



OPTIONAL ANNUAL REPORT TEMPLATE

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

210000657
Emo Drinking Water System
The Corporation of the Township of Emo
Large Municipal Residential System
January 2016 to December 2016

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 [X]

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.

Emo Municipal Office
39 Roy Street
Emo Ontario
POW 1E0

Complete for all other Categories.

Number of Designated Facilities served:

[]

Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []

Number of Interested Authorities you report to:

[]

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

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:

Table with 2 columns: 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 [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

Surface Water Treatment Plant with Coagulation, Flocculation, Sedimentation tank, Filtration and Chlorination with P.H. adjustment.

List all water treatment chemicals used over this reporting period

Chlorine Gas, Soda Ash, Alum and Polymer.

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

Install new watermains complete with associated valving, hydrants and testing \$824,275.00.
New Chlorine Analyzer \$6,346.62

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
Oct 21/16	THM ^s	123 Avg	ug/L	Lower Chlorine	ongoing



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	52	<1 - 276	11 - 72420	N/A	N/A
Treated	52	0	0	49	0 - 3
Distribution	104	0	0	29	0 - 7

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	8760	.01 - 1.64	NTU
Chlorine	8760	0 - 2.29	mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A	

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

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	Result Value	Unit of Measure	Exceedance
Antimony	Jan 18/16	<0.60	ug/L	No
Arsenic	Jan 18/16	<1.0	ug/L	No
Barium	Jan 18/16	<10	ug/L	No
Boron	Jan 18/16	<50	ug/L	No
Cadmium	Jan 18/16	<0.10	ug/L	No
Chromium	Jan 18/16	<1.0	ug/L	No
*Lead	Sept 13/16	<1.0	ug/L	No
Mercury	Jan 18/16	<0.10	ug/L	No
Selenium	Jan 18/16	<1.0	ug/L	No
Sodium	Jan 18/16	28.3	mg/L	Yes
Uranium	Jan 18/16	<2.0	ug/L	No
Fluoride	Jan 18/16	0.027	mg/L	No



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

Nitrite	Jan 18 / 16	< 0.010	mg/L	No
Nitrate	Jan 18 / 16	0.079	mg/L	No

*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	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	1	< 1.0 < 1.0	ug/L	0
Distribution	3	< 1.0 < 1.0	ug/L	0

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	Jan 18 / 16	< 0.10	ug/L	No
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites	Jan 18 / 16	< 0.20	ug/L	No
Azinphos-methyl	Jan 18 / 16	< 0.10	ug/L	No
Bendiocarb				
Benzene	Jan 18 / 16	< 0.50	ug/L	No
Benzo(a)pyrene	Jan 18 / 16	< 0.010	ug/L	No
Bromoxynil	Jan 18 / 16	< 0.20	ug/L	No
Carbaryl	Jan 18 / 16	< 0.20	ug/L	No
Carbofuran	Jan 18 / 16	< 0.20	ug/L	No
Carbon Tetrachloride	Jan 18 / 16	< 0.50	ug/L	No
Chlordane (Total)				
Chlorpyrifos	Jan 18 / 16	< 0.10	ug/L	No
Cyanazine				
Diazinon	Jan 18 / 16	< 0.10	ug/L	No
Dicamba	Jan 18 / 16	< 0.20	ug/L	No
1,2-Dichlorobenzene	Jan 18 / 16	< 0.50	ug/L	No
1,4-Dichlorobenzene	Jan 18 / 16	< 0.50	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane	Jan 18 / 16	< 0.50	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 18 / 16	< 0.50	ug/L	No
Dichloromethane	Jan 18 / 16	< 5.0	ug/L	No
2-4 Dichlorophenol	Jan 18 / 16	< 0.30	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 18 / 16	< 0.20	ug/L	No



	Diclofop-methyl	Jan 18/16	<0.20	ug/L	No
	Dimethoate	Jan 18/16	<0.10	ug/L	No
	Dinoseb				
	Diquat	Jan 18/16	<1.0	ug/L	No
	Diuron	Jan 18/16	<1.0	ug/L	No
	Glyphosate	Jan 18/16	<5.0	ug/L	No
x	Heptachlor + Heptachlor Epoxide				
x	Lindane (Total)				
	Malathion	Jan 18/16	<0.10	ug/L	No
x	Methoxychlor				
	Metolachlor	Jan 18/16	<0.10	ug/L	No
	Metribuzin	Jan 18/16	<0.10	ug/L	No
	Monochlorobenzene	Jan 18/16	<0.50	ug/L	No
x	Paraquat	Jan 18/16	<1.0	ug/L	No
x	Parathion		<0.50	ug/L	
	Pentachlorophenol	Jan 18/16	<0.50	ug/L	No
	Phorate	Jan 18/16	<0.10	ug/L	No
	Picloram	Jan 18/16	<0.20	ug/L	No
	Polychlorinated Biphenyls(PCB)	Jan 18/16	<0.035	ug/L	No
	Prometryne	Jan 18/16	<0.10	ug/L	No
	Simazine	Jan 18/16	<0.10	ug/L	No
	THM (NOTE: show latest annual average)	2016 Average	123.25	ug/L	Yes
x	Temephos				
	Terbufos	Jan 18/16	<0.20	ug/L	No
	Tetrachloroethylene	Jan 18/16	<0.50	ug/L	No
	2,3,4,6-Tetrachlorophenol	Jan 18/16	<0.50	ug/L	No
	Triallate	Jan 18/16	<0.10	ug/L	No
	Trichloroethylene	Jan 18/16	<0.50	ug/L	No
	2,4,6-Trichlorophenol	Jan 18/16	<0.50	ug/L	No
x	2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
x	Trifluralin	Jan 18/16	<0.10	ug/L	No
	Vinyl Chloride	Jan 18/16	<0.20	ug/L	No

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
Sodium	28.3	mg/L	Jan 18/16
THM's	123.25	ug/L	2016 Average