

O. Reg. 170 Section 11 Annual Report

Drinking-Water System Number:	220009194
Drinking-Water System Name:	Hamilton Drive Water Supply System
Drinking-Water System Owner:	The Corporation of the Township of Geulph Eramosa
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2010 – December 31, 2010

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Office of Township of Guelph Eramosa 8348 Wellington Road, 124 PO Box 700 Rockwood ON N0B 2K0 </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div> </p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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	

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?

Yes [] No [] Not Applicable [X]

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
- [] Public access/notice via a newspaper
- [X] Public access/notice via Public Request
- [] Public access/notice via a Public Library
- [X] Public access/notice via other method Notice given via water or tax bills

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Describe your Drinking-Water System

The Hamilton Drive Water Supply System is located in the Township of Guelph-Eramosa. A residential development obtains its entire water supply from two groundwater wells (Huntington and Cross Creek) each with its own pumphouse and grade-level reservoir.

The raw water from each well is chlorinated to protect against microbial contaminants prior to discharge into the reservoir. The raw water is disinfected with a sodium hypochlorite solution (chlorine) for primary and secondary disinfection requirements. The water level in the reservoir starts and stops the well pumps.

The treated water is pumped with high-lift pumps at each station through the distribution system which consists of approximately 21 kilometers of water main. The high lift pumps operate based on the water level in the standpipe. Once the low water level in the standpipe is reached, the pump stations are called upon to operate in sequence and supply the distribution system and any excess water fills the standpipe to the high water level. This system is a demand/storage system; once the standpipe is full, the high lift pumps shut down until the water level drops in the tower and the pumps are required again.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite (12% solution) - disinfection

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

**Installation of analog transmitter at Cross Creek Pumphouse
Installation of new sampling ports**

Total incurred: \$10,159.38

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	N/A	N/A	N/A	N/A	N/A

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	# of Samples	E.Coli (min –max)	Total Coliform (min – max)	# of HPC Samples	HPC (min – max)
Raw	104	0-0	0-0	N/A	N/A
Treated	106	0-0	0-0	106	0-9.0
Distribution	157	0-0	0-0	157	0-14.0

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Operational testing done under Schedule 8 of Regulation 170/03 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results (min #)-(max #)
Raw Water		
Turbidity (Huntington)	12	0.09-0.38 NTU's
Turbidity (Crosscreek)	12	0.08-0.27 NTU's
Treated Water		
Chlorine Residual (Huntington) (free)	8760	0.67-2.16 mg/L
Chlorine Residual (Crosscreek) (free)		0.27-2.16 mg/L
Distribution System		
Chlorine Residual (free)	2107	0.49-2.07 mg/L

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date Legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
HUNTINGTON				
Antimony	Jan 18/10	<0.5	ug/l	No
Arsenic	Jan 18/10	<1.0	ug/l	No
Barium	Jan 18/10	44.0	ug/l	No
Boron	Jan 18/10	32.0	ug/l	No
Cadmium	Jan 18/10	<0.1	ug/l	No
Chromium	Jan 18/10	<5.0	ug/l	No
Lead Distribution	Jan 10/10	<0.5	ug/l	No
Mercury	Jan 18/10	<0.01	ug/l	No
Selenium	Jan 18/10	<2.0	ug/l	No
Sodium	Jan 18/10	23000	ug/l	Yes
Uranium	Jan 18/10	<0.1	ug/l	No
Fluoride	Sept 04/08	0.18	mg/l	No
Nitrite	Jan 12/10	<0.01	mg/l	No
	Apr 06/10	<0.01		
	Jul 05/10	<0.01		
	Oct 04/10	<0.01		
Nitrate	Jan 12/10	<0.1	mg/l	No
	Apr 06/10	<0.1		
	Jul 05/10	<0.1		
	Oct 04/10	<0.1		

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
CROSS CREEK				
Antimony	Jan 18/10	<0.5	ug/l	No
Arsenic	Jan 18/10	<1.0	ug/l	No
Barium	Jan 18/10	37.0	ug/l	No
Boron	Jan 18/10	29.0	ug/l	No
Cadmium	Jan 18/10	<0.1	ug/l	No
Chromium	Jan 18/10	<5.0	ug/l	No
Lead Distribution	Jan 10/10	<0.5	ug/l	No
Mercury	Jan 18/10	<0.01	ug/l	No
Selenium	Jan 18/10	<2.0	ug/l	No
Sodium	Jan 18/10	10000	mg/l	No
Uranium	Jan 18/10	<0.1	ug/l	No
Fluoride	Sept 04/08	0.17	mg/l	No
Nitrite	Jan 12/10	<0.01	mg/l	No
	Apr 06/10	<0.01		
	Jul 05/10	<0.01		
	Oct 04/10	<0.01		
Nitrate	Jan 12/10	<0.1	mg/l	No
	Apr 06/10	<0.1		
	Jul 05/10	<0.1		
	Oct 04/10	<0.1		

