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	Drinking Water System Reporting to Owner	Original Issue Date:	December, 2011
		Revision No:	0
	QMS 12-2	Revision Date:	
System: All Water Systems		Facility: All Water Facilities	

TO: Guelph/Eramosa Township Drinking Water System Owner
(Council and CAO)

FROM: Manager of Public Works – Water/Wastewater Department

DATE: Monday March 19, 2012

SUBJECT: Guelph/Eramosa Township Drinking Water System Report

SUMMARY

Guelph/Eramosa Water Wastewater Department has prepared a G.E.T. Drinking Water System Report that includes a summary of any adverse test results (and related corrective actions), major changes or activities within the drinking water system and/or the quality management system.

The scope of this report represents 2011 Annual and Summary information from January 1 to December 31, 2011; and Drinking Water Quality Management System information for years 2010 and 2011. Future reports will be presented to the Owner (Township of Guelph/Eramosa Council and CAO) on an annual basis.

BACKGROUND

In conformance with QMS 12-2 Reporting to Owner, information shall be communicated to the Owner in a timely fashion by Top Management in order to comply with section 19 of the Safe Drinking Water Act, 2002: Standard of care, and conformance with the municipal drinking water system.

REPORT

The Guelph/Eramosa Water/Wastewater Department is requesting that the Owner (council) reviews this report regarding the Rockwood and Hamilton Drive Drinking Water Systems and provide comments (if applicable):

ATTACHMENTS

APPENDIX "A" Ontario Regulation 170/03 Annual and Summary Report

Adverse test results and related corrective actions for the period January 1 to December 31, 2011

APPENDIX "B" Quality Management System Report to the Owner to satisfy the requirements of section 20 of the Drinking Water Quality Management Standard for the period January 1 to December 31, 2010 and January 1 to December 31, 2011.

APPENDIX "C" Gazer Mooney Subdivision January 1, to December 31, 2011

APPENDIX "D" Legal and Other Requirements Update

POLICY STATEMENT

The Township of Guelph/Eramosa is committed to:
Providing the consumer with clean, safe drinking-water.
Maintaining and continuously improving the quality management system.
Meeting the applicable regulations and legislation associated with drinking-water systems.
Sincerely focusing on consumer needs and communication concerning matters of drinking-water quality.

FINANCIAL IMPLICATIONS

All financial implications related to this report are already accounted for in the applicable annual water budget.

RECOMMENDATION

Be it resolved that the Council of the Township of Guelph/Eramosa has received the Public Work's Report 12-02 regarding the Ontario Regulation 170/03 Annual and Summary Reports and the Drinking Water Quality Management System Report to the Owner for years 2010 and 2011, and;

That Council accepts this report as it relates to the Hamilton Drive Water Supply System, the Rockwood Water Supply System and the Gazer Mooney Distribution System for the period from January 1st 2011 to December 31st 2011 and;

That Council accepts the Drinking Water Quality Management System Report as it relates to the Hamilton Drive Water Supply System, the Rockwood Water Supply System and the Gazer Mooney Distribution System for the period from January 2010 to December 31, 2010



Prepared By:

Donna Button
Quality Management System
Representative
519-856-9596 ext. 122
dbutton@get.on.ca



Approved By:

Mark Robertson
Manager of Public Works
519-856-9596 ext. 109
mrobertson@get.on.ca

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Annual Drinking Water Report

O. REG. 170 SECTION 11 ANNUAL REPORT - ROCKWOOD

APPENDIX "A"

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, 2011 – December 31, 2011

<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 <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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;"> <p>Office of Township of Guelph Eramosa PO Box 700 8348 Wellington Road, 124 Rockwood ON N0B 2K0</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: N/A</p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Number of Interested Authorities you report to: N/A</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input type="checkbox"/></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 ☒

Indicate how you notified system users that your annual report is available, and is free of charge.

- ☒ Public access/notice via the web
- ☒ Public access/notice via Government Office
- ☐ Public access/notice via a newspaper
- ☒ Public access/notice via Public Request
- ☐ Public access/notice via a Public Library
- ☒ Public access/notice via other method Notice via Water or Tax Bills

File Name: 12-02 Annual Drinking Water Report Final 2011 (with GMooney).doc
March, 2012

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Annual Drinking Water Report

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 Pump House and the other at the Bernardi Pump House. 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 1,364 L/min and a maximum daily flow of 1,965 m³/day. The well located within the Bernardi Pump House 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 incurred

Station Street Well # 1 pump and motor replacement
Station Street Well # 2 auto start repair for well pump
Station Street Pump House hypo pump replacement
Bernardi Pump House High Lift Pump bearing replaced
Bernardi Pump House hypo pump repair
Rockwood Booster Station replaced UPS in the MCC panel
Eramosa River crossing water main replacement
Rockwood water main and service break repairs
Rockwood Standpipe Tank Inspection
Rockwood supervisory control and data acquisition (SCADA) upgrades
Total incurred: \$70,935.12

