Part III Form 2 Section 11. ANNUAL REPORT

Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category: Period being reported: 220007285
HILLSBURGH DRINKING WATER SYSTEM
CORPORATION OF THE TOWN OF ERIN
LARGE MUNICIPAL RESIDENTIAL
JANUARY 1 – DECEMBER 31, 2015

<u>Complete if your Category is Large Municipal</u> <u>Residential or Small Municipal Residential</u>

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.

TOWN OF ERIN COMPLIANCE ADMINISTRATOR'S OFFICE 5684 TRAFALGAR ROAD HILLSBURGH, ON N0B 1Z0

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 []

Number of Interested Authorities you report to: $\begin{tabular}{c|c} N/A \end{tabular}$

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

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		
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

Well No. H2 is located on Wellington Rd 24 at the Hillsburgh Heights Facility. It is an 88 m deep drilled groundwater well, constructed of steel casing of 200 mm diameter to a depth of 51 m. It is equipped with a submersible pump rated at 702 L/min at 52.7 m. It discharges through a 150 mm diameter line into a reservoir. A lead removal treatment system has been installed at the Hillsburgh Heights pumphouse.

Well No. H3 is located at Victoria Park, across the road from the Glendevon pumphouse. It is a 57.9 m deep drilled groundwater well, constructed of steel casing of 200 mm diameter to a depth of 20.1 m. It is equipped with a submersible pump rated at 456 L/min. It is connected to a 75 mm diameter discharge line leading to the reservoir.

The Hillsburgh water distribution system is divided into two pressure zones. There is a pressure reducing valve chamber at the intersection of Barbour Drive and Orangeville Street. The upper pressure zone has primarily been supplied by Well No. H2. The lower pressure zone has primarily been supplied by Well No. H3. The Frank Smedley Booster Station was completed in 2014 and mainly delivers water from the lower pressure zone to the upper pressure zone. However, it will also allow reverse flow from the upper pressure zone to the lower pressure zone in times of need.

List all water treatment chemicals used over this reporting period

Treatment at the Glendevon facility consists of disinfection with sodium hypochlorite.

Treatment at the Hillsburgh Heights facility consists of disinfection of sodium hypochlorite and lead removal.

Were any significant expenses incurred to?

- [X] Install required equipment
- [X] Repair required equipment
- [X] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Hillsburgh Well House Maintenance	\$ 22,857.09
Hillsburgh Distribution Maintenance	\$ 28,563.15
Hydro	\$ 24,737.33
Well House Data Loggers	\$ 20,250.25
Major Repair Glendevon Reservoir	\$ 53,149.80
Testing/Sampling	\$ 7,882.58

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					

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	100	0-0	100	0-0	100	0-0 cfu/100mL
Treated	100	0-0	100	0-0	200	0-2 cfu/100mL
Distribution	104	0-0	104	0-0	208	0-20 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	Range of Results
	Samples	(min #)-(max #)
Turbidity (HH)	12	0.09 – 0.62 NTU
Turbidity (GD)	11(well offline Sept. 2015)	0.06 – 0.14 NTU
Chlorine (continuous) (HH)	8760	*0.0000 – 1.357
Chlorine (continuous) (GD)	8760	*0.0000 – 1.778
Chlorine (grab samples)	365	0.44 – 1.22
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.

Date of legal Unit of Date **Sampling Point Parameter** Result instrument issued Sampled Measure 0.0065 01/18/2010 Hillsburgh Heights Treated Lead 03/03/2015 mg/L 01/18/2010 03/03/2015 Hillsburgh Heights Raw Lead 0.010 mg/L01/18/2010 Hillsburgh Heights Treated Lead 06/03/2015 0.0057 mg/L01/18/2010 Hillsburgh Heights Raw Lead 06/03/2015 0.0089 mg/L01/18/2010 Hillsburgh Heights Treated Lead09/25/2015 0.0058 mg/L01/18/2010 Hillsburgh Heights Raw Lead 09/25/2015 0.0081 mg/L01/18/2010 Hillsburgh Heights Treated Lead 12/08/2015 0.0063 mg/L01/18/2010 Hillsburgh Heights Raw 12/08/2015 0.0095 Lead mg/L01/18/2010 Hillsburgh Heights Raw Gross Alpha 08/16/2011 0.2 Bq/L< 0.1 01/18/2010 Hillsburgh Heights Raw 08/16/2011 Gross Beta Bq/L

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	Range of Lead Results	Number of
Location Type	Samples	(min#) – (max #)	Exceedances
Plumbing	N/A	-	-
Distribution	6	ND – 0.0076 mg/L	0

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

Parameter Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2015/06/23	ND	mg/L	
Arsenic	2015/06/23	0.0011	mg/L	
Barium	2015/06/23	0.047	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	2015/12/08	0.0063	mg/L	
Mercury	2015/06/23	ND	mg/L	
Selenium	2015/06/23	ND	mg/L	
Sodium	2013/06/20	14	mg/L	
Uranium	2015/06/23	0.0035	mg/L	
Fluoride	2013/06/20	0.88	mg/L	
Nitrite	2015/12/08	ND	mg/L	
Nitrate	2015/12/08	1.10	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 *Hillsburgh Heights*

Parameter	Sample	Result	Unit of	Exceedance
	Date	Value	Measure	
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 metobolites	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	
Bromoxynil	2015/06/23	ND	ug/L	
Carbaryl	2015/06/23	ND	ug/L	
Carbofuran	2015/06/23	ND	ug/L	
Carbon Tetrachloride	2015/06/23	ND	ug/L	
Chlordane (Total)	2015/06/23	ND	ug/L	

