



SECTION 11 ANNUAL REPORT

Drinking-Water System Number:	210000194
Drinking-Water System Name:	Minden Hills WTP
Drinking-Water System Owner:	Township of Minden Hills
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2009 – 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 [] No [X]</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>7 Milne Street Minden, Ontario K0M 2K0</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; text-align: center; padding: 2px;">0</div> </p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No [X]</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; width: 100px; text-align: center; padding: 2px;">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 [X]</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
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 [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 _____

Describe your Drinking-Water System

The Minden Well Supply drinking water system consists of a disinfection system that uses liquid sodium hypochlorite injected into the raw water. Continuous monitoring for free chlorine residual and turbidity is carried