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

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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	151	0-0	0-0	N/A	N/A
Treated	105	0-0	0-0	105	0-30
Distribution	208	0-0	0-0	208	0-72

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	0.08-0.41 NTU's
Turbidity (Station Street; Well 1-76)	12	0.06-0.35 NTU's
Turbidity (Bernardi)	12	0.08-0.31 NTU's
Treated Water		
Chlorine Residual (Station St) (free)	8760	0.24-2.22 mg/L
Chlorine Residual (Bernardi) (free)	8760	0.44-2.01 mg/L
Distribution System		
Chlorine Residual (free)	2553	0.16-2.86 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
BERNARDI				
Antimony	Jan.06/10	< 0.5	ug/l	No
Arsenic	Jan.06/10	< 1	ug/l	No
Barium	Jan.06/10	40	ug/l	No
Boron	Jan.06/10	< 10	ug/l	No
Cadmium	Jan.06/10	< 0.1	ug/l	No
Chromium	Jan.06/10	< 5	ug/l	No
Lead (Distribution)	Jan.06/10	< 0.5	ug/l	No
Mercury	Jan.06/10	< 0.1	ug/l	No
Selenium	Jan.06/10	< 2	ug/l	No
Uranium	Jan.06/10	0.3	ug/l	No
Sodium	Mar. 09/09	5.3	mg/l	No
Fluoride	Mar. 09/09	1.4	mg/l	No
Nitrite	Apr 04/11	< 0.01	mg/l	No
	Jul 04/11	< 0.01		
	Oct 03/11	< 0.01		
	Oct 03/11	< 0.01		
Nitrate	Apr 04/11	< 0.1	mg/l	No
	Jul 04/11	< 0.1		
	Oct 03/11	< 0.1		
	Oct 03/11	< 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
STATION STREET				
Antimony	Jan.10/11	< .50	ug/L	No
Arsenic	Jan.10/11	< 1.0	ug/L	No
Barium	Jan.10/11	82	ug/L	No
Boron	Jan.10/11	16	ug/L	No
Cadmium	Jan.10/11	< 0.1	ug/L	No
Chromium	Jan.10/11	< 5.0	ug/L	No
Lead (Distribution)	Jan.10/11	1.0	ug/L	No
Mercury	Jan.10/11	< .10	ug/L	No
Selenium	Jan.10/11	< 2.0	ug/L	No
Uranium	Jan.10/11	0.9	ug/L	No
Sodium	Mar. 02/09	97	mg/L	Yes
Fluoride	Mar. 2/09	0.8	mg/L	No
Nitrite	Jan 10/11	< 0.01	mg/l	No
	Apr 04/11	< 0.01		
	Jul 04/11	< 0.01		
	Oct 03/11	< 0.01		
Nitrate	Jan 10/11	< 0.1	mg/l	No
	Apr 04/11	< 0.1		
	Jul 04/11	< 0.1		
	Oct 03/11	< 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	n/a
Distribution	pH and alkalinity		n/a

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	Jan. 06/10	< 0.1	ug/l	No
Aldicarb	Jan. 06/10	< 0.2	ug/l	No
Aldrin + dieldrin	Jan. 06/10	< 0.5	ug/l	No
Atrazine + N-dealkylated metabolites	Jan. 06/10	< 1	ug/l	No
Azinophos-methyl	Jan. 06/10	< 0.5	ug/l	No
Bendiocarb	Jan. 06/10	< 1	ug/l	No
Benzene	Jan. 06/10	< 0.5	ug/l	No
Benzo[a]pyrene	Jan. 06/10	< 0.5	ug/l	No
Bromoxynil	Jan. 06/10	< 5	ug/l	No
Carbaryl	Jan. 06/10	< 0.01	ug/l	No
Carbofuran	Jan. 06/10	< 1	ug/l	No
Carbon tetrachloride	Jan. 06/10	< 2	ug/l	No

