

O. Reg. 170 Section 11 Annual Report

Drinking-Water System Number:	220005599
Drinking-Water System Name:	Rockwood Water Supply System
Drinking-Water System Owner:	The Corporation of the Township of Guelph Eramosa
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2007 – December 31, 2007

<p><u><i>Complete if your Category is Large Municipal Residential or Small Municipal Residential</i></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: 10px;"> <p>Township of Guelph Eramosa PO Box 3000 8348 Wellington Road, 124 Rockwood ON N0B 2K0</p> </div>	<p><u><i>Complete for all other Categories.</i></u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 5px;">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; display: inline-block; margin: 5px;">N/A</div></p> <p>Did you provide 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 via Water or Tax Bills

Describe your Drinking-Water System

The Rockwood Water Supply System is located in the Township of Guelph-Eramosa. The water system consists of three municipal groundwater wells, a water tower and distribution system. Two of the wells are located at the Station Street pumphouse and the other at the Bernardi Pumphouse. The water level in the water tower starts and stops the well pumps. The raw water from the wells is chlorinated prior to discharge into the distribution system. Once the low level in the water tower has been reached, the pump station is called upon to operate and supply the distribution system with the excess water filling the tower. This water system is known as a demand/storage system. Once the water tower is full, the well pumps shut down until the water level drops in the water tower and the pumps are required to run again.

The two wells located within the Station Street pumphouse are approved to supply water at a maximum combined flow rate of 1,360 L/min and a maximum daily flow of 1,964 m³/day. The well located within the Bernardi pumphouse is approved to supply water at a maximum flow rate of 910 L/min and a maximum daily flow of 1,310 m³/day. Before entering the distribution system from these wells, the raw water is treated (UV- Station St.) by adding a disinfectant to protect against microbial contaminants. The water is disinfected with sodium hypochlorite solution (chlorine) and iron sequestering (sodium silicate), which is injected during the pump cycle.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite (12% solution) – disinfection UV Swift – Station St.
Sodium silicate (34.8 % solution) – iron sequestering

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 incur

Upgrading to a new Chlorine Analyzer
SCADA Upgrades and Communication Repairs
Micro16 Controller 5203 repair
900 MHz Spread Spectrum Radio repair

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
May 22/08	Total Coliform	1.0	cfu/100mL	Resampled	May 24/08

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	Bkgrd (min - max)
Raw	144	0-0	0-1.0	N/A	N/A		
Treated	104	0-0	0-0	104	0-1.0		
Distribution	163	0-0	0-1.0	163	0-4.0		

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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 (Station Street; Well 1-67)	12	0.08-0.44
Turbidity (Station Street; Well 1-76)	12	0.05-0.37
Turbidity (Bernardi)	12	0.07-0.39
Treated Water		
Chlorine Residual (Station St)	8760	0.37-2.10
Chlorine Residual (Bernardi)	8760	0.35-2.27
Distribution System		
Chlorine Residual	365	0.64-2.02

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
<i>BERNARDI</i>				
Antimony	Feb. 07/05	<0.6	ug/l	No
Arsenic	Feb. 07/05	<2	ug/l	No
Barium	Feb. 07/05	35	ug/l	No
Boron	Feb. 07/05	9.0	ug/l	No
Cadmium	Feb. 07/05	<0.1	ug/l	No
Chromium	Feb. 07/05	4.0	ug/l	No
Lead (Distribution)	Jan. 25/07	0.06	ug/l	No
Mercury	Feb. 07/05	<0.02	ug/l	No
Selenium	Feb. 07/05	<3	ug/l	No
Sodium	Feb. 07/05	3.19	mg/l	No
Uranium	Feb. 07/05	<0.05	ug/l	No
Fluoride	Feb. 11/05	1.54	mg/l	Yes

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Nitrite	Jan. 10/07	0.005	mg/l	No
	Apr. 16/07	0.005		
	July 11/07	0.005		
	Oct. 15/07	0.005		
Nitrate	Jan 10/07	0.013	mg/l	No
	Apr. 16/07	0.013		
	July 11/07	0.013		
	Oct 15/07	0.046		

