



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

COLGAN
WELL SUPPLY SYSTEM

ONTARIO REGULATION 170/03

Section 11

ANNUAL REPORT

For the Period of

May 4, 2009 to December 31, 2009

Prepared for The Corporation of the Township of Adjala-Tosorontio

By the Ontario Clean Water Agency



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220009933
Drinking-Water System Name:	Colgan Well Supply System
Drinking-Water System Owner:	The Corporation of the Township of Adjala-Tosorontio
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	May 4, 2009 to December 31, 2009

<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: 10px;"> <p>Summary Report is available for inspection at the Township of Adjala-Tosorontio Municipal Office located at 7855 Sideroad 30, Alliston, ON</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></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; width: 100px; height: 20px; margin: 5px 0;"></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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Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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
Not applicable	Not applicable

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 [NA]



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

The Colgan water system is classified as a Small Municipal Residential water system that currently serves approximately 71 homes, plus a school in the community of Colgan. Water is supplied via five (5) municipal wells, two (2) pumphouses and an inground reservoir. Inspections and maintenance duties are conducted by Ontario Clean Water Agency staff on a regular basis to maintain compliance with Ontario Regulation 170/03 to ensure that Colgan's water supply is safe to drink.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite 12% Solution NSF, Disinfection
Sodium Silicate, Iron Sequestering, NSF

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

Expenses incurred which were in addition to normal operating costs:

1. Drinking Water Quality Management System Multi-Facility Operational Plan
2. Community Lead Testing Program
3. Data Logger



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
June 16, 2009 (Sample Date) (AWQI# 88612)	Total Coliform on Distribution Water	28	Counts/100 ml	Oral and Written Notification and Resample	June 18, 2009

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 #)
RW1 – Raw Well CW1	Refer to attached Appendix A				
RW2 – Raw Well CW2					
RW3 – Raw Well CW3					
RW4 – Raw Well #1					
RW5 – Raw Well #2					
DW - Distribution					



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 #)
RW1 - Raw Well CW1 Turbidity	4	0.27 – 0.58 NTU
RW2 – Raw Well CW2 Turbidity	4	0.47 – 0.89 NTU
RW3 – Raw Well CW3 Turbidity	4	0.36 – 0.53 NTU
RW4 – Raw Well #1 Turbidity	8	0.22 – 0.98 NTU
RW5 – Raw Well #2 Turbidity	7	0.44 – 2.56 NTU
Pumphouse Treated Turbidity	8760	0.00 – 2.05 NTU
Pumphouse Treated Free Chlorine Residual	8760	0.00 – 5.09 mg/L *
Distribution Free Chlorine Residual	73	0.55 – 4.00 mg/L
Fluoride (If the DWS provides fluoridation)	N/A	

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

* Chlorine residual of 0.00 and 5.09 due to system maintenance and / or power interruptions and does not indicate an adverse situation.

*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
No Additional Testing and or Sampling Required				



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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Refer to attached Appendix A			
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrite				
Nitrate				
Nitrate				

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

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 #)	Number of Exceedances
Plumbing	7	0.26 – 1.50 ug/L	0
Distribution	2	0.65 – 5.18 ug/L	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
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				

Refer to attached Appendix A



<p>THM (NOTE: shows latest annual average which includes February and April results sampled by Township of Adjala-Tosorontio Staff)</p>	<p>Refer to attached Appendix A</p>
Temephos	
Terbufos	
Tetrachloroethylene	
2,3,4,6-Tetrachlorophenol	
Triallate	
Trichloroethylene	
2,4,6-Trichlorophenol	
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	
Trifluralin	
Vinyl Chloride	

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
<p>No Parameters exceeded half the standard prescribed in Schedule 2 for the Colgan Well Supply System.</p>			

APPENDIX A

ANNUAL SUMMARY (Microbiological, Inorganic & Organic)

Location:

RW1 – Raw Water Well CW1
RW2 – Raw Water Well CW2
RW3 – Raw Water Well CW3
RW4 – Raw Water Well #1
RW5 – Raw Water Well #2

TW – Treated Water

DW – Distribution Water

Note: Number of Microbiological Samples on RW1 (Well CW1), RW2 (Well CW2) and RW3 (Well CW3) includes AWWA sampling and testing.

ANNUAL REPORT - Microbiological, Inorganic & Organic

Waterworks: 1116 - [220009933] Colgan WT
 Period being reported: 01/01/2009 to 12/31/2009

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

Location	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 #)	Number of Background Samples	Range of Background Results (min #) - (max #)
Raw - RW1	21	0 - 0	0 - 1		-		-
Raw - RW2	19	0 - 0	0 - 5		-		-
Raw - RW3	15	0 - 0	0 - 1		-		-
Raw - RW4	8	0 - 0	0 - 0		-		-
Raw - RW5	8	0 - 0	0 - 0		-		-
Distribution - DW	21	0 - 0	0 - 28	21	0 - 1300		-

