Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category: Period being reported: 220009194

Hamilton Drive Water Supply System

The Corporation of the Township of Geulph Eramosa

Large Municipal Residential

January 1, 2006 – December 31, 2006

Complete if your Category is Large Municipal
Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [ ]

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.

Township of Geulph Eramosa 8348 Wellington Road, 124 PO Box 3000 Rockwood ON

N0B 2K0

#### Complete for all other Categories.

**Number of Designated Facilities served:** 

N/A

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

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:

g	g y
Drinking Water System Name	Drinking Water System Number
	• •
NI/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?

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

**Describe your Drinking-Water System** 

The Hamilton Drive Water Supply System is located in the Township of Guelph-Eramosa. This water system consists of two municipal groundwater wells, two pumphouses, one standpipe and distribution system.

There is one well and in ground reservoir in each of the pumphouses and the water level in the reservoir starts and stops the well pumps. 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 treated water is pumped with high-lift pumps at each station through the distribution system which consists of approximately 21 kilometers of watermain. 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?

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

#### Please provide a brief description and a breakdown of monetary expenses incur

- Control Microsystems (computer software) repair/troubleshooting (SCADA)

Notices submitted in accordance with O.Reg 170/03; Schedule 16 during this reporting period.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
Aug 30/06	TC	1	cfu/ml	Re-sampled	Aug 30/06

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

	# of Samples	E.Coli (min – max)	Total Coliform (min – max)	# of HPC Samples	HPC (min – max)	# of Bkgrd Samples	Bkgnd (min - max)
Raw	104	0 - 0	0 - 0	4	0 -0	1	0 - 0
Treated	104	0 - 0	0 - 1	57	0 - 1	46	0 - 0
Distribution	158	0 - 0	0 - 0	89	0 - 1	69	0 - 0

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	0.13 - 0.49		
Turbidity (Crosscreek)	12	0.09 - 0.26		
Treated Water				
Chlorine Residual (Huntington)	8760	0.2 - 3.12		
Chlorine Residual (Crosscreek)	8700	0.34 - 1.93		
Distribution System				
Chlorine Residual	8760	0.11 - 1.97		

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

resuits Parameter	Sample Date	Result Value	Unit of	Exceedance
i ai ametei	Sample Date	result value	Measure	Excedimee
		HUNTING	ΓON	
Antimony	Aug 19/03	< 0.6	ug/l	No
Arsenic	Aug 19/03	<2	ug/l	No
Barium	Aug 19/03	41	ug/l	No
Boron	Aug 19/03	26	ug/l	No
Cadmium	Aug 19/03	<0.1	ug/l	No
Chromium	Aug 19/03	<3	ug/l	No
<b>Lead Distribution</b>	July 07/05	< 0.1	ug/l	No
Mercury	Aug 19/03	< 0.1	ug/l	No
Selenium	Aug 19/03	<3	ug/l	No
Sodium	Aug 19/03	11.6	mg/l	No
Uranium	Aug 19/03	0.05	ug/l	No
Fluoride	Aug 19/03	0.14	mg/l	No
Nitrite	Jan 03/06	< 0.005		
	Apr 10/06	< 0.005	mg/l	No
	Jul 10/06	< 0.005		INO
	Oct 04/06	< 0.005		
Nitrate	Jan 03/06	< 0.013		
	Apr 10/06	< 0.013	mg/l	No
	Jul 10/06	< 0.013		110
	Oct 04/06	< 0.013		

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

Parameter	Sample Date	Result Value	Unit of	Exceedance
	•		Measure	
		CROSS CR	EEK	
Antimony	Aug 19/03	< 0.6	ug/l	No
Arsenic	Aug 19/03	<2	ug/l	No
Barium	Aug 19/03	36	ug/l	No
Boron	Aug 19/03	28	ug/l	No
Cadmium	Aug 19/03	< 0.1	ug/l	No
Chromium	Aug 19/03	<3	ug/l	No
Lead Distribution	July 07/05	< 0.1	ug/l	No
Mercury	Aug 19/03	< 0.1	ug/l	No
Selenium	Aug 19/03	<3	ug/l	No
Sodium	Aug 19/03	7.6	mg/l	No
Uranium	Aug 19/03	< 0.05	ug/l	No
Fluoride	Aug 19/03	0.12	mg/l	No
Nitrite	Jan 03/06	< 0.005		
	Apr 10/06	< 0.005	mg/l	No
	Jul 10/06	< 0.005	IIIg/I	110
	Oct 04/06	< 0.005		
Nitrate	Jan 03/06	< 0.013		
	Apr 10/06	< 0.013	mg/l	No
	Jul 10/06	< 0.013	1115/1	110
	Oct 04/06	< 0.013		