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Chlordane	Jan. 06/10	< 2	ug/l	No
Chlorpyrifos	Jan. 06/10	< 0.1	ug/l	No
Cyanazine	Jan. 06/10	< 0.009	ug/l	No
1,1-Dichloroethylene	Jan. 06/10	< 0.5	ug/l	No
1,2-Dichloroethane	Jan. 06/10	< 5	ug/l	No
2,4-D	Jan. 06/10	< 5	ug/l	No
2,4-Dichlorophenol	Jan. 06/10	< 0.1	ug/l	No
DDT + metabolites	Jan. 06/10	< 0.01	ug/l	No
Diazinon	Jan. 06/10	< 1	ug/l	No
Dicamba	Jan. 06/10	< 1	ug/l	No
Dichloromethane	Jan. 06/10	< 0.02	ug/l	No
Diclofop-methyl	Jan. 06/10	< 1	ug/l	No
Dimethoate	Jan. 06/10	< 1	ug/l	No
Dinoseb	Jan. 06/10	< 0.5	ug/l	No
Diquat	Jan. 06/10	< 0.9	ug/l	No
Diuron	Jan. 06/10	< 3	ug/l	No
Heptachlor & heptachlor epoxide	Jan. 06/10	< 1	ug/l	No
Lindane	Jan. 06/10	< 7	ug/l	No
Malathion	Jan. 06/10	< 10	ug/l	No
Methoxychlor	Jan. 06/10	< 0.01	ug/l	No
Metolachlor	Jan. 06/10	< 0.006	ug/l	No
Metribuzin	Jan. 06/10	< 5	ug/l	No
Monochlorobenzene	Jan. 06/10	< 0.02	ug/l	No
o-Dichlorobenzene	Jan. 06/10	< 0.5	ug/l	No
Paraquat	Jan. 06/10	< 5	ug/l	No
Parathion	Jan. 06/10	< 0.1	ug/l	No
p-Dichlorobenzene	Jan. 06/10	< 0.2	ug/l	No
Pentachlorophenol / PCP	Jan. 06/10	< 1	ug/l	No
Phorate	Jan. 06/10	< 1	ug/l	No
Picloram	Jan. 06/10	< 0.2	ug/l	No
Polychlorinated Biphenyls / PCBs	Jan. 06/10	< 0.5	ug/l	No
Prometryn	Jan. 06/10	< 0.5	ug/l	No
Simazine	Jan. 06/10	< 5	ug/l	No
2,3,4,6-Tetrachlorophenol	Jan. 06/10	< 0.05	ug/l	No
2,4,5-T	Jan. 06/10	< 0.3	ug/l	No
2,4,6-Trichlorophenol	Jan. 06/10	< 1	ug/l	No
Temephos	Jan. 06/10	< 10	ug/l	No
Terbufos	Jan. 06/10	< 0.5	ug/l	No
Tetrachloroethylene	Jan. 06/10	< 0.1	ug/l	No
Triallate	Jan. 06/10	< 1	ug/l	No
Trichloroethylene	Jan. 06/10	< 0.1	ug/l	No
Trifluralin	Jan. 06/10	< 1	ug/l	No
Vinyl chloride	Jan. 06/10	< 0.2	ug/l	No
THMS (Distribution) (NOTE: show latest annual average) Average – 9.1 ug/L	Jan 10/11 Apr 04/11 Jul 04/11 Oct 03/11			No

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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. 10/11	< 0.5	ug/l	No
Aldicarb	Jan. 10/11	< 5	ug/l	No
Aldrin + dieldrin	Jan. 10/11	< 0.01	ug/l	No
Atrazine + N-dealkylated metabolites	Jan. 10/11	< 1	ug/l	No
Azinophos-methyl	Jan. 10/11	< 2	ug/l	No
Bendiocarb	Jan. 10/11	< 2	ug/l	No
Benzene	Jan. 10/11	< 0.1	ug/l	No
Benzo[a]pyrene	Jan. 10/11	< 0.009	ug/l	No
Bromoxynil	Jan. 10/11	< 0.5	ug/l	No
Carbaryl	Jan. 10/11	< 5	ug/l	No
Carbofuran	Jan. 10/11	< 5	ug/l	No
Carbon tetrachloride	Jan. 10/11	< 0.1	ug/l	No
Chlordane	Jan. 10/11	< 0.01	ug/l	No
Chlorpyrifos	Jan. 10/11	< 1	ug/l	No
Cyanazine	Jan. 10/11	< 1	ug/l	No
1,1-Dichloroethylene	Jan. 10/11	< 0.1	ug/l	No
1,2-Dichloroethane	Jan. 10/11	< 0.2	ug/l	No
2,4-D	Jan. 10/11	< 1	ug/l	No
2,4-Dichlorophenol	Jan. 10/11	< 0.5	ug/l	No
DDT + metabolites	Jan. 10/11	< 0.02	ug/l	No
Diazinon	Jan. 10/11	< 1	ug/l	No
Dicamba	Jan. 10/11	< 1	ug/l	No
Dichloromethane	Jan. 10/11	< 0.5	ug/l	No
Diclofop-methyl	Jan. 10/11	< 0.9	ug/l	No
Dimethoate	Jan. 10/11	< 3	ug/l	No
Dinoseb	Jan. 10/11	< 1	ug/l	No
Diquat	Jan. 10/11	< 7	ug/l	No
Diuron	Jan. 10/11	< 10	ug/l	No
Heptachlor & heptachlor epoxide	Jan. 10/11	< 0.01	ug/l	No
Lindane	Jan. 10/11	< 0.006	ug/l	No
Malathion	Jan. 10/11	< 5	ug/l	No
Methoxychlor	Jan. 10/11	< 0.02	ug/l	No
Metolachlor	Jan. 10/11	< 0.5	ug/l	No
Metribuzin	Jan. 10/11	< 5	ug/l	No
Monochlorobenzene	Jan. 10/11	< 0.1	ug/l	No
o-Dichlorobenzene	Jan. 10/11	< 0.2	ug/l	No
Paraquat	Jan. 10/11	< 1	ug/l	No

