



Part III Form 2
Section 11. ANNUAL REPORT

Table with 2 columns: Label (Drinking-Water System Number, Name, Owner, Category, Period) and Value (220000013, ERIN DRINKING WATER SYSTEM, CORPORATION OF THE TOWN OF ERIN, LARGE MUNICIPAL RESIDENTIAL, JANUARY 1 - DECEMBER 31, 2013)

Form with two columns. Left column: 'Complete if your Category is Large Municipal Residential or Small Municipal Residential'. Right column: 'Complete for all other Categories.' Includes questions about serving 10,000+ people, public availability of reports, and number of facilities/authorities served.

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, 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? N/A
Yes [] No []

Indicate how you notified system users that your annual report is available, and is free of charge.

- [X] Public access/notice via the web
[X] Public access/notice via Government Office
[X] Public access/notice via Public Request



Describe your Drinking-Water System

The Erin Drinking Water System is a ground water supply system serving a population of approximately 2500 residential and commercial customers, located in the former Village of Erin.

The water is supplied from two wells drilled into the fractured limestone bedrock, with a total rated capacity of 4,128 m³/day. The pressure in most of the Erin Municipal Water System is maintained by a 1,700 m³ water tower, however 65 residences in the Erin Heights Subdivision require a booster pump main to maintain adequate pressure.

The Erin Drinking Water System’s Certification Facility Level is WD3, Certificate Number 1235 issued 05/25/2005.

Well No. 7, located at 46 Shamrock Road, Erin Well No. 7, located at 46 Shamrock Road, Erin. It is a 250 mm diameter, 41.96m deep drilled ground water well, with casing to a depth of 10.67m. It is equipped with a submersible pump rated at 1,800 L/min. The well is located approximately 7m southeast of the pumphouse. The neighbouring land is used for both industrial and agricultural purposes. There is also undeveloped land in the vicinity of the pumphouse.

Well No. 8 is located on Lot 17, concession 8-9, Erin. It is a 200 mm diameter, 46 m deep drilled groundwater well, with double casing to depths of 6.7 m (outer casing) and 8.53 m (inner casing) and is equipped with a submersible pump rated at 1,636 L/min at 32 m total dynamic head. The well is located approximately 4 m northwest of the pumphouse. The neighbouring land is used for both residential and agricultural purposes. A golf course runs adjacent to the pumphouse along with undeveloped land.

List all water treatment chemicals used over this reporting period

Gaseous Chlorine

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

Well House Maintenance	\$ 23,129.82
Erin Distribution Maintenance	\$ 21,924.13
Erin Water Tower Maintenance	\$ 9,075.45
Erin Water Tower Capital (repair/paint)	\$ 7,504.18
Hydro	\$ 63,256.15
Asset Management Project	\$ 7,960.17
MTV Hydrants – Install	\$ 35,021.04
Testing/Sampling	\$ 8,513.35



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
<i>None to report</i>					

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 #)	Number of Samples	Range of Total Coliform Results (min #)-(max #)	Number of HPC & Background Bacteria Samples	Range of HPC Results (min #)-(max #)
Raw	104	0-0	104	0-0	104	0-170 cfu/100mL
Treated	104	0-0	104	0-0	208	0-2 cfu/100mL
Distribution	209	0-0	209	0-0	418	0-26 cfu/100mL

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 #)
Turbidity (E7)	12	0.07 – 0.73 NTU
Turbidity (E8)	12	0.00 – 0.81 NTU
Chlorine (continuous) (E7)	8760	*0.000 – 1.369
Chlorine (continuous) (E8)	8760	*0.000 – 1.527
Chlorine (grab samples)	365	0.35 – 1.07
Fluoride (If the DWS provides fluoridation)	N/A	N/A

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

**This reading is not considered to be adverse. It was due to power failures, alarm testing and programming changes.*

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. N/A

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
<i>None to report</i>				

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 #)	Number of Exceedances
Plumbing	N/A	-	-
Distribution	N/A	-	-

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

Well E7

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2012/06/25	ND	mg/L	
Arsenic	2012/06/25	ND	mg/L	
Barium	2012/06/25	0.032	mg/L	
Boron	2012/06/25	0.012	mg/L	
Cadmium	2012/06/25	ND	mg/L	
Chromium	2012/06/25	ND	mg/L	
Lead	2012/06/25	ND	mg/L	
Mercury	2012/06/25	ND	mg/L	
Selenium	2012/06/25	ND	mg/L	
Sodium	2013/06/20	6.2	mg/L	
Uranium	2012/06/25	0.00038	mg/L	
Fluoride	2013/06/20	0.2	mg/L	
Nitrite	2013/11/19	ND	mg/L	
Nitrate	2013/11/19	0.12	mg/L	

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

Well E7

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2012/06/25	ND	ug/L	
Aldicarb	2012/06/25	ND	ug/L	
Aldrin + Dieldrin	2012/06/25	ND	ug/L	
Atrazine + N-dealkylated metabolites	2012/06/25	ND	ug/L	
Azinphos-methyl	2012/06/25	ND	ug/L	
Bendiocarb	2012/06/25	ND	ug/L	
Benzene	2012/06/25	ND	ug/L	
Benzo(a)pyrene	2012/06/25	ND	ug/L	
Bromoxynil	2012/06/25	ND	ug/L	
Carbaryl	2012/06/25	ND	ug/L	
Carbofuran	2012/06/25	ND	ug/L	
Carbon Tetrachloride	2012/06/25	ND	ug/L	
Chlordane (Total)	2012/06/25	ND	ug/L	
Chlorpyrifos	2012/06/25	ND	ug/L	
Cyanazine	2012/06/25	ND	ug/L	
Diazinon	2012/06/25	ND	ug/L	
Dicamba	2012/06/25	ND	ug/L	
1,2-Dichlorobenzene	2012/06/25	ND	ug/L	



1,4-Dichlorobenzene	2012/06/25	ND	ug/L	
Dichlorodiphenyltrichloroethane (DDT) + metabolites	2012/06/25	ND	ug/L	
1,2-Dichloroethane	2012/06/25	ND	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	2012/06/25	ND	ug/L	
Dichloromethane	2012/06/25	ND	ug/L	
2-4 Dichlorophenol	2012/06/25	ND	ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	2012/06/25	ND	ug/L	
Diclofop-methyl	2012/06/25	ND	ug/L	
Dimethoate	2012/06/25	ND	ug/L	
Dinoseb	2012/06/25	ND	ug/L	
Diquat	2012/06/25	ND	ug/L	
Diuron	2012/06/25	ND	ug/L	
Glyphosate	2012/06/25	ND	ug/L	
Heptachlor + Heptachlor Epoxide	2012/06/25	ND	ug/L	
Lindane (Total)	2012/06/25	ND	ug/L	
Malathion	2012/06/25	ND	ug/L	
Methoxychlor	2012/06/25	ND	ug/L	
Metolachlor	2012/06/25	ND	ug/L	
Metribuzin	2012/06/25	ND	ug/L	
Monochlorobenzene	2012/06/25	ND	ug/L	
Paraquat	2012/06/25	ND	ug/L	
Parathion	2012/06/25	ND	ug/L	
Pentachlorophenol	2012/06/25	ND	ug/L	
Phorate	2012/06/25	ND	ug/L	
Picloram	2012/06/25	ND	ug/L	
Polychlorinated Biphenyls(PCB)	2012/06/25	ND	ug/L	
Prometryne	2012/06/25	ND	ug/L	
Simazine	2012/06/25	ND	ug/L	
THM (Distribution) (NOTE: show latest annual average)	2013/11/19	12.1	ug/L	
Temephos	2012/06/25	ND	ug/L	
Terbufos	2012/06/25	ND	ug/L	
Tetrachloroethylene	2012/06/25	ND	ug/L	
2,3,4,6-Tetrachlorophenol	2012/06/25	ND	ug/L	
Triallate	2012/06/25	ND	ug/L	
Trichloroethylene	2012/06/25	ND	ug/L	
2,4,6-Trichlorophenol	2012/06/25	ND	ug/L	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2012/06/25	ND	ug/L	
Trifluralin	2012/06/25	ND	ug/L	
Vinyl Chloride	2012/06/25	ND	ug/L	