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

Parameter	Sample Date	Result Value	Unit of	Exceedance				
			Measure					
	HUNTINGTON							
Alachlor	Aug 19/03	< 0.11	ug/l	No				
Aldicarb	Aug 19/03	< 0.30	ug/l	No				
Aldrin + Dieldrin	Aug 19/03	< 0.067	ug/l	No				
Atrazine + N-dealkylated metobolites	Aug 19/03	< 0.12	ug/l	No				
Azinphos-methyl	Aug 19/03	< 0.21	ug/l	No				
Bendiocarb	Aug 19/03	< 0.13	ug/l	No				
Benzene	Aug 19/03	< 0.36	ug/l	No				
Benzo(a)pyrene	Aug 19/03	< 0.004	ug/l	No				
Bromoxynil	Aug 19/03	< 0.094	ug/l	No				
Carbaryl	Aug 19/03	< 0.16	ug/l	No				
Carbofuran	Aug 19/03	< 0.37	ug/l	No				
Carbon Tetrachloride	Aug 19/03	< 0.34	ug/l	No				
Chlordane (Total)	Aug 19/03	< 0.11	ug/l	No				
Chlorpyrifos	Aug 19/03	< 0.18	ug/l	No				
Cyanazine	Aug 19/03	< 0.18	ug/l	No				
Diazinon	Aug 19/03	< 0.081	ug/l	No				
Dicamba	Aug 19/03	< 0.17	ug/l	No				

HUNTINGTON CON'T					
1,2-Dichlorobenzene	Aug 19/03	< 0.56	ug/l	No	
1,4-Dichlorobenzene	Aug 19/03	< 0.25	ug/l	No	
Dichlorodiphenyltrichloroethane	Ŭ			NI-	
(DDT) + metabolites	Aug 19/03	< 0.14	ug/l	No	
1,2-Dichloroethane	Aug 19/03	< 0.32	ug/l	No	
1,1-Dichloroethylene	Aug 19/03	< 0.52	ug/l	No	
(vinylidene chloride)					
Dichloromethane	Aug 19/03	<1.17	ug/l	No	
2-4 Dichlorophenol	Aug 19/03	< 0.15	ug/l	No	
2,4-Dichlorophenoxy acetic acid (2,4-D)	Aug 19/03	< 0.11	ug/l	No	
Diclofop-methyl	Aug 19/03	< 0.13	ug/l	No	
Dimethoate	Aug 19/03	< 0.12	ug/l	No	
Dinoseb	Aug 19/03	< 0.084	ug/l	No	
Diquat	Aug 19/03	<1	ug/l	No	
Diuron	Aug 19/03	< 0.087	ug/l	No	
Glyphosate	Aug 19/03	<6	ug/l	No	
Heptachlor + Heptachlor Epoxide	Aug 19/03	< 0.11	ug/l	No	
Lindane (Total)	Aug 19/03	< 0.056	ug/l	No	
Malathion	Aug 19/03	<0.091	ug/l	No	
Methoxychlor	Aug 19/03	<0.14	ug/l	No	
Metolachlor	Aug 19/03	<0.092	ug/l	No	
Metribuzin	Aug 19/03	<0.12	ug/l	No	
Monochlorobenzene	Aug 19/03	<0.46 <1	ug/l	No	
Paraquat Parathion	Aug 19/03	<0.18	ug/l	No No	
Pentachlorophenol	Aug 19/03 Aug 19/03	<0.18	ug/l	No No	
Phorate	Aug 19/03 Aug 19/03	<0.13	ug/l ug/l	No	
Picloram	Aug 19/03 Aug 19/03	<0.11	ug/l	No	
Polychlorinated Biphenyls(PCB)	Aug 19/03	<0.20	ug/l	No	
Prometryne	Aug 19/03	<0.23	ug/l	No	
Simazine	Aug 19/03	< 0.15	ug/l	No	
THM Distribution Guelph Tower	Jan 04/06	24	, , , , , , , , , , , , , , , , , , ,	1,0	
•	Apr 11/06	14	/1	NI	
(NOTE: show latest annual average)	Jul 10/06	10	ug/l	No	
average – 19.8 ug/l	Oct 04/06	31			
Temephos	Aug 19/03	< 0.31	ug/l	No	
Terbufos	Aug 19/03	< 0.12	ug/l	No	
Tetrachloroethylene	Aug 19/03	< 0.48	ug/l	No	
2,3,4,6-Tetrachlorophenol	Aug 19/03	< 0.14	ug/l	No	
Triallate	Aug 19/03	< 0.10	ug/l	No	
Trichloroethylene	Aug 19/03	<0.54	ug/l	No	
2,4,6-Trichlorophenol	Aug 19/03	< 0.25	ug/l	No	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Aug 19/03	< 0.14	ug/l	No	
Trifluralin	Aug 19/03	< 0.12	ug/l	No	
Vinyl Chloride	Aug 19/03	< 0.08	ug/l	No	