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Parathion	Jan. 10/11	< 1	ug/l	No
p-Dichlorobenzene	Jan. 10/11	< 0.2	ug/l	No
Pentachlorophenol / PCP	Jan. 10/11	< 0.5	ug/l	No
Phorate	Jan. 10/11	< 0.5	ug/l	No
Picloram	Jan. 10/11	< 5	ug/l	No
Polychlorinated Biphenyls / PCBs	Jan. 10/11	< 0.05	ug/l	No
Prometryn	Jan. 10/11	< 0.3	ug/l	No
Simazine	Jan. 10/11	< 1	ug/l	No
2,3,4,6-Tetrachlorophenol	Jan. 10/11	< 0.5	ug/l	No
2,4,5-T	Jan. 10/11	< 1	ug/l	No
2,4,6-Trichlorophenol	Jan. 10/11	< 0.5	ug/l	No
Temephos	Jan. 10/11	< 10	ug/l	No
Terbufos	Jan. 10/11	< 0.5	ug/l	No
Tetrachloroethylene	Jan. 10/11	< 0.1	ug/l	No
Triallate	Jan. 10/11	< 1	ug/l	No
Trichloroethylene	Jan. 10/11	< 0.1	ug/l	No
Trifluralin	Jan. 10/11	< 1	ug/l	No
Vinyl chloride	Jan. 10/11	< 0.2	ug/l	No
THMS (Distribution) (NOTE: show latest annual average) Average – 9.1 ug/L	Jan 10/11 Apr 04/11 Jul 04/11 Oct 03/11			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			

O. REG. 170 SCHEDULE 22 SUMMARY REPORT - ROCKWOOD

APPENDIX "A"

SUMMARY

This report is a summary of water quality and quantity information submitted in accordance with schedule 22 of Ontario's Drinking Water System regulation for the reporting period of January 01, 2011 to December 31, 2011 for the Rockwood Water Supply System, located in the Township of Guelph/Eramosa.

The summary includes:

Any requirements of the Act and Regulation, System Approval (s), Drinking Water Works Permit, Municipal Drinking Water Licence and any Orders that the system failed to meet during the reporting period and the measures taken to correct each failure.

A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.

A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

ISSUES OF NON-COMPLIANCE

The Ministry of the Environment carried out their annual system inspection on September 6, 2011 for the period of December 1st, 2010 to August 31, 2011 during this time period, no issues of non-compliance were noted by staff or the MOE.

Requirement	Non-Compliance	Action Required
Not Applicable: No non-compliances issued during this reporting period.		

ASSESSMENT OF FLOW RATES AND QUANTITIES OF WATER SUPPLIED

The following table lists the quantities and flow rates of the water supplied during the reporting period covered by this report, including monthly average and maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval:

Summary of Raw Water Flows - Station Street Pumphouse

Well TW# 1- 67		(Rated Capacity 1,964 m3/day)		(Rated Daily Peak 1,360 L/min)		
MONTH	Avg. Daily Volume m3	% Of Approved Volume	MAX Daily Volume m3/d	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	464.35	23.63	1242.0	63.21	1080.00	79.30
FEBRUARY	483.21	24.59	1047.0	53.28	1080.00	79.30

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MARCH	419.03	21.32	977.0	49.72	1080.00	79.30
APRIL	478.63	24.36	959.0	48.80	1080.00	79.30
MAY	off line due to flow meter failure					
JUNE	505.98	25.75	1382.0	70.33	1020.00	74.89
JULY	477.23	24.29	1304.0	66.36	1020.00	74.89
AUGUST	401.81	20.45	1400.0	71.25	1200.00	88.11
SEPTEMBER	452.16	23.01	1364.0	69.41	1110.00	81.50
OCTOBER	359.57	18.30	989.0	50.33	1080.00	79.30
NOVEMBER	385.37	19.61	994.0	50.59	1080.00	79.30
DECEMBER	504.90	25.69	1144.0	58.22	1080.00	79.30

Summary of Raw Water Flows - Station Street Pumphouse

Well TW# 1- 76

(Rated Capacity 1,964 m3/day)

(Rated Daily Peak 1,360 L/min)