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

Parameter	Sample Date	Result Value	Exceedance
Antimony: Sb (ug/L) - TW	2009/09/15	< 0.020	No
Arsenic: As (ug/L) - TW	2009/09/15	0.60	No
Barium: Ba (ug/L) - TW	2009/09/15	86.40	No
Boron: B (ug/L) - TW	2009/09/15	7.50	No
Cadmium: Cd (ug/L) - TW	2009/09/15	< 0.0030	No
Chromium: Cr (ug/L) - TW	2009/09/15	0.70	No
Lead: Pb (ug/L)			
Mercury: Hg (ug/L) - TW	2009/09/15	< 0.020	No
Selenium: Se (ug/L) - TW	2009/09/15	< 1.00	No
Sodium: Na (mg/L) - TW	2009/09/15	8.37	No
Uranium: U (ug/L) - TW	2009/09/15	0.16	No
Fluoride Residual: Mean (mg/L) - TW	2009/09/15	0.080	No
Nitrite (mg/L) - TW	2009/07/21	0.0050	No
Nitrite (mg/L) - TW	2009/09/15	0.0050	No
Nitrite (mg/L) - TW	2009/10/09	0.0050	No
Nitrate (mg/L) - TW	2009/07/21	0.016	No
Nitrate (mg/L) - TW	2009/09/15	0.013	No
Nitrate (mg/L) - TW	2009/10/09	0.028	No

ANNUAL REPORT - Microbiological, Inorganic & Organic

Waterworks: 1116 - [220009933] Colgan WT
 Period being reported: 01/01/2009 to 12/31/2009

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

Parameter	Sample Date	Result Value	Exceedance
Alachlor (ug/L) - TW	2009/09/15	< 0.11	No
Aldicarb (ug/L) - TW	2009/09/15	< 0.30	No
Aldrin + Dieldrin (ug/L) - TW	2009/09/15	< 0.067	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2009/09/15	< 0.12	No
Azinphos-methyl (ug/L) - TW	2009/09/15	< 0.21	No
Bendiocarb (ug/L) - TW	2009/09/15	< 0.13	No
Benzene (ug/L) - TW	2009/09/15	< 0.32	No
Benzo(a)pyrene (ug/L) - TW	2009/09/15	< 0.0040	No
Bromoxynil (ug/L) - TW	2009/09/15	< 0.33	No
Carbaryl (ug/L) - TW	2009/09/15	< 0.16	No
Carbofuran (ug/L) - TW	2009/09/15	< 0.37	No
Carbon Tetrachloride (ug/L) - TW	2009/09/15	< 0.16	No
Chlordane:Total (ug/L) - TW	2009/09/15	< 0.11	No
Chlorpyrifos (ug/L) - TW	2009/09/15	< 0.18	No
Cyanazine (ug/L) - TW	2009/09/15	< 0.18	No
Diazinon (ug/L) - TW	2009/09/15	< 0.081	No
Dicamba (ug/L) - TW	2009/09/15	< 0.20	No
1,2-Dichlorobenzene (ug/L) - TW	2009/09/15	< 0.41	No
1,4-Dichlorobenzene (ug/L) - TW	2009/09/15	< 0.36	No
Dichlorodiphenyltrichloroethane(DDT) + metabolites (ug/L) - TW	2009/09/15	< 0.14	No
1,2-Dichloroethane (ug/L) - TW	2009/09/15	< 0.35	No
1,1-Dichloroethylene (ug/L) - TW	2009/09/15	< 0.33	No
Dichloromethane (ug/L) - TW	2009/09/15	< 0.35	No
2,4-Dichlorophenol (ug/L) - TW	2009/09/15	< 0.15	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2009/09/15	< 0.19	No
Diclofop-methyl (ug/L) - TW	2009/09/15	< 0.40	No
Dimethoate (ug/L) - TW	2009/09/15	< 0.12	No
Dinoseb (ug/L) - TW	2009/09/15	< 0.36	No
Diquat (ug/L) - TW	2009/09/15	< 1.00	No
Diuron (ug/L) - TW	2009/09/15	< 0.087	No
Glyphosate (ug/L) - TW	2009/09/15	< 6.00	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW	2009/09/15	< 0.11	No
Lindane: (ug/L) - TW	2009/09/15	< 0.056	No
Malathion (ug/L) - TW	2009/09/15	< 0.091	No
Methoxychlor (ug/L) - TW	2009/09/15	< 0.14	No
Metolachlor (ug/L) - TW	2009/09/15	< 0.092	No
Metribuzin (ug/L) - TW	2009/09/15	< 0.12	No
Monochlorobenzene (ug/L) - TW	2009/09/15	< 0.30	No
Paraquat (ug/L) - TW	2009/09/15	< 1.00	No
Parathion (ug/L) - TW	2009/09/15	< 0.18	No
Pentachlorophenol (ug/L) - TW	2009/09/15	< 0.15	No
Phorate (ug/L) - TW	2009/09/15	< 0.11	No
Picloram (ug/L) - TW	2009/09/15	< 0.25	No
Polychlorinated Bichenyl(PCB) (ug/L) - TW	2009/09/15	< 0.040	No

ANNUAL REPORT - Microbiological, Inorganic & Organic

Waterworks: 1116 - [220009933] Colgan WT

Period being reported: 01/01/2009 to 12/31/2009

Prometryne (ug/L) - TW	2009/09/15	< 0.23	No
Simazine (ug/L) - TW	2009/09/15	< 0.15	No
THM (ug/L)	2009	54.50	No
Temephos (ug/L) - TW	2009/09/15	< 0.31	No
Terbufos (ug/L) - TW	2009/09/15	< 0.12	No
Tetrachloroethylene (ug/L) - TW	2009/09/15	< 0.35	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2009/09/15	< 0.14	No
Triallate (ug/L) - TW	2009/09/15	< 0.10	No
Trichloroethylene (ug/L) - TW	2009/09/15	< 0.43	No
2,4,6-Trichlorophenol (ug/L) - TW	2009/09/15	< 0.25	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW	2009/09/15	< 0.22	No
Trifluralin (ug/L) - TW	2009/09/15	< 0.12	No
Vinyl Chloride (ug/L) - TW	2009/09/15	< 0.17	No