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Chlorpyrifos	2015/06/23	ND	ug/L	
Cyanazine	2015/06/23	ND	ug/L	
Diazinon	2015/06/23	ND	ug/L	
Dicamba	2015/06/23	ND	ug/L	
1,2-Dichlorobenzene	2015/06/23	ND	ug/L	
1,4-Dichlorobenzene	2015/06/23	ND	ug/L	
Dichlorodiphenyltrichloroethane (DDT) +	2015/06/22	ND	ug/L	
metabolites	2015/06/23			
1,2-Dichloroethane	2015/06/23	ND	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	2015/06/23	ND	ug/L	
Dichloromethane	2015/06/23	ND	ug/L	
2-4 Dichlorophenol	2015/06/23	ND	ug/L ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	2015/06/23	ND	ug/L	
Diclofop-methyl	2015/06/23	ND	ug/L	
Dimethoate	2015/06/23	ND	ug/L	
Dinoseb	2015/06/23	ND	ug/L	
Diquat	2015/06/23	ND	ug/L	
Diuron	2015/06/23	ND	ug/L	
Glyphosate	2015/06/23	ND	ug/L	
Heptachlor + Heptachlor Epoxide	2015/06/23	ND	ug/L	
Lindane (Total)	2015/06/23	ND	ug/L	
Malathion	2015/06/23	ND	ug/L	
Methoxychlor	2015/06/23	ND	ug/L	
Metolachlor	2015/06/23	ND	ug/L	
Metribuzin	2015/06/23	ND	ug/L	
Monochlorobenzene	2015/06/23	ND	ug/L	
Paraquat	2015/06/23	ND	ug/L	
Parathion	2015/06/23	ND	ug/L	
Pentachlorophenol	2015/06/23	ND	ug/L	
Phorate	2015/06/23	ND	ug/L	
Picloram	2015/06/23	ND	ug/L	
Polychlorinated Biphenyls(PCB)	2015/06/23	ND	ug/L	
Prometryne	2015/06/23	ND	ug/L	
Simazine	2015/06/23	ND	ug/L	
THM (Distribution) (NOTE: show latest annual average)	2015/12/08	10.6	ug/L	
Temephos	2015/06/23	ND	ug/L	
Terbufos	2015/06/23	ND	ug/L	
Tetrachloroethylene	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 Glendevon

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2015/06/23	ND	mg/L	
Arsenic	2015/06/23	0.001	mg/L	
Barium	2015/06/23	0.018	mg/L	
Boron	2015/06/23	0.033	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	11	mg/L	
Uranium	2015/06/23	0.00018	mg/L	
Fluoride	2013/06/20	0.61	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 *Glendevon*

Parameter	Sample	Result	Unit of	Exceedance
	Date	Value	Measure	
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 metobolites	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	
Bromoxynil	2015/06/23	ND	ug/L	
Carbaryl	2015/06/23	ND	ug/L	
Carbofuran	2015/06/23	ND	ug/L	
Carbon Tetrachloride	2015/06/23	ND	ug/L	
Chlordane (Total)	2015/06/23	ND	ug/L	
Chlorpyrifos	2015/06/23	ND	ug/L	
Cyanazine	2015/06/23	ND	ug/L	
Diazinon	2015/06/23	ND	ug/L	
Dicamba	2015/06/23	ND	ug/L	
1,2-Dichlorobenzene	2015/06/23	ND	ug/L	
1,4-Dichlorobenzene	2015/06/23	ND	ug/L	

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Dichlorodiphenyltrichloroethane (DDT) +	2015/06/23	ND	ug/L	
metabolites		NID	/T	
1,2-Dichloroethane	2015/06/23	ND	ug/L	
1,1-Dichloroethylene (vinylidene chloride)	2015/06/23	ND	ug/L	
Dichloromethane	2015/06/23	ND	ug/L	
2-4 Dichlorophenol	2015/06/23	ND	ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	2015/06/23	ND	ug/L	
Diclofop-methyl	2015/06/23	ND	ug/L	
Dimethoate	2015/06/23	ND	ug/L	
Dinoseb	2015/06/23	ND	ug/L	
Diquat	2015/06/23	ND	ug/L	
Diuron	2015/06/23	ND	ug/L	
Glyphosate	2015/06/23	ND	ug/L	
Heptachlor + Heptachlor Epoxide	2015/06/23	ND	ug/L	
Lindane (Total)	2015/06/23	ND	ug/L	
Malathion	2015/06/23	ND	ug/L	
Methoxychlor	2015/06/23	ND	ug/L	
Metolachlor	2015/06/23	ND	ug/L	
Metribuzin	2015/06/23	ND	ug/L	
Monochlorobenzene	2015/06/23	ND	ug/L	
Paraquat	2015/06/23	ND	ug/L	
Parathion	2015/06/23	ND	ug/L	
Pentachlorophenol	2015/06/23	ND	ug/L	
Phorate	2015/06/23	ND	ug/L	
Picloram	2015/06/23	ND	ug/L	
Polychlorinated Biphenyls(PCB)	2015/06/23	ND	ug/L	
Prometryne	2015/06/23	ND	ug/L	
Simazine	2015/06/23	ND	ug/L	
THM (Distribution) (NOTE: show latest annual average)	2015/12/08	10.6	ug/L	
Temephos	2015/06/23	ND	ug/L	
Terbufos	2015/06/23	ND	ug/L	
Tetrachloroethylene	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	

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			