MONTH	Avg. Daily Volume m3	% Of Approved Volume	MAX Daily Volume m3/d	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	359.32	18.29	753.00	38.32	1080.00	79.30
FEBRUARY	412.43	20.99	1028.00	52.32	1110.00	81.50
MARCH	427.73	21.77	1309.00	66.62	1080.00	79.30
APRIL	557.89	28.39	1404.00	71.45	1080.00	79.30
MAY	1101.13	56.04	1608.00	81.83	1080.00	79.30
JUNE	580.73	29.55	1443.00	73.44	1020.00	74.89
JULY	530.29	26.99	1221.00	62.14	1200.00	88.11
AUGUST	505.60	25.73	1278.00	65.04	1230.00	90.31
SEPTEMBER	762.13	38.79	1644.00	83.66	1080.00	79.30
OCTOBER	661.55	33.67	1428.00	72.67	1050.00	77.09
NOVEMBER	460.21	23.42	938.00	47.74	1050.00	77.09
DECEMBER	479.30	24.39	1235.00	62.85	1080.00	79.30

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Summary of Raw Water Flows – Bernardi Pumphouse

Well # 3 (Rated Capacity 1,310 m3/day) (Rated Daily Peak 910.0 L/min)

MONTH	Avg. Daily Volume m3	% Of Approved Volume	MAX Daily Volume m3/d	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	375.74	28.68	848.7	64.79	660.00	72.85
FEBRUARY	416.81	31.82	834.1	63.67	690.00	76.16
MARCH	393.73	30.06	822.5	62.79	690.00	76.16
APRIL	415.77	31.74	960.9	73.35	720.00	79.47
MAY	467.88	35.72	970.4	74.08	780.00	86.09
JUNE	446.80	34.11	912.2	69.63	780.00	86.09
JULY	536.84	40.98	974.5	74.39	720.00	79.47
AUGUST	487.09	37.18	958.5	73.17	690.00	76.16
SEPTEMBER	424.18	32.38	885.1	67.56	690.00	76.16
OCTOBER	449.36	34.30	885.8	67.62	690.00	76.16
NOVEMBER	476.47	36.37	947.8	72.35	690.00	76.16
DECEMBER	382.83	29.22	869.8	66.40	750.00	82.78

O. REG. 170 SECTION 11 ANNUAL REPORT – HAMILTON DRIVE

APPENDIX “A”

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, 2011 – December 31, 2011

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 [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.

Office of Township of Guelph Eramosa
8348 Wellington Road, 124
PO Box 700
Rockwood ON
N0B 2K0

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 []

Number of Interested Authorities you report to:

N/A

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:

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.

- ☒ Public access/notice via the web
☒ Public access/notice via Government Office
☐ Public access/notice via a newspaper
☒ Public access/notice via Public Request
☐ Public access/notice via a Public Library
☒ Public access/notice via other method Notice given via water or tax bills

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Annual Drinking Water Report

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 Pump House 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

Cross Creek Cla-valve repairs to both well pump and high lift pump
Cross Creek Pump House installation of new controller for chlorine pumps
Cross Creek Pump House repair to hypo pump
Huntington Pump House replacement to unit heater
Huntington Pump House repaired barring in treated flow meter
Hamilton Drive Standpipe replaced UPS in MCC panel
Hamilton Drive Standpipe Tank Inspection
Hamilton Drive Supervisory control and data acquisition upgrades
Total Cost Incurred \$ 22,289.20

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	HPC (min – max)
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File Name: 12-02 Annual Drinking Water Report Final 2011 (with GMooney).doc
March, 2012

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Annual Drinking Water Report

				Samples	
Raw	102	0-0	0-0	N/A	N/A
Treated	102	0-0	0-0	102	0-2.0
Distribution	153	0-0	0-0	153	0-50.0

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)	20	0.09-0.36 NTU's
Turbidity (Crosscreek)	16	0.08-0.35 NTU's
Treated Water		
Chlorine Residual (Huntington) (free)	8760	0.34-2.60 mg/L
Chlorine Residual (Cross Creek) (free)		0.18-2.10 mg/L
Distribution System		
Chlorine Residual (free)	2159	0.42-2.47mg/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 10/11	<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 10/11	<0.01	mg/l	No
	Apr 04/11	<0.01		
	Jul 04/11	<0.01		
	Oct 03/11	<0.01		
Nitrate	Jan 10/11	<0.1	mg/l	No
	Apr 04/11	<0.1		
	Jul 04/11	<0.1		
	Oct 03/11	<0.1		

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

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Annual Drinking Water Report

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 10/11	<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 10/11	<0.01	mg/l	No
	Apr 04/11	<0.01		
	Jul 04/11	<0.01		
	Oct 03/11	<0.01		
Nitrate	Jan 10/11	<0.1	mg/l	No
	Apr 04/11	<0.1		
	Jul 04/11	<0.1		
	Oct 03/11	<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	Ref: O.Reg 170: Community Lead Testing: Reduced Sampling & Frequency	n/a
Distribution	pH and alkalinity		0

