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, 2013	

<u>Complete if your Category is Large Municipal</u> 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.

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 [ ]

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>		
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.

## 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	\$30,789.20
Hillsburgh Distribution Maintenance	\$16,843.62
Hydro	\$11,908.03
ORII – Hillsburgh Pumping Station	\$71,647.43
OSWAP 3 – Glendevon Pump	\$35,708.43
Asset Management Project	\$ 3,411.50
Testing/Sampling	\$ 8,168.75

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	Parameter	Result	Unit of	<b>Corrective Action</b>	Corrective
Date			Measure		<b>Action Date</b>
September 12,	Total Coliforms	1	cfu/100mL	Resampled – results had	September 23,
2013				hits on Total Coliforms.	2013
				Reviewed sampling	
				procedures, Flushed &	
				resampled – Results OK	

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	101	0-0	101	0-0	101	0-1 cfu/100mL
Treated	101	0-0	101	0-0	202	0-4 cfu/100mL
Distribution	106	0-0	106	0-0	212	0-60 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 (HH)	12	0.01 – 0.71 NTU
Turbidity (GD)	12	0.00 – 0.23 NTU
Chlorine (continuous) (HH)	8760	*0.0000 - 1.3183
Chlorine (continuous) (GD)	8760	*0.0000 - 2.9485
Chlorine (grab samples)	365	0.33 – 1.30
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 instrument issued	Sampling Point	Parameter	Date Sampled	Result	Unit of Measure
01/18/2010	Hillsburgh Heights Treated	Lead	2013/03/15	0.0062	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	2013/06/20	0.0061	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	2013/06/20	0.0094	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	2013/09/11	0.0066	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	2013/09/11	0.018	mg/L
01/18/2010	Hillsburgh Heights Treated	Lead	2013/11/19	0.0057	mg/L
01/18/2010	Hillsburgh Heights Raw	Lead	2013/11/19	0.0081	mg/L
01/18/2010	Hillsburgh Heights Raw	Gross Alpha	08/16/2011	0.2	Bq/L
01/18/2010	Hillsburgh Heights Raw	Gross Beta	08/16/2011	< 0.1	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)

<b>Location Type</b>	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 Hillshurgh Hoights

recent sample results Hillsburgh Heights							
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance			
Antimony	2012/06/25	ND	mg/L				
Arsenic	2012/06/25	0.0010	mg/L				
Barium	2012/06/25	0.047	mg/L				
Boron	2012/06/25	0.022	mg/L				
Cadmium	2012/06/25	ND	mg/L				
Chromium	2012/06/25	ND	mg/L				
Lead	2013/12/03	0.0062	mg/L				
Mercury	2012/06/25	ND	mg/L				
Selenium	2012/06/25	ND	mg/L				
Sodium	2013/06/20	14	mg/L				
Uranium	2012/06/25	0.0028	mg/L				
Fluoride	2013/06/20	0.88	mg/L				
Nitrite	2013/11/19	ND	mg/L				
Nitrate	2013/11/19	1.1	mg/L				

<sup>\*</sup>only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential 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 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 metobolites	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	

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

Chlorpyrifos	2012/06/25	ND	ug/L	
Cyanazine	2012/06/25	ND	ug/L ug/L	
Diazinon	2012/06/25	ND	ug/L ug/L	
Dicamba	2012/06/25	ND	ug/L ug/L	
1,2-Dichlorobenzene	2012/06/25	ND ND	ug/L ug/L	
1,4-Dichlorobenzene	2012/06/25	ND	ug/L ug/L	
Dichlorodiphenyltrichloroethane (DDT) +	2012/00/23	ND ND		
metabolites	2012/06/25	ND	ug/L	
1,2-Dichloroethane	2012/06/25	ND	ug/L	
1,1-Dichloroethylene	2012/06/25	ND	ug/L	
(vinylidene chloride)		1770	_	
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)	2013/11/19	8.85	ug/L	
(NOTE: show latest annual average)  Temephos	2012/06/25	ND	ug/L	
Terbufos	2012/06/25	ND	ug/L ug/L	
Tetrachloroethylene	2012/06/25	ND ND	ug/L ug/L	
2,3,4,6-Tetrachlorophenol	2012/06/25	ND ND	ug/L ug/L	
Triallate	2012/06/25	ND ND	ug/L ug/L	
Trichloroethylene	2012/06/25	ND ND	ug/L ug/L	
2,4,6-Trichlorophenol	2012/06/25	ND ND	-	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2012/06/25	ND ND	ug/L	
Trifluralin	2012/06/25		ug/L	
Vinyl Chloride		ND	ug/L	
vinyi Cinoriae	2012/06/25	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	2012/06/25	ND	mg/L	
Arsenic	2012/06/25	ND	mg/L	
Barium	2012/06/25	0.019	mg/L	
Boron	2012/06/25	0.038	mg/L	
Cadmium	2012/06/25	ND	mg/L	
Chromium	2012/06/25	ND	mg/L	
Lead	2013/03/15	ND	mg/L	
Mercury	2012/06/25	ND	mg/L	
Selenium	2012/06/25	ND	mg/L	
Sodium	2013/06/20	11	mg/L	
Uranium	2012/06/25	0.00020	mg/L	
Fluoride	2013/06/20	0.61	mg/L	
Nitrite	2013/11/19	ND	mg/L	
Nitrate	2013/11/19	ND	mg/L	

<sup>\*</sup>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	2012/06/25	ND	ug/L	
Aldicarb	2012/06/25	ND	ug/L	
Aldrin + Dieldrin	2012/06/25	ND	ug/L	
Atrazine + N-dealkylated metobolites	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	

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

Dichlorodiphenyltrichloroethane (DDT) +	2012/06/25	ND	ug/L	
metabolites				
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 ug/L	
2,4-Dichlorophenoxy acetic acid (2,4-D)	2012/06/25	ND	ug/L	
Diclofop-methyl	2012/06/25	ND	ug/L ug/L	
Dimethoate	2012/06/25	ND	ug/L 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 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	8.85	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			