



Part III Form 2
Section 11. ANNUAL REPORT

Table with 2 columns: Label (Drinking-Water System Number, Name, Owner, Category, Period) and Value (220007285, HILLSBURGH DRINKING WATER SYSTEM, CORPORATION OF THE TOWN OF ERIN, LARGE MUNICIPAL RESIDENTIAL, JANUARY 1 - DECEMBER 31, 2016)

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 more than 10,000 people, public availability of reports, and interested authorities.

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. Both cells contain 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 Hillsburgh Drinking Water System is a Class 2 Water Distribution and Supply Subsystem and a Class 1 Water Treatment Subsystem. The water system serves a population of approximately 850 residential and commercial customers, located in the former Village of Hillsburgh. The distribution system has 7.2 km of water mains with 35 fire hydrants.

The water system is a ground water system supplied by two deep drilled wells, with a total rated capacity of 1,637 m³/day. 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.

Well No. H2 is located at 5929 Trafalgar Road, Hillsburgh at the Hillsburgh Heights (HH) 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 802 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(GD) 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.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite at both facilities
Lead Removal (Hillsburgh Heights)

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

Hillsburgh Well House Maintenance	\$ 19,790
Hillsburgh Distribution Maintenance	\$ 10,883
Hydro	\$ 32,544
1 New Hydrant Installed	\$ 6,106
Meter Replacement Program (Erin & Hillsburgh)	\$ 11,356
Testing/Sampling	\$ 7,670



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 & Background Results (min #)-(max #)
Raw	104	0-0	104	0-0	104	0-1 cfu/100mL
Treated	103	0-0	103	0-0	206	0-2 cfu/100mL
Distribution	104	0-0	104	0-0	208	0-7 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 #)	<p><i>NOTE: For continuous monitors use 8760 as the number of samples.</i></p> <p><i>*This reading is not considered to be adverse. It was due to power failures, alarm testing and programming changes.</i></p>
Turbidity (HH)	12	0.08 – 0.78 NTU	
Turbidity (GD)	12	0.06 – 0.31 NTU	
Chlorine (continuous) (HH)	8760	0.6814 – 1.3015	
Chlorine (continuous) (GD)	8760	*0.0000 – 2.0052	
Chlorine (grab samples)	366	0.53 – 1.17	
Fluoride (if the DWS provides fluoridation)	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	Sampling Point	Parameter	Date Sampled	Result	Unit of Measure
01/18/2010	Hillsburgh Heights Treated	Lead	02/23/2016	0.0057	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	02/23/2016	0.0095	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	05/24/2016	0.0047	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	05/24/2016	0.0087	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	08/29/2016	0.0047	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	08/29/2016	0.0084	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	11/14/2016	0.0050	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	11/14/2016	0.0094	mg/L



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

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 *Hillsburgh Heights*

Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Antimony	2015/06/23	ND	mg/L	0.006
Arsenic	2015/06/23	0.0011	mg/L	0.025
Barium	2015/06/23	0.047	mg/L	1
Boron	2015/06/23	0.017	mg/L	5
Cadmium	2015/06/23	ND	mg/L	0.005
Chromium	2015/06/23	ND	mg/L	0.05
Lead	2016/11/14	0.0050	mg/L	0.01
Mercury	2015/06/23	ND	mg/L	0.001
Selenium	2015/06/23	ND	mg/L	0.01
Sodium	2013/06/20	14	mg/L	20
Uranium	2015/06/23	0.0035	mg/L	0.02
Fluoride	2013/06/20	0.88	mg/L	1.5
Nitrite	2016/11/14	ND	mg/L	1
Nitrate	2016/11/14	1.13	mg/L	10