# 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 CREI	EK		
Alachlor	Aug 19/03	< 0.11	ug/l	No
Aldicarb	Aug 19/03	< 0.30	ug/l	No
Aldrin + Dieldrin	Aug 19/03	< 0.067	ug/l	No
Atrazine + N-dealkylated metobolites	Aug 19/03	< 0.12	ug/l	No
Azinphos-methyl	Aug 19/03	< 0.21	ug/l	No
Bendiocarb	Aug 19/03	< 0.13	ug/l	No
Benzene	Aug 19/03	< 0.36	ug/l	No
Benzo(a)pyrene	Aug 19/03	< 0.004	ug/l	No
Bromoxynil	Aug 19/03	< 0.094	ug/l	No
Carbaryl	Aug 19/03	< 0.16	ug/l	No
Carbofuran	Aug 19/03	< 0.37	ug/l	No
Carbon Tetrachloride	Aug 19/03	< 0.34	ug/l	No
Chlordane (Total)	Aug 19/03	< 0.11	ug/l	No
Chlorpyrifos	Aug 19/03	< 0.18	ug/l	No
Cyanazine	Aug 19/03	< 0.18	ug/l	No
Diazinon	Aug 19/03	< 0.081	ug/l	No
Dicamba	Aug 19/03	< 0.17	ug/l	No
1,2-Dichlorobenzene	Aug 19/03	< 0.56	ug/l	No
1,4-Dichlorobenzene	Aug 19/03	< 0.24	ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Aug 19/03	< 0.14	ug/l	No
1,2-Dichloroethane	Aug 19/03	< 0.32	ug/l	No
1,1-Dichloroethylene				
(vinylidene chloride)	Aug 19/03	< 0.52	ug/l	No
Dichloromethane	Aug 19/03	<1.17	ug/l	No
2-4 Dichlorophenol	Aug 19/03	< 0.15	ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Aug 19/03	<0.11	ug/l	No
Diclofop-methyl	Aug 19/03	< 0.13	ug/l	No
Dimethoate	Aug 19/03	< 0.12	ug/l	No
Dinoseb	Aug 19/03	< 0.084	ug/l	No
Diquat	Aug 19/03	<1	ug/l	No
Diuron	Aug 19/03	< 0.087	ug/l	No
Glyphosate	Aug 19/03	<6	ug/l	No
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Metolachlor	Aug 19/03	< 0.092	ug/l	No
Metribuzin	Aug 19/03	< 0.12	ug/l	No
Monochlorobenzene	Aug 19/03	< 0.46	ug/l	No

CROSS CREEK CON'T					
Paraquat	Aug 19/03	<1	ug/l	No	
Parathion	Aug 19/03	< 0.18	ug/l	No	
Pentachlorophenol	Aug 19/03	< 0.15	ug/l	No	
Phorate	Aug 19/03	< 0.11	ug/l	No	
Picloram	Aug 19/03	< 0.20	ug/l	No	
Polychlorinated Biphenyls(PCB)	Aug 19/03	< 0.04	ug/l	No	
Prometryne	Aug 19/03	< 0.23	ug/l	No	
Simazine	Aug 19/03	< 0.15	ug/l	No	
THM Distribution Guelph Tower	Jan 04/06	24			
	Apr 11/06	14	ug/l	No	
(NOTE: show latest annual average)	Jul 10/06	10	ug/I No	NO	
average – 19.8 ug/l	Oct 04/06	31			
Temephos	Aug 19/03	< 0.31	ug/l	No	
Terbufos	Aug 19/03	< 0.12	ug/l	No	
Tetrachloroethylene	Aug 19/03	< 0.48	ug/l	No	
2,3,4,6-Tetrachlorophenol	Aug 19/03	< 0.14	ug/l	No	
Triallate	Aug 19/03	< 0.10	ug/l	No	
Trichloroethylene	Aug 19/03	< 0.54	ug/l	No	
2,4,6-Trichlorophenol	Aug 19/03	< 0.25	ug/l	No	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Aug 19/03	< 0.14	ug/l	No	
Trifluralin	Aug 19/03	< 0.12	ug/l	No	
Vinyl Chloride	Aug 19/03	< 0.08	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	