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 #) ug/L	Number of Exceedances
Plumbing	Exempt until the third 12 month period – No samples exceeded standard Ref: O.Reg 170: Community Lead Testing: Reduced Sampling & Frequency		
Distribution			

- 10 sampling points with 2 samples at each point (plumbing per session)

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
HUNTINGTON				
Alachlor	Jan 10/10	< 0.5	ug/l	No
Aldicarb	Jan 10/10	< 5	ug/l	No
Aldrin + dieldrin	Jan 10/10	< 0.01	ug/l	No
Atrazine + N-dealkylated metabolites	Jan 10/10	< 1	ug/l	No
Azinophos-methyl	Jan 10/10	< 2	ug/l	No
Bendiocarb	Jan 10/10	< 2	ug/l	No
Benzene	Jan 10/10	< 0.1	ug/l	No
Benzo[a]pyrene	Jan 10/10	< 0.009	ug/l	No

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HUNTINGTON Continued....

Bromoxynil	Jan 10/10	< 0.5	ug/l	No
Carbaryl	Jan 10/10	< 5	ug/l	No
Carbofuran	Jan 10/10	< 5	ug/l	No
Carbon tetrachloride	Jan 10/10	< 0.1	ug/l	No
Chlordane	Jan 10/10	< 0.01	ug/l	No
Chlorpyrifos	Jan 10/10	< 1	ug/l	No
Cyanazine	Jan 10/10	< 1	ug/l	No
1,1-Dichloroethylene	Jan 10/10	< 0.1	ug/l	No
1,2-Dichloroethane	Jan 10/10	< 0.2	ug/l	No
2,4-D	Jan 10/10	< 1	ug/l	No
2,4-Dichlorophenol	Jan 10/10	< 0.5	ug/l	No
DDT + metabolites	Jan 10/10	< 0.02	ug/l	No
Diazinon	Jan 10/10	< 1	ug/l	No
Dicamba	Jan 10/10	< 1	ug/l	No
Dichloromethane	Jan 10/10	< 0.5	ug/l	No
Diclofop-methyl	Jan 10/10	< 0.9	ug/l	No
Dimethoate	Jan 10/10	< 3	ug/l	No
Dinoseb	Jan 10/10	< 1	ug/l	No
Diquat	Jan 10/10	< 7	ug/l	No
Diuron	Jan 10/10	< 10	ug/l	No
Heptachlor & heptachlor epoxide	Jan 10/10	< 0.01	ug/l	No
Lindane	Jan 10/10	< 0.006	ug/l	No
Malathion	Jan 10/10	< 5	ug/l	No
Methoxychlor	Jan 10/10	< 0.02	ug/l	No
Metolachlor	Jan 10/10	< 0.5	ug/l	No
Metribuzin	Jan 10/10	< 5	ug/l	No
Monochlorobenzene	Jan 10/10	< 0.1	ug/l	No
o-Dichlorobenzene	Jan 10/10	< 0.2	ug/l	No
Paraquat	Jan 10/10	< 1	ug/l	No
Parathion	Jan 10/10	< 1	ug/l	No
p-Dichlorobenzene	Jan 10/10	< 0.2	ug/l	No
Pentachlorophenol / PCP	Jan 10/10	< 0.5	ug/l	No
Phorate	Jan 10/10	< 0.5	ug/l	No
Picloram	Jan 10/10	< 5	ug/l	No
Polychlorinated Biphenyls / PCBs	Jan 10/10	< 0.05	ug/l	No
Prometryn	Jan 10/10	< 0.3	ug/l	No
Simazine	Jan 10/10	< 1	ug/l	No
2,3,4,6-Tetrachlorophenol	Jan 10/10	< 0.5	ug/l	No
2,4,5-T	Jan 10/10	< 1	ug/l	No
2,4,6-Trichlorophenol	Jan 10/10	< 0.5	ug/l	No
Temephos	Jan 10/10	< 10	ug/l	No
Terbufos	Jan 10/10	< 0.5	ug/l	No
Tetrachloroethylene	Jan 10/10	< 0.1	ug/l	No
Triallate	Jan 10/10	< 1	ug/l	No
Trichloroethylene	Jan 10/10	< 0.1	ug/l	No
Trifluralin	Jan 10/10	< 1	ug/l	No
Vinyl chloride	Jan 10/10	< 0.2	ug/l	No

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HUNTINGTON Continued...