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
STATION STREET				
Antimony	Jan. 10/07	<0.2	ug/l	No
Arsenic	Jan. 10/07	1.5	ug/l	No
Barium	Jan. 10/07	88.8	ug/l	No
Boron	Jan. 10/07	21	ug/l	No
Cadmium	Jan. 10/07	<0.06	ug/l	No
Chromium	Jan. 10/07	3.4	ug/l	No
Lead (Distribution)	Jan. 10/07	0.06	ug/	No
Mercury	Jan. 10/07	<0.02	ug/l	No
Selenium	Jan. 10/07	<1.0	ug/l	No
Sodium	Feb. 07/05	3.19	mg/l	Yes
Uranium	Jan. 10/07	1.01	ug/l	No
Fluoride	Feb. 11/05	1.54	mg/l	No
Nitrite	Jan 10/07	0.005	mg/l	No
	Apr. 16/07	0.005		
	July 11/07	0.005		
	Oct. 15/07	0.005		
Nitrate	Jan 10/07	0.013	mg/l	No
	Apr. 16/07	0.013		
	July 11/07	0.013		
	Oct 15/07	0.013		

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
BERNARDI				
Alachlor	Feb. 07/05	<0.11	ug/l	No
Aldicarb	Feb. 07/05	<0.30	ug/l	No
Aldrin + Dieldrin	Feb. 07/05	<0.067	ug/l	No
Atrazine + N-dealkylated metabolites	Feb. 07/05	<0.12	ug/l	No
Azinphos-methyl	Feb. 07/05	<0.21	ug/l	No
Bendiocarb	Feb. 07/05	<0.13	ug/l	No

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Benzene	Feb. 07/05	<0.36	ug/l	No
Benzo(a)pyrene	Feb. 07/05	<0.004	ug/l	No
Bromoxynil	Feb. 07/05	<0.094	ug/l	No
Carbaryl	Feb. 07/05	<0.16	ug/l	No
Carbofuran	Feb. 07/05	<0.37	ug/l	No
Carbon Tetrachloride	Feb. 07/05	<0.34	ug/l	No
Chlordane (Total)	Feb. 07/05	<0.11	ug/l	No
Chlorpyrifos	Feb. 07/05	<0.18	ug/l	No
Cyanazine	Feb. 07/05	<0.18	ug/l	No
Diazinon	Feb. 07/05	<0.081	ug/l	No
Dicamba	Feb. 07/05	<0.17	ug/l	No
1,2-Dichlorobenzene	Feb. 07/05	<0.56	ug/l	No
1,4-Dichlorobenzene	Feb. 07/05	<0.25	ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Feb. 07/05	<0.14	ug/l	No
1,2-Dichloroethane	Feb. 07/05	<0.32	ug/l	No
1,1-Dichloroethylene (vinylidene chloride)	Feb. 07/05	<0.52	ug/l	No
Dichloromethane	Feb. 07/05	<1.17	ug/l	No
2-4 Dichlorophenol	Feb. 07/05	<0.15	ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Feb. 07/05	<0.11	ug/l	No
Diclofop-methyl	Feb. 07/05	<0.13	ug/l	No
Dimethoate	Feb. 07/05	<0.12	ug/l	No
Dinoseb	Feb. 07/05	<0.084	ug/l	No
Diquat	Feb. 07/05	<1	ug/l	No
Diuron	Feb. 07/05	<0.087	ug/l	No
Glyphosate	Feb. 07/05	<6	ug/l	No
Heptachlor + Heptachlor Epoxide	Feb. 07/05	<0.11	ug/l	No
Lindane (Total)	Feb. 07/05	<0.056	ug/l	No
Malathion	Feb. 07/05	<0.091	ug/l	No
Methoxychlor	Feb. 07/05	<0.14	ug/l	No
Metolachlor	Feb. 07/05	<0.092	ug/l	No
Metribuzin	Feb. 07/05	<0.12	ug/l	No
Monochlorobenzene	Feb. 07/05	<0.46	ug/l	No
Paraquat	Feb. 07/05	<1	ug/l	No
Parathion	Feb. 07/05	<0.18	ug/l	No
Pentachlorophenol	Feb. 07/05	<0.15	ug/l	No
Phorate	Feb. 07/05	<0.11	ug/l	No
Picloram	Feb. 07/05	<0.20	ug/l	No
Polychlorinated Biphenyls(PCB)	Feb. 07/05	<0.04	ug/l	No
Prometryne	Feb. 07/05	<0.23	ug/l	No
Simazine	Feb. 07/05	<0.15	ug/l	No
THM (Distribution) (NOTE: show latest annual average) average – 15.1 ug/l	Jan 10/07 Apr 16/07 Jul 11/07 Oct 15/07			
Temephos	Feb. 07/05	<0.31	ug/l	No
Terbufos	Feb. 07/05	<0.12	ug/l	No

