/24</b>	<b>0.001</b>	<b>&lt;0.00001</b>	<b>Mg/L</b>	<b>No</b>
<b>Tetrachloroethylene</b>	<b>Mar. 6/24</b>	<b>0.010</b>	<b>&lt;0.00035</b>	<b>Mg/L</b>	<b>No</b>
<b>2,3,4,6-Tetrachlorophenol</b>	<b>Mar. 6/24</b>	<b>0.1</b>	<b>&lt;0.0002</b>	<b>Mg/L</b>	<b>No</b>
<b>Triallate</b>	<b>Mar. 6/24</b>	<b>0.23</b>	<b>&lt;0.00001</b>	<b>Mg/L</b>	<b>No</b>
<b>Trichloroethylene</b>	<b>Mar. 6/24</b>	<b>0.005</b>	<b>&lt;0.00044</b>	<b>Mg/L</b>	<b>No</b>
<b>2,4,6-Trichlorophenol</b>	<b>Mar. 6/24</b>	<b>0.005</b>	<b>&lt;0.00025</b>	<b>Mg/L</b>	<b>No</b>
<b>2-Methyl-4-chlorophenoxyacetic acid (MCPA)</b>	<b>Mar. 6/24</b>	<b>0.1</b>	<b>&lt;0.00012</b>	<b>Mg/L</b>	<b>No</b>
<b>Trifluralin</b>	<b>Mar. 6/24</b>	<b>0.045</b>	<b>&lt;0.00002</b>	<b>Mg/L</b>	<b>No</b>
<b>Vinyl Chloride</b>	<b>Mar. 6/24</b>	<b>0.001</b>	<b>&lt;0.00017</b>	<b>Mg/L</b>	<b>No</b>

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

**(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)**