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM Distribution Guelph Tower	Jan 12/10	Annual average - 12.9 ug/L	ug/l	No
(NOTE: Result value - shows latest annual average)	Apr 06/10			
	Jul 05/10			
	Oct 04/10			

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
CROSS CREEK				
Alachlor	Jan 10/10	< 0.5	ug/l	No
Aldicarb	Jan 10/10	< 5	ug/l	No
Aldrin + dieldrin	Jan 10/10	< 0.01	ug/l	No
Atrazine + N-dealkylated metabolites	Jan 10/10	< 1	ug/l	No
Azinophos-methyl	Jan 10/10	< 2	ug/l	No
Bendiocarb	Jan 10/10	< 2	ug/l	No
Benzene	Jan 10/10	< 0.1	ug/l	No
Benzo[a]pyrene	Jan 10/10	< 0.009	ug/l	No
Bromoxynil	Jan 10/10	< 0.5	ug/l	No
Carbaryl	Jan 10/10	< 5	ug/l	No
Carbofuran	Jan 10/10	< 5	ug/l	No
Carbon tetrachloride	Jan 10/10	< 0.1	ug/l	No
Chlordane	Jan 10/10	< 0.01	ug/l	No
Chlorpyrifos	Jan 10/10	< 1	ug/l	No
Cyanazine	Jan 10/10	< 1	ug/l	No
1,1-Dichloroethylene	Jan 10/10	< 0.1	ug/l	No
1,2-Dichloroethane	Jan 10/10	< 0.2	ug/l	No
2,4-D	Jan 10/10	< 1	ug/l	No
2,4-Dichlorophenol	Jan 10/10	< 0.5	ug/l	No
DDT + metabolites	Jan 10/10	< 0.02	ug/l	No
Diazinon	Jan 10/10	< 1	ug/l	No
Dicamba	Jan 10/10	< 1	ug/l	No
Dichloromethane	Jan 10/10	< 0.5	ug/l	No
Diclofop-methyl	Jan 10/10	< 0.9	ug/l	No
Dimethoate	Jan 10/10	< 3	ug/l	No
Dinoseb	Jan 10/10	< 1	ug/l	No
Diquat	Jan 10/10	< 7	ug/l	No
Diuron	Jan 10/10	< 10	ug/l	No
Heptachlor & heptachlor epoxide	Jan 10/10	< 0.01	ug/l	No
Lindane	Jan 10/10	< 0.006	ug/l	No

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CROSS CREEK Continued...

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Malathion	Jan 10/10	< 5	ug/l	No
Methoxychlor	Jan 10/10	< 0.02	ug/l	No
Metolachlor	Jan 10/10	< 0.5	ug/l	No
Metribuzin	Jan 10/10	< 5	ug/l	No
Monochlorobenzene	Jan 10/10	< 0.1	ug/l	No
o-Dichlorobenzene	Jan 10/10	< 0.2	ug/l	No
Paraquat	Jan 10/10	< 1	ug/l	No
Parathion	Jan 10/10	< 1	ug/l	No
p-Dichlorobenzene	Jan 10/10	< 0.2	ug/l	No
Pentachlorophenol / PCP	Jan 10/10	< 0.5	ug/l	No
Phorate	Jan 10/10	< 0.5	ug/l	No
Picloram	Jan 10/10	< 5	ug/l	No
Polychlorinated Biphenyls / PCBs	Jan 10/10	< 0.05	ug/l	No
Prometryn	Jan 10/10	< 0.3	ug/l	No
Simazine	Jan 10/10	< 1	ug/l	No
2,3,4,6-Tetrachlorophenol	Jan 10/10	< 0.5	ug/l	No
2,4,5-T	Jan 10/10	< 1	ug/l	No
2,4,6-Trichlorophenol	Jan 10/10	< 0.5	ug/l	No
Temephos	Jan 10/10	< 10	ug/l	No
Terbufos	Jan 10/10	< 0.5	ug/l	No
Tetrachloroethylene	Jan 10/10	< 0.1	ug/l	No
Triallate	Jan 10/10	< 1	ug/l	No
Trichloroethylene	Jan 10/10	< 0.1	ug/l	No
Trifluralin	Jan 10/10	< 1	ug/l	No
Vinyl chloride	Jan 10/10	< 0.2	ug/l	No
THM Distribution Guelph Tower (NOTE: Result value - shows latest annual average)	Jan 12/10 Apr 06/10 Jul 05/10 Oct 04/10	Annual average – 12.9 ug/L	ug/l	No

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			