



SECTION 11 ANNUAL REPORT

Drinking-Water System Number:	260064272
Drinking-Water System Name:	Elgeti and Crystal Springs Subdivisions Drinking Water System
Drinking-Water System Owner:	The Township of Otonabee-South Monaghan
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2010 to 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> <table border="1" style="width: 100%;"> <tr> <td>Public Access/Notice via the web. Public Access/Notice via Government Office</td> </tr> </table>	Public Access/Notice via the web. Public Access/Notice via Government Office	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input type="text" value="NONE"/></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: <input type="text" value="NONE"/></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>
Public Access/Notice via the web. Public Access/Notice via Government Office		

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
NONE	

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 []



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 _____

Describe your Drinking-Water System

A well supply system consisting of 2 groundwater wells potentially under the direct influence of surface water in the Crystal Springs wellfield. Well #2 serves as the sole production well for the water system and Well #1 serves only in standby capacity. The system contains treated water reservoirs and sodium hypochlorite and ultra violet disinfection. The facility has continuous on-line alarmed analyzers recording treated water turbidity, free chlorine residual and distribution system free chlorine residual (located at Stewart Hall). The water system supplies treated water to the Elgeti and Crystal Springs Subdivisions, consisting of approximately 107 service connections.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite – 12%

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

- ◆ Replacement of the online Chlorine Analyzer – Approx. \$3500;
- ◆ Repairs to the Operator Interface Terminal – Approx. \$1900; and
- ◆ Repairs and replacement parts to the UV System – Approx. \$900.

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
Sep. 20, 2010	Loss of System Pressure due to Distribution System Repairs	n/a	n/a	Boil Water Advisory Issued, Established normal operating pressure, flushed system and collected 2 sets of bacti samples.	Sep. 20 – 24, 2010



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 #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw, Well #1 (not in service)	57	0 - 1	0 - 0	Not Required	
Raw, Well #2	57	0 - 0	0 - 0	Not Required	
Treated	52	0 - 0	0 - 0	52	0 - 1
Distribution	126	0 - 0	0 - 0	120	0 - 48

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, Raw Well #1 (NTU)	18	0.29 - 2.41
Turbidity, Raw Well #2 (NTU)	18	0.17 - 1.17
Turbidity, Treated (NTU)	8760	0.00 - 0.36
Chlorine, Treated	8760	1.01 - 2.0
Chlorine, Treated	135	1.24 - 1.62
Chlorine, Distribution	8760	0.93 - 2.29
Chlorine, Distribution	125	1.06 - 1.52
Fluoride (If the DWS provides fluoridation)	n/a	n/a

NOTE: For continuous monitors use 8760 as the number of samples.

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	Parameter	Date Sampled	Result	Unit of Measure
December 2, 2010, Provincial Officer's Order No. 1-8WC5M	Turbidity, Raw Water Well No. 1	Dec. 3/10	0.93	NTU
		Dec. 6/10	0.84	NTU
		Dec. 10/10	0.97	NTU
		Dec. 17/10	0.93	NTU
		Dec. 24/10	0.55	NTU
		Dec. 31/10	0.76	NTU