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
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

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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
THM Distribution Guelph Tower (NOTE: Result value - shows latest annual average)	Jan 10/11 Apr 04/11 Jul 04/11 Oct 03/11	Annual average – 12.7 ug/L	ug/l	No

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

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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
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

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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 10/11 Apr 04/11 Jul 04/11 Oct 03/11	Annual average – 12.7 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			

O. REG 170 SCHEDULE 22 SUMMARY REPORT – HAMILTON DRIVE

APPENDIX “A”

SUMMARY

This report is a summary of water quality and quantity information submitted in accordance with schedule 22 of Ontario's Drinking Water System regulation for the reporting period of January 01, 2011 to December 31, 2011 for the Hamilton Drive Water Supply System, located in the Township of Guelph/Eramosa.

The summary includes:

- 1.Any requirements of the Act and Regulation, System Approval (s), Drinking Water Works Permit, Municipal Drinking Water Licence and any Orders that the system failed to meet during the reporting period and the measures taken to correct each failure.
- 2.A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- 3.A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

ISSUES OF NON-COMPLIANCE

The Ministry of the Environment carried out their annual system inspection on September 6, 2011 for the period of December 1st, 2010 to August 31, 2011 during this time period, no issues of non-compliance were noted by staff or the MOE.

Requirement	Non-Compliance	Action Required
Not Applicable: No non-compliances issued during this reporting period.		

ASSESSMENT OF FLOW RATES AND QUANTITIES OF WATER SUPPLIED

The following table lists the quantities and flow rates of the water supplied during the reporting period covered by this report, including monthly average and maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval:

Summary of Raw Water Flows - Cross Creek

Well # 1	(Rated Capacity 812 m ³ /19 hours)			Rated Daily Peak 725 L/min)		
MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ³ /d	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	74.63	9.19	159.20	19.61	330	45.53
FEBRUARY	66.71	8.22	112.20	13.82	360	49.67
MARCH	62.93	7.75	104.10	12.82	330	45.53
APRIL	74.71	9.20	128.70	15.85	330	45.53
MAY	113.02	13.92	278.00	34.24	300	41.39
JUNE	140.36	17.29	324.50	39.96	360	49.67

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JULY	236.98	29.19	551.50	67.92	330	45.53
AUGUST	200.45	24.69	533.70	65.73	300	41.39
SEPTEMBER	140.47	17.30	395.90	48.76	300	41.39
OCTOBER	114.85	14.14	253.40	31.21	270	37.25
NOVEMBER	73.37	9.04	140.90	17.35	300	41.39
DECEMBER	88.16	10.86	165.20	20.34	300	41.39

Summary of Raw Water Flows – Huntington

Well # 2

(Rated Capacity 916 m³/day)

(Rated Daily Peak 452 L/min)

MONTH	Avg. Daily Volume m ³	% Of Approved Volume	MAX Daily Volume m ³ /d	% Of Approved Volume	Peak Flow Rate L/min	% Of Approved Flow Rate
JANUARY	72.52	7.92	158.60	17.31	474	74.53
FEBRUARY	72.83	7.95	133.10	14.53	462	72.64
MARCH	77.30	8.44	153.90	16.80	462	72.64
APRIL	71.11	7.76	115.90	12.65	462	72.64
MAY	111.63	12.19	336.90	36.78	498	78.30
JUNE	158.92	17.35	293.60	32.05	450	70.75
JULY	245.32	26.78	564.70	61.65	450	70.75
AUGUST	171.80	18.76	389.20	42.49	456	71.70
SEPTEMBER	153.25	16.73	265.10	28.94	396	62.26
OCTOBER	119.41	13.04	244.00	26.64	456	71.70
NOVEMBER	71.02	7.75	188.00	20.52	462	72.64
DECEMBER	90.49	9.88	137.40	15.00	480	75.47

APPENDIX "B"**QUALITY MANAGEMENT SYSTEM REPORT TO THE OWNER**

The following table is presented in response to the requirement of section 20 of the Drinking Water Quality Management Standard that requires Guelph/Eramosa Water/Wastewater Department to report the results of management review, the identified deficiencies, decisions and action items to the Owner.

2010 MANAGEMENT REVIEW

The Management review was conducted on Friday June 18, 2010 In attendance were all of the Management Review participants listed within 20.2 of the G.E.T. Operational Plan.

This report to owner reflects internal audit results from July 1st, 2009 to December 31, 2009.