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

Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Alachlor	2015/06/23	ND	ug/L	5
Aldicarb	2015/06/23	ND	ug/L	9
Aldrin + Dieldrin	2015/06/23	ND	ug/L	0.7
Atrazine + N-dealkylated metabolites	2015/06/23	ND	ug/L	5
Azinphos-methyl	2015/06/23	ND	ug/L	20
Bendiocarb	2015/06/23	ND	ug/L	40
Benzene	2015/06/23	ND	ug/L	5
Benzo(a)pyrene	2015/06/23	ND	ug/L	0.01
Bromoxynil	2015/06/23	ND	ug/L	5
Carbaryl	2015/06/23	ND	ug/L	90
Carbofuran	2015/06/23	ND	ug/L	90
Carbon Tetrachloride	2015/06/23	ND	ug/L	5
Chlordane (Total)	2015/06/23	ND	ug/L	7



Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Chlorpyrifos	2015/06/23	ND	ug/L	90
Cyanazine	2015/06/23	ND	ug/L	10
Diazinon	2015/06/23	ND	ug/L	20
Dicamba	2015/06/23	ND	ug/L	120
1,2-Dichlorobenzene	2015/06/23	ND	ug/L	200
1,4-Dichlorobenzene	2015/06/23	ND	ug/L	5
Dichlorodiphenyltrichloroethane (DDT) + metabolites	2015/06/23	ND	ug/L	30
1,2-Dichloroethane	2015/06/23	ND	ug/L	5
1,1-Dichloroethylene (vinylidene chloride)	2015/06/23	ND	ug/L	14
Dichloromethane	2015/06/23	ND	ug/L	50
2-4 Dichlorophenol	2015/06/23	ND	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	2015/06/23	ND	ug/L	100
Diclofop-methyl	2015/06/23	ND	ug/L	9
Dimethoate	2015/06/23	ND	ug/L	20
Dinoseb	2015/06/23	ND	ug/L	10
Diquat	2015/06/23	ND	ug/L	70
Diuron	2015/06/23	ND	ug/L	150
Glyphosate	2015/06/23	ND	ug/L	280
Heptachlor + Heptachlor Epoxide	2015/06/23	ND	ug/L	3
Lindane (Total)	2015/06/23	ND	ug/L	4
Malathion	2015/06/23	ND	ug/L	190
Methoxychlor	2015/06/23	ND	ug/L	900
Metolachlor	2015/06/23	ND	ug/L	50
Metribuzin	2015/06/23	ND	ug/L	80
Chlorobenzene	2015/06/23	ND	ug/L	80
Paraquat	2015/06/23	ND	ug/L	10
Parathion	2015/06/23	ND	ug/L	50
Pentachlorophenol	2015/06/23	ND	ug/L	60
Phorate	2015/06/23	ND	ug/L	2
Picloram	2015/06/23	ND	ug/L	190
Polychlorinated Biphenyls(PCB)	2015/06/23	ND	ug/L	3
Prometryne	2015/06/23	ND	ug/L	1
Simazine	2015/06/23	ND	ug/L	10
THM (Distribution) (NOTE: show latest annual average)	2016/11/14	9.75	ug/L	100
Temephos	2015/06/23	ND	ug/L	280
Terbufos	2015/06/23	ND	ug/L	1
Tetrachloroethylene	2015/06/23	ND	ug/L	30
2,3,4,6-Tetrachlorophenol	2015/06/23	ND	ug/L	100
Triallate	2015/06/23	ND	ug/L	230
Trichloroethylene	2015/06/23	ND	ug/L	5
2,4,6-Trichlorophenol	2015/06/23	ND	ug/L	5



Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2015/06/23	ND	ug/L	280
Trifluralin	2015/06/23	ND	ug/L	45
Vinyl Chloride	2015/06/23	ND	ug/L	2

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

Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Antimony	2015/06/23	ND	mg/L	0.006
Arsenic	2015/06/23	0.001	mg/L	0.025
Barium	2015/06/23	0.018	mg/L	1
Boron	2015/06/23	0.033	mg/L	5
Cadmium	2015/06/23	ND	mg/L	0.005
Chromium	2015/06/23	ND	mg/L	0.05
Lead	2015/06/23	ND	mg/L	0.01
Mercury	2015/06/23	ND	mg/L	0.001
Selenium	2015/06/23	ND	mg/L	0.01
Sodium	2013/06/20	11	mg/L	20
Uranium	2015/06/23	0.00018	mg/L	0.02
Fluoride	2013/06/20	0.61	mg/L	1.5
Nitrite	2016/11/14	ND	mg/L	1
Nitrate	2016/11/14	ND	mg/L	10