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Tetrachloroethylene	Feb. 07/05	<0.48	ug/l	No
2,3,4,6-Tetrachlorophenol	Feb. 07/05	<0.14	ug/l	No
Triallate	Feb. 07/05	<0.10	ug/l	No
Trichloroethylene	Feb. 07/05	<0.54	ug/l	No
2,4,6-Trichlorophenol	Feb. 07/05	<0.25	ug/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Feb. 07/05	<0.14	ug/l	No
Trifluralin	Feb. 07/05	<0.12	ug/l	No
Vinyl Chloride	Feb. 07/05	<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
STATION STREET				
Alachlor	Jan.10/07	<0.11	ug/l	No
Aldicarb	Jan.10/07	<0.30	ug/l	No
Aldrin + Dieldrin	Jan.10/07	<0.067	ug/l	No
Atrazine + N-dealkylated metabolites	Jan.10/07	<0.12	ug/l	No
Azinphos-methyl	Jan.10/07	<0.21	ug/l	No
Bendiocarb	Jan.10/07	<0.13	ug/l	No
Benzene	Jan.10/07	<0.37	ug/l	No
Benzo(a)pyrene	Jan.10/07	<0.004	ug/l	No
Bromoxynil	Jan.10/07	<0.33	ug/l	No
Carbaryl	Jan.10/07	<0.16	ug/l	No
Carbofuran	Jan.10/07	<0.37	ug/l	No
Carbon Tetrachloride	Jan.10/07	<0.41	ug/l	No
Chlordane (Total)	Jan.10/07	<0.11	ug/l	No
Chlorpyrifos	Jan.10/07	<0.18	ug/l	No
Cyanazine	Jan.10/07	<0.18	ug/l	No
Diazinon	Jan.10/07	<0.081	ug/l	No
Dicamba	Jan.10/07	<0.2	ug/l	No
1,2-Dichlorobenzene	Jan.10/07	<0.50	ug/l	No
1,4-Dichlorobenzene	Jan.10/07	<0.21	ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan.10/07	<0.14	ug/l	No
1,2-Dichloroethane	Jan.10/07	<0.43	ug/l	No
1,1-Dichloroethylene (vinylidene chloride)	Jan.10/07	<0.41	ug/l	No
Dichloromethane	Jan.10/07	<0.34	ug/l	No
2,4-Dichlorophenol	Jan.10/07	<0.15	ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan.10/07	<0.19	ug/l	No
Diclofop-methyl	Jan.10/07	<0.4	ug/l	No
Dimethoate	Jan.10/07	<0.12	ug/l	No
Dinoseb	Jan.10/07	<0.36	ug/l	No
Diquat	Jan.10/07	<1.0	ug/l	No

<i>STATION STREET CON'T</i>				
Diuron	Jan.10/07	<0.087	ug/l	No
Glyphosate	Jan. 10/07	<6	ug/l	No
Heptachlor + Heptachlor Epoxide	Jan. 10/07	<0.11	ug/l	No
Lindane (Total)	Jan. 10/07	<0.056	ug/l	No
Malathion	Jan. 10/07	<0.091	ug/l	No
Methoxychlor	Jan. 10/07	<0.14	ug/l	No
Metolachlor	Jan. 10/07	<0.092	ug/l	No
Metribuzin	Jan. 10/07	<0.12	ug/l	No
Monochlorobenzene	Jan. 10/07	<0.58	ug/l	No
Paraquat	Jan. 10/07	<1	ug/l	No
Parathion	Jan. 10/07	<0.18	ug/l	No
Pentachlorophenol	Jan. 10/07	<0.15	ug/l	No
Phorate	Jan. 10/07	<0.11	ug/l	No
Picloram	Jan. 10/07	<0.25	ug/l	No
Polychlorinated Biphenyls(PCB)	Jan. 10/07	<0.04	ug/l	No
Prometryne	Jan. 10/07	<0.23	ug/l	No
Simazine	Jan. 10/07	<0.15	ug/l	No
THM (Distribution) (NOTE: show latest annual average) average – 15.1 ug/l	Jan 10/07 Apr 16/07 Jul 11/07 Oct 15/07			
Temephos	Jan. 10/07	<0.31	ug/l	No
Terbufos	Jan. 10/07	<0.12	ug/l	No
Tetrachloroethylene	Jan. 10/07	<0.45	ug/l	No
2,3,4,6-Tetrachlorophenol	Jan. 10/07	<0.14	ug/l	No
Triallate	Jan. 10/07	<0.10	ug/l	No
Trichloroethylene	Jan. 10/07	<0.38	ug/l	No
2,4,6-Trichlorophenol	Jan. 10/07	<0.25	ug/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan. 10/07	<0.22	ug/l	No
Trifluralin	Jan. 10/07	<0.12	ug/l	No
Vinyl Chloride	Jan. 10/07	<0.17	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
Bernardi			
Station Street			