RESULTS OF MANAGEMENT REVIEW	REPORT
QMS 20 Summary of Management Review <ul style="list-style-type: none"> a.) Incidents of regulatory non-compliance. b.) Incidents of adverse drinking-water tests. c.) Deviations from critical control point limits and response actions. d.) The efficacy of the risk assessment process. e.) Internal and third-party audit results. f.) Results of emergency response testing. g.) Operational performance. h.) Raw water supply and drinking water quality trends. i.) Follow-up on action items from previous management reviews. j.) The status of management action items identified between reviews. k.) Changes that could affect the QMS. l.) Consumer feedback. m.) The resources needed to maintain the QMS. n.) The results of the infrastructure review. o.) Operational Plan currency, content and updates. p.) Staff suggestions. <p>The detailed results have been reviewed by Top Management in accordance with the DWQMS management review system procedure.</p>	

Deficiencies Identified

S.M.R. item d.) The efficacy of the risk assessment process.

Risk Assessment has not yet been completed for 2010.

S.M.R. item f.) Emergency response testing.

EMS desk top scenarios are not currently conducted on a regular basis.

S.M.R. item a.) Operational performance

Update Element 12.1 to convey "Owner"

S.M.R. item n.) Results of Infrastructure Review

Not fully completed last year.

Decisions Made

Risk Assessment & Infrastructure Review

Reviews are to be completed at the same time and submitted to the Manager of Public works by early September of each year.

Results of emergency response testing.

Future review SOPs and EMS procedures to ensure that "what if" scenarios are covered in each specific procedure.

Operational performance

Update Element 12.1 to convey "Owner"

Document within - that the Infrastructure, maintenance, rehabilitation and renewal programs are conveyed to the owner through the budgetary process. It was suggested that a possible information report may be submitted quarterly to help keep the council "Owners" informed and up to date as section 19 of the SDWA will be coming into play in 2013.

APPENDIX "B"**QUALITY MANAGEMENT SYSTEM REPORT TO THE OWNER**

The following table is presented in response to the requirement of section 20 of the Drinking Water Quality Management Standard that requires Guelph/Eramosa Water/Wastewater Department to report the results of management review, the identified deficiencies, decisions and action items to the Owner.

2011 MANAGEMENT REVIEW

The Management review was conducted on May 31, 2011. In attendance were all of the Management Review participants listed within 20.2 of the G.E.T. Operational Plan.

This report to owner reflects internal audit results from January 1st, 2010 to December 31, 2010

RESULTS OF MANAGEMENT REVIEW	REPORT
QMS 20 Summary of Management Review (S.M.R.) <ul style="list-style-type: none"> a.) Incidents of regulatory non-compliance. b.) Incidents of adverse drinking-water tests. c.) Deviations from critical control point limits and response actions. d.) The efficacy of the risk assessment process. e.) Internal and third-party audit results. f.) Results of emergency response testing. g.) Operational performance. h.) Raw water supply and drinking water quality trends. i.) Follow-up on action items from previous management reviews. j.) The status of management action items identified between reviews. k.) Changes that could affect the QMS. l.) Consumer feedback. m.) The resources needed to maintain the QMS. n.) The results of the infrastructure review. o.) Operational Plan currency, content and updates. p.) Staff suggestions. <p>The detailed results have been reviewed by Top Management in accordance with the DWQMS management review system procedure.</p>	

Deficiencies Identified

S.M.R. item e.) Internal and third-party audit results.

S.M.R. item o.) Operational Plan currency, content and updates.

QMS 12 Communications

The operational plan does not document a procedure for communications that describes how the relevant aspects of the QMS are communicated to the owner as per requirement in 12. Plan a.) It mentions Employees, Consumers and suppliers but not owners.

S.M.R. item e.) Internal and third-party audit results.

S.M.R. item o.) Operational Plan currency, content and updates.

S.M.R. item j.) The status of management action items identified between reviews

QMS 16 Sampling Testing and Monitoring

There is no procedure outlined in the Operational Plan describing how sampling, testing and monitoring results are shared between the Operating Authority and the Owner. (16.4 only tells' how it is available to the public and Public Works Staff not the owner).

S.M.R. item e.) Internal and third-party audit results.

QMS 20 Management Review

There is no evidence that the first Management Review recommendations, decisions, or action items were presented to council (owners) as per 20.3 of the Operational Plan.

S.M.R. item d.) The efficacy of the risk assessment process.

QMS 6 Drinking Water System

The Operational Plan does not document a description of any critical upstream or downstream process relied upon to ensure the provision of safe drinking water as per the requirement in 6. Plan a.)v.

Decisions Made

QMS 12 Communications

QMS 16 Sampling Testing and Monitoring

The above noted sections of the operational plan have been revised to describe how the relevant aspects of the QMS are communicated to the owner in time for our full scope operational plan submission in December 2011.

QMS 20 Management Review

The first Management Review recommendations, decisions, or action items were not presented to council (owners) as per 20.3 of the Operational Plan.