	Turbidity, Raw Water Well No. 2	Dec. 3/10	0.44	NTU
		Dec. 6/10	0.28	NTU
		Dec. 10/10	0.69	NTU
		Dec. 17/10	0.35	NTU
		Dec. 24/10	0.42	NTU
		Dec. 31/10	0.41	NTU
	TC, Raw Water Well No. 1	Dec. 3/10	0	CFU/100 mL
		Dec. 6/10	0	CFU/100 mL
		Dec. 10/10	0	CFU/100 mL
		Dec. 13/10	0	CFU/100 mL
		Dec. 17/10	0	CFU/100 mL
		Dec. 20/10	0	CFU/100 mL
		Dec. 24/10	0	CFU/100 mL
		Dec. 29/10	0	CFU/100 mL
		Dec. 31/10	0	CFU/100 mL
	EC, Raw Water Well No. 1	Dec. 3/10	0	CFU/100 mL
		Dec. 6/10	0	CFU/100 mL
		Dec. 10/10	0	CFU/100 mL
		Dec. 13/10	0	CFU/100 mL
		Dec. 17/10	0	CFU/100 mL
		Dec. 20/10	0	CFU/100 mL
		Dec. 24/10	0	CFU/100 mL
		Dec. 29/10	0	CFU/100 mL
		Dec. 31/10	0	CFU/100 mL
	TC, Raw Water Well No. 2	Dec. 3/10	0	CFU/100 mL
		Dec. 6/10	0	CFU/100 mL
		Dec. 10/10	0	CFU/100 mL
		Dec. 13/10	0	CFU/100 mL
Dec. 17/10		0	CFU/100 mL	
Dec. 20/10		0	CFU/100 mL	
Dec. 24/10		0	CFU/100 mL	
Dec. 29/10		0	CFU/100 mL	
Dec. 31/10		0	CFU/100 mL	
EC, Raw Water Well No. 2	Dec. 3/10	0	CFU/100 mL	
	Dec. 6/10	0	CFU/100 mL	
	Dec. 10/10	0	CFU/100 mL	
	Dec. 13/10	0	CFU/100 mL	
	Dec. 17/10	0	CFU/100 mL	
	Dec. 20/10	0	CFU/100 mL	
	Dec. 24/10	0	CFU/100 mL	
	Dec. 29/10	0	CFU/100 mL	
	Dec. 31/10	0	CFU/100 mL	

*Note that the sample results tabulated above are also included in the Microbiological and operational testing summaries above.

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

Parameter	Sample Date	Sample Result	Exceedance
Antimony: Sb (ug/L) - TW	2010/03/01	< 0.020	No
Arsenic: As (ug/L) - TW	2010/03/01	0.40	No
Barium: Ba (ug/L) - TW	2010/03/01	172.00	No
Boron: B (ug/L) - TW	2010/03/01	9.20	No
Cadmium: Cd (ug/L) - TW	2010/03/01	< 0.0030	No
Chromium: Cr (ug/L) - TW	2010/03/01	0.60	No
Lead: Pb (ug/L) - DW	2007/03/19	0.14	No
Mercury: Hg (ug/L) - TW	2010/03/01	< 0.020	No
Selenium: Se (ug/L) - TW	2010/03/01	< 1.00	No
Sodium: Na (mg/L) - TW	2008/09/02	7.24	No
Uranium: U (ug/L) - TW	2010/03/01	2.13	No
Fluoride Residual: Mean (mg/L) - TW	2008/09/02	0.090	No
Nitrite (mg/L) - TW	2010/01/04	< 0.0050	No
Nitrite (mg/L) - TW	2010/04/06	< 0.0050	No
Nitrite (mg/L) - TW	2010/07/12	< 0.0050	No
Nitrite (mg/L) - TW	2010/10/04	< 0.0050	No
Nitrate (mg/L) - TW	2010/01/04	3.13	No
Nitrate (mg/L) - TW	2010/04/06	3.09	No
Nitrate (mg/L) - TW	2010/07/12	3.31	No
Nitrate (mg/L) - TW	2010/10/04	3.33	No

Summary of lead testing under Schedule 15.1 during this reporting period

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	NONE*		
Distribution	NONE*		

*This system is exempt from plumbing sampling for lead. This system must collect distribution pH and alkalinity samples under the reduced sampling table during each sampling period in every 12 month period and distribution lead samples under the reduced sampling table during each sampling period in every third 12-month period. The 2010 reporting period was not the third 12-month period so no lead samples were collected as per regulatory requirements.