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

Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Alachlor	2015/06/23	ND	ug/L	5
Aldicarb	2015/06/23	ND	ug/L	9
Aldrin + Dieldrin	2015/06/23	ND	ug/L	0.7
Atrazine + N-dealkylated metabolites	2015/06/23	ND	ug/L	5
Azinphos-methyl	2015/06/23	ND	ug/L	20
Bendiocarb	2015/06/23	ND	ug/L	40
Benzene	2015/06/23	ND	ug/L	5
Benzo(a)pyrene	2015/06/23	ND	ug/L	0.01
Bromoxynil	2015/06/23	ND	ug/L	5
Carbaryl	2015/06/23	ND	ug/L	90
Carbofuran	2015/06/23	ND	ug/L	90
Carbon Tetrachloride	2015/06/23	ND	ug/L	5
Chlordane (Total)	2015/06/23	ND	ug/L	7
Chlorpyrifos	2015/06/23	ND	ug/L	90



Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Cyanazine	2015/06/23	ND	ug/L	10
Diazinon	2015/06/23	ND	ug/L	20
Dicamba	2015/06/23	ND	ug/L	120
1,2-Dichlorobenzene	2015/06/23	ND	ug/L	200
1,4-Dichlorobenzene	2015/06/23	ND	ug/L	5
Dichlorodiphenyltrichloroethane (DDT) + metabolites	2015/06/23	ND	ug/L	30
1,2-Dichloroethane	2015/06/23	ND	ug/L	5
1,1-Dichloroethylene (vinylidene chloride)	2015/06/23	ND	ug/L	14
Dichloromethane	2015/06/23	ND	ug/L	50
2-4 Dichlorophenol	2015/06/23	ND	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	2015/06/23	ND	ug/L	100
Diclofop-methyl	2015/06/23	ND	ug/L	9
Dimethoate	2015/06/23	ND	ug/L	20
Dinoseb	2015/06/23	ND	ug/L	10
Diquat	2015/06/23	ND	ug/L	70
Diuron	2015/06/23	ND	ug/L	150
Glyphosate	2015/06/23	ND	ug/L	280
Heptachlor + Heptachlor Epoxide	2015/06/23	ND	ug/L	3
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Metribuzin	2015/06/23	ND	ug/L	80
Chlorobenzene	2015/06/23	ND	ug/L	80
Paraquat	2015/06/23	ND	ug/L	10
Parathion	2015/06/23	ND	ug/L	50
Pentachlorophenol	2015/06/23	ND	ug/L	60
Phorate	2015/06/23	ND	ug/L	2
Picloram	2015/06/23	ND	ug/L	190
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Prometryne	2015/06/23	ND	ug/L	1
Simazine	2015/06/23	ND	ug/L	10
THM (Distribution) (NOTE: show latest annual average)	2016/11/14	9.75	ug/L	100
Temephos	2015/06/23	ND	ug/L	280
Terbufos	2015/06/23	ND	ug/L	1
Tetrachloroethylene	2015/06/23	ND	ug/L	30
2,3,4,6-Tetrachlorophenol	2015/06/23	ND	ug/L	100
Triallate	2015/06/23	ND	ug/L	230
Trichloroethylene	2015/06/23	ND	ug/L	5
2,4,6-Trichlorophenol	2015/06/23	ND	ug/L	5
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2015/06/23	ND	ug/L	280



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

Parameter	Sample Date	Result Value	Unit of Measure	MAC (Maximum Acceptable Concentration)
Trifluralin	2015/06/23	ND	ug/L	45
Vinyl Chloride	2015/06/23	ND	ug/L	2

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			