After inquiring with the Canadian Standards Board regarding this non conformance the decision made was to present both 2010 and 2011 Management Review results to council at the same time.

QMS 6 Drinking Water System

Documented within the Operational Plan QMS 6 Wellington County's Official Plan which provides direction to water quality protection measures within the county and its municipalities through the "Steering Committee". Pointed to the DRAFT copy of the Source Water Assessment Report available at www.grandriver.ca (pages 7-110 through to 7-156) specifically addressing the Guelph/Eramosa Drinking Water Systems.

Next revision to the Risk Assessment will include a section for critical upstream or downstream process which will point to the above noted assessment report and Guelph/Eramosa's Water By-law 21-2000 as well as a cross connection program.

APPENDIX "C"

GAZER MOONEY DISTRIBUTION SYSTEM

The City of Guelph's Water Services Summary Report not only satisfies the O.Reg. 70/03 Section 11 and Schedule 22 requirements for the Gazer Mooney Subdivision Distribution System and has expanded to provide more detailed information in conformance with its QMS 12-02 Reporting to Owner policy.

Since the Gazer Mooney Distribution System makes up less than ¼ of a percent of the Guelph System, Management thought it would be beneficial to highlight certain aspects of the report concerning Gazer Mooney. The full report is available for viewing at the Township Office.

Bacteriological Samples:

- There were no adverse Bacteriological samples in the Gazer Mooney distribution systems.

Distribution System Process Parameters:

- Daily samples were taken for chlorine residuals and there were no health exceedence in the Gazer Mooney distribution systems.

Miscellaneous Water Quality Result:

- There were no health exceedences for lead, trihalomethanes or sodium in the Gazer Mooney distribution systems.

Adverse Test Results and Corrective Action:

- There were no adverse test results in the Gazer Mooney distribution systems.

Summary of Maintenance:

- Standard hydrant flushing and valve exercising took place during 2011 in the Gazer Mooney Subdivision.

Drinking Water Quality Management System Report to Owner:

- The 2010 and 2011 Report to Owner has satisfied the requirements for the Gazer/Mooney Subdivision Distribution System. To view copies of these reports please contact the Quality Management Representative for the Township or view via link from our website @ www.get.on.ca

- ✓ Note: The Gazer Mooney Distribution System (DWS # 260057967) was inspected by the MOE June of 2011. The Inspection Report 1-96R91. There were no non-compliance issues. The MOE Inspection Summary Rating Record for the system was 100%.

APPENDIX "D" LEGAL AND OTHER REQUIREMENTS UPDATE

Date - 2011	Source of Posting / Reference	Title of Legal & Other Requirement Highlights of posting	Action and Status Update
Mar. 12	Ontario Gazette	Water Opportunities and Water Conservation Act, 2010 - Sections 3 to 23 of Schedule 1 of the Act, being Part II of the Water Opportunities Act, 2010 in force March 2, 2011	No action required at this time.
Mar. 22	Environmental Registry	Proposed Amendments to the technical rules made under section 107 of the Clean Water Act, 2006 with respect to the preparation of an assessment report. <u>Technical Rules: Assessment Report - Clean Water Act, 2006 (proposed amendments)</u>	No action required.
Jul. 2	Ontario Gazette	Certificates of Approval are now called Environmental Compliance Approvals.	No action required
Jul. 12	NSERC	World Health Organization's <u>Guidelines for Drinking Water Quality – Fourth Edition</u> .	No action required.
Jul. 29	Ontario MOE News	Ontario Leading North America - Clean, Safe, Reliable Drinking Water - The Minister's Annual Report on Drinking Water 2011 highlights the government's key achievements and successes in protecting drinking water.	No action required.
Sep. 1	Ontario MOE News	Statement from Minister of the Environment John Wilkinson Regarding Highland Companies Proposed Quarry in Dufferin County – full EA required...to protect our water and our environment	No action required.
Aug. 27	Ontario Gazette	Amendment of Safe Drinking Water Act, Section 19 – Statutory Standard of Care - striking out "January 1, 2013" and substituting "December 31, 2012".	No action required.
Aug. 27	Ontario Gazette	Open for Business Act - striking out "September 19, 2011" and substituting "October 31, 2011"	No action required.
Sep. 10	Ontario Gazette	Green Energy Act, 2009 – Ontario Regulation 397/11 – Energy Conservation and Demand Management Plans - requires public agencies to submit to the Ministry of Energy and make available to the public, a municipal Energy Consumption and Greenhouse Gas Emission Report on or before July 1, 2013 and annually in following years. Also annually from July 1, 2014, municipalities will be required to submit and make public Energy Conservation and Demand Management Plan with plan status updates every five years.	Collection of data is required at this time.

9.3 REVISED

Annual Drinking Water Report

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