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

Parameter	Sample Date	Result Value	Exceedance
Alachlor (ug/L) - TW	2010/03/01	< 0.020	No
Aldicarb (ug/L) - TW	2010/03/01	< 0.010	No
Aldrin + Dieldrin (ug/L) - TW	2010/03/01	< 0.010	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2010/03/01	0.010	No
Azinphos-methyl (ug/L) - TW	2010/03/01	< 0.020	No
Bendiocarb (ug/L) - TW	2010/03/01	< 0.010	No
Benzene (ug/L) - TW	2010/03/01	< 0.32	No
Benzo(a)pyrene (ug/L) - TW	2010/03/01	< 0.0040	No
Bromoxynil (ug/L) - TW	2010/03/01	< 0.33	No
Carbaryl (ug/L) - TW	2010/03/01	< 0.010	No
Carbofuran (ug/L) - TW	2010/03/01	< 0.010	No
Carbon Tetrachloride (ug/L) - TW	2010/03/01	< 0.16	No
Chlordane:Total (ug/L) - TW	2010/03/01	< 0.010	No
Chlorpyrifos (ug/L) - TW	2010/03/01	< 0.020	No
Cyanazine (ug/L) - TW	2010/03/01	< 0.030	No
Diazinon (ug/L) - TW	2010/03/01	< 0.020	No
Dicamba (ug/L) - TW	2010/03/01	< 0.20	No
1,2-Dichlorobenzene (ug/L) - TW	2010/03/01	< 0.41	No
1,4-Dichlorobenzene (ug/L) - TW	2010/03/01	< 0.36	No
Dichlorodiphenyltrichloroethane(DDT) + metabolites (ug/L) - TW	2010/03/01	< 0.010	No
1,2-Dichloroethane (ug/L) - TW	2010/03/01	< 0.35	No
1,1-Dichloroethylene (ug/L) - TW	2010/03/01	< 0.33	No
Dichloromethane (ug/L) - TW	2010/03/01	< 0.35	No
2,4-Dichlorophenol (ug/L) - TW	2010/03/01	< 0.15	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2010/03/01	< 0.19	No
Diclofop-methyl (ug/L) - TW	2010/03/01	< 0.40	No
Dimethoate (ug/L) - TW	2010/03/01	< 0.030	No
Dinoseb (ug/L) - TW	2010/03/01	< 0.36	No
Diquat (ug/L) - TW	2010/03/01	< 1.00	No
Diuron (ug/L) - TW	2010/03/01	< 0.030	No
Glyphosate (ug/L) - TW	2010/03/01	< 6.00	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW	2010/03/01	< 0.010	No
Lindane: (ug/L) - TW	2010/03/01	< 0.010	No
Malathion (ug/L) - TW	2010/03/01	< 0.020	No
Methoxychlor (ug/L) - TW	2010/03/01	< 0.010	No



Metolachlor (ug/L) - TW	2010/03/01	< 0.010	No
Metribuzin (ug/L) - TW	2010/03/01	< 0.020	No
Monochlorobenzene (ug/L) - TW	2010/03/01	< 0.30	No
Paraquat (ug/L) - TW	2010/03/01	< 1.00	No
Parathion (ug/L) - TW	2010/03/01	< 0.020	No
Pentachlorophenol (ug/L) - TW	2010/03/01	< 0.15	No
Phorate (ug/L) - TW	2010/03/01	< 0.010	No
Picloram (ug/L) - TW	2010/03/01	< 0.25	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW	2010/03/01	< 0.040	No
Prometryne (ug/L) - TW	2010/03/01	< 0.030	No
Simazine (ug/L) - TW	2010/03/01	< 0.010	No
THM (ug/L) - DW	2010	11.30	No
Temephos (ug/L) - TW	2010/03/01	< 0.010	No
Terbufos (ug/L) - TW	2010/03/01	< 0.010	No
Tetrachloroethylene (ug/L) - TW	2010/03/01	< 0.35	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2010/03/01	< 0.14	No
Triallate (ug/L) - TW	2010/03/01	< 0.010	No
Trichloroethylene (ug/L) - TW	2010/03/01	< 0.43	No
2,4,6-Trichlorophenol (ug/L) - TW	2010/03/01	< 0.25	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW	2010/03/01	< 0.22	No
Trifluralin (ug/L) - TW	2010/03/01	< 0.020	No
Vinyl Chloride (ug/L) - TW	2010/03/01	< 0.17	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
NONE			