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

Well E8

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2012/06/25	ND	mg/L	
Arsenic	2012/06/25	ND	mg/L	
Barium	2012/06/25	0.046	mg/L	
Boron	2012/06/25	0.012	mg/L	
Cadmium	2012/06/25	ND	mg/L	
Chromium	2012/06/25	ND	mg/L	
Lead	2012/06/25	ND	mg/L	
Mercury	2012/06/25	ND	mg/L	
Selenium	2012/06/25	ND	mg/L	
Sodium	2013/06/20	5.2	mg/L	
Uranium	2012/06/25	ND	mg/L	
Fluoride	2013/06/20	0.27	mg/L	
Nitrite	2013/11/19	ND	mg/L	
Nitrate	2013/11/19	ND	mg/L	

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

Well E8

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2012/06/25	ND	ug/L	
Aldicarb	2012/06/25	ND	ug/L	
Aldrin + Dieldrin	2012/06/25	ND	ug/L	
Atrazine + N-dealkylated metabolites	2012/06/25	ND	ug/L	
Azinphos-methyl	2012/06/25	ND	ug/L	
Bendiocarb	2012/06/25	ND	ug/L	
Benzene	2012/06/25	ND	ug/L	
Benzo(a)pyrene	2012/06/25	ND	ug/L	
Bromoxynil	2012/06/25	ND	ug/L	
Carbaryl	2012/06/25	ND	ug/L	
Carbofuran	2012/06/25	ND	ug/L	
Carbon Tetrachloride	2012/06/25	ND	ug/L	
Chlordane (Total)	2012/06/25	ND	ug/L	
Chlorpyrifos	2012/06/25	ND	ug/L	
Cyanazine	2012/06/25	ND	ug/L	
Diazinon	2012/06/25	ND	ug/L	
Dicamba	2012/06/25	ND	ug/L	
1,2-Dichlorobenzene	2012/06/25	ND	ug/L	
1,4-Dichlorobenzene	2012/06/25	ND	ug/L	



Dichlorodiphenyltrichloroethane (DDT) + metabolites	2012/06/25	ND	ug/L	
1,2-Dichloroethane	2012/06/25	ND	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	2012/06/25	ND	ug/L	
Dichloromethane	2012/06/25	ND	ug/L	
2-4 Dichlorophenol	2012/06/25	ND	ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	2012/06/25	ND	ug/L	
Diclofop-methyl	2012/06/25	ND	ug/L	
Dimethoate	2012/06/25	ND	ug/L	
Dinoseb	2012/06/25	ND	ug/L	
Diquat	2012/06/25	ND	ug/L	
Diuron	2012/06/25	ND	ug/L	
Glyphosate	2012/06/25	ND	ug/L	
Heptachlor + Heptachlor Epoxide	2012/06/25	ND	ug/L	
Lindane (Total)	2012/06/25	ND	ug/L	
Malathion	2012/06/25	ND	ug/L	
Methoxychlor	2012/06/25	ND	ug/L	
Metolachlor	2012/06/25	ND	ug/L	
Metribuzin	2012/06/25	ND	ug/L	
Monochlorobenzene	2012/06/25	ND	ug/L	
Paraquat	2012/06/25	ND	ug/L	
Parathion	2012/06/25	ND	ug/L	
Pentachlorophenol	2012/06/25	ND	ug/L	
Phorate	2012/06/25	ND	ug/L	
Picloram	2012/06/25	ND	ug/L	
Polychlorinated Biphenyls(PCB)	2012/06/25	ND	ug/L	
Prometryne	2012/06/25	ND	ug/L	
Simazine	2012/06/25	ND	ug/L	
THM (Distribution) (NOTE: show latest annual average)	2013/11/19	12.1	ug/L	
Temephos	2012/06/25	ND	ug/L	
Terbufos	2012/06/25	ND	ug/L	
Tetrachloroethylene	2012/06/25	ND	ug/L	
2,3,4,6-Tetrachlorophenol	2012/06/25	ND	ug/L	
Triallate	2012/06/25	ND	ug/L	
Trichloroethylene	2012/06/25	ND	ug/L	
2,4,6-Trichlorophenol	2012/06/25	ND	ug/L	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2012/06/25	ND	ug/L	
Trifluralin	2012/06/25	ND	ug/L	
Vinyl Chloride	2012/06/25	ND	ug/L	

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			