



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, 2015)

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 report availability, and designated facilities.

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 m<sup>3</sup>/day. The pressure in most of the Erin Municipal Water System is maintained by a 1,700 m<sup>3</sup> 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. 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**

<b>Erin Well House Maintenance</b>	<b>\$ 38,368.35</b>
<b>Erin Distribution Maintenance</b>	<b>\$ 29,782.95</b>
<b>Erin Water Tower Maintenance</b>	<b>\$ 6,031.39</b>
<b>Hydro</b>	<b>\$ 67,555.95</b>
<b>Well House Data Loggers</b>	<b>\$ 20,250.25</b>
<b>PLC SCADA Upgrades</b>	<b>\$ 154,169.08</b>
<b>Testing/Sampling</b>	<b>\$ 9,616.02</b>

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
2015/06/15	Low Chlorine reading on analyzer for 5 min capture	0	mg/L	Sampled that day as per Health Unit, all test results were within limits.	2015/06/15
2015/02/13	Sodium Exceedance on Distribution Sample	160	mg/L	Re-sampled at a location without a water softener installed, all test results were within limits.	2015/02/13

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	0-0cfu/100mL
Treated	104	0-0	104	0-0	208	0-1cfu/100mL
Distribution	208	0-0	208	0-0	416	0-7cfu/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	0.09 – 0.27 NTU
Turbidity (E8)	12	0.08 – 0.25 NTU
Chlorine (continuous) (E7)	8760	*0.000 – 2.000
Chlorine (continuous) (E8)	8760	*0.000 – 2.003
Chlorine (grab samples)	365	0.44 – 1.28
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	6	ND - 0.0040 mg/L	0

**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	2015/06/23	ND	mg/L	
Arsenic	2015/06/23	ND	mg/L	
Barium	2015/06/23	0.031	mg/L	
Boron	2015/06/23	0.017	mg/L	
Cadmium	2015/06/23	ND	mg/L	
Chromium	2015/06/23	ND	mg/L	
Lead	2015/06/23	ND	mg/L	
Mercury	2015/06/23	ND	mg/L	
Selenium	2015/06/23	ND	mg/L	
Sodium	2013/06/20	6.2	mg/L	
Uranium	2015/06/23	0.00042	mg/L	
Fluoride	2013/06/20	0.2	mg/L	
Nitrite	2015/12/08	ND	mg/L	
Nitrate	2015/12/08	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 E7**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2015/06/23	ND	ug/L	
Aldicarb	2015/06/23	ND	ug/L	
Aldrin + Dieldrin	2015/06/23	ND	ug/L	
Atrazine + N-dealkylated metabolites	2015/06/23	ND	ug/L	
Azinphos-methyl	2015/06/23	ND	ug/L	
Bendiocarb	2015/06/23	ND	ug/L	



<b>Benzene</b>	2015/06/23	ND	ug/L	
<b>Benzo(a)pyrene</b>	2015/06/23	ND	ug/L	
<b>Bromoxynil</b>	2015/06/23	ND	ug/L	
<b>Carbaryl</b>	2015/06/23	ND	ug/L	
<b>Carbofuran</b>	2015/06/23	ND	ug/L	
<b>Carbon Tetrachloride</b>	2015/06/23	ND	ug/L	
<b>Chlordane (Total)</b>	2015/06/23	ND	ug/L	
<b>Chlorpyrifos</b>	2015/06/23	ND	ug/L	
<b>Cyanazine</b>	2015/06/23	ND	ug/L	
<b>Diazinon</b>	2015/06/23	ND	ug/L	
<b>Dicamba</b>	2015/06/23	ND	ug/L	
<b>1,2-Dichlorobenzene</b>	2015/06/23	ND	ug/L	
<b>1,4-Dichlorobenzene</b>	2015/06/23	ND	ug/L	
<b>Dichlorodiphenyltrichloroethane (DDT) + metabolites</b>	2015/06/23	ND	ug/L	
<b>1,2-Dichloroethane</b>	2015/06/23	ND	ug/L	
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	2015/06/23	ND	ug/L	
<b>Dichloromethane</b>	2015/06/23	ND	ug/L	
<b>2-4 Dichlorophenol</b>	2015/06/23	ND	ug/L	
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	2015/06/23	ND	ug/L	
<b>Diclofop-methyl</b>	2015/06/23	ND	ug/L	
<b>Dimethoate</b>	2015/06/23	ND	ug/L	
<b>Dinoseb</b>	2015/06/23	ND	ug/L	
<b>Diquat</b>	2015/06/23	ND	ug/L	
<b>Diuron</b>	2015/06/23	ND	ug/L	
<b>Glyphosate</b>	2015/06/23	ND	ug/L	
<b>Heptachlor + Heptachlor Epoxide</b>	2015/06/23	ND	ug/L	
<b>Lindane (Total)</b>	2015/06/23	ND	ug/L	
<b>Malathion</b>	2015/06/23	ND	ug/L	
<b>Methoxychlor</b>	2015/06/23	ND	ug/L	
<b>Metolachlor</b>	2015/06/23	ND	ug/L	
<b>Metribuzin</b>	2015/06/23	ND	ug/L	
<b>Monochlorobenzene</b>	2015/06/23	ND	ug/L	
<b>Paraquat</b>	2015/06/23	ND	ug/L	
<b>Parathion</b>	2015/06/23	ND	ug/L	
<b>Pentachlorophenol</b>	2015/06/23	ND	ug/L	
<b>Phorate</b>	2015/06/23	ND	ug/L	
<b>Picloram</b>	2015/06/23	ND	ug/L	
<b>Polychlorinated Biphenyls(PCB)</b>	2015/06/23	ND	ug/L	
<b>Prometryne</b>	2015/06/23	ND	ug/L	
<b>Simazine</b>	2015/06/23	ND	ug/L	
<b>THM (Distribution) (NOTE: show latest annual average)</b>	2015/12/08	7.83	ug/L	
<b>Temephos</b>	2015/06/23	ND	ug/L	
<b>Terbufos</b>	2015/06/23	ND	ug/L	
<b>Tetrachloroethylene</b>	2015/06/23	ND	ug/L	

2,3,4,6-Tetrachlorophenol	2015/06/23	ND	ug/L	
Triallate	2015/06/23	ND	ug/L	
Trichloroethylene	2015/06/23	ND	ug/L	
2,4,6-Trichlorophenol	2015/06/23	ND	ug/L	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2015/06/23	ND	ug/L	
Trifluralin	2015/06/23	ND	ug/L	
Vinyl Chloride	2015/06/23	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	2015/06/23	ND	mg/L	
Arsenic	2015/06/23	ND	mg/L	
Barium	2015/06/23	0.045	mg/L	
Boron	2015/06/23	0.011	mg/L	
Cadmium	2015/06/23	ND	mg/L	
Chromium	2015/06/23	ND	mg/L	
Lead	2015/06/23	ND	mg/L	
Mercury	2015/06/23	ND	mg/L	
Selenium	2015/06/23	ND	mg/L	
Sodium	2013/06/20	5.2	mg/L	
Uranium	2015/06/23	0.00011	mg/L	
Fluoride	2013/06/20	0.27	mg/L	
Nitrite	2015/12/08	ND	mg/L	
Nitrate	2015/12/08	ND	mg/L	

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**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	2015/06/23	ND	ug/L	
Aldicarb	2015/06/23	ND	ug/L	
Aldrin + Dieldrin	2015/06/23	ND	ug/L	
Atrazine + N-dealkylated metabolites	2015/06/23	ND	ug/L	
Azinphos-methyl	2015/06/23	ND	ug/L	
Bendiocarb	2015/06/23	ND	ug/L	
Benzene	2015/06/23	ND	ug/L	
Benzo(a)pyrene	2015/06/23	ND	ug/L	

<b>Bromoxynil</b>	2015/06/23	ND	ug/L	
<b>Carbaryl</b>	2015/06/23	ND	ug/L	
<b>Carbofuran</b>	2015/06/23	ND	ug/L	
<b>Carbon Tetrachloride</b>	2015/06/23	ND	ug/L	
<b>Chlordane (Total)</b>	2015/06/23	ND	ug/L	
<b>Chlorpyrifos</b>	2015/06/23	ND	ug/L	
<b>Cyanazine</b>	2015/06/23	ND	ug/L	
<b>Diazinon</b>	2015/06/23	ND	ug/L	
<b>Dicamba</b>	2015/06/23	ND	ug/L	
<b>1,2-Dichlorobenzene</b>	2015/06/23	ND	ug/L	
<b>1,4-Dichlorobenzene</b>	2015/06/23	ND	ug/L	
<b>Dichlorodiphenyltrichloroethane (DDT) + metabolites</b>	2015/06/23	ND	ug/L	
<b>1,2-Dichloroethane</b>	2015/06/23	ND	ug/L	
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	2015/06/23	ND	ug/L	
<b>Dichloromethane</b>	2015/06/23	ND	ug/L	
<b>2-4 Dichlorophenol</b>	2015/06/23	ND	ug/L	
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	2015/06/23	ND	ug/L	
<b>Diclofop-methyl</b>	2015/06/23	ND	ug/L	
<b>Dimethoate</b>	2015/06/23	ND	ug/L	
<b>Dinoseb</b>	2015/06/23	ND	ug/L	
<b>Diquat</b>	2015/06/23	ND	ug/L	
<b>Diuron</b>	2015/06/23	ND	ug/L	
<b>Glyphosate</b>	2015/06/23	ND	ug/L	
<b>Heptachlor + Heptachlor Epoxide</b>	2015/06/23	ND	ug/L	
<b>Lindane (Total)</b>	2015/06/23	ND	ug/L	
<b>Malathion</b>	2015/06/23	ND	ug/L	
<b>Methoxychlor</b>	2015/06/23	ND	ug/L	
<b>Metolachlor</b>	2015/06/23	ND	ug/L	
<b>Metribuzin</b>	2015/06/23	ND	ug/L	
<b>Monochlorobenzene</b>	2015/06/23	ND	ug/L	
<b>Paraquat</b>	2015/06/23	ND	ug/L	
<b>Parathion</b>	2015/06/23	ND	ug/L	
<b>Pentachlorophenol</b>	2015/06/23	ND	ug/L	
<b>Phorate</b>	2015/06/23	ND	ug/L	
<b>Picloram</b>	2015/06/23	ND	ug/L	
<b>Polychlorinated Biphenyls(PCB)</b>	2015/06/23	ND	ug/L	
<b>Prometryne</b>	2015/06/23	ND	ug/L	
<b>Simazine</b>	2015/06/23	ND	ug/L	
<b>THM (Distribution) (NOTE: show latest annual average)</b>	2015/12/08	7.83	ug/L	
<b>Temephos</b>	2015/06/23	ND	ug/L	
<b>Terbufos</b>	2015/06/23	ND	ug/L	
<b>Tetrachloroethylene</b>	2015/06/23	ND	ug/L	
<b>2,3,4,6-Tetrachlorophenol</b>	2015/06/23	ND	ug/L	
<b>Triallate</b>	2015/06/23	ND	ug/L	



Trichloroethylene	2015/06/23	ND	ug/L	
2,4,6-Trichlorophenol	2015/06/23	ND	ug/L	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2015/06/23	ND	ug/L	
Trifluralin	2015/06/23	ND	ug/L	
Vinyl Chloride	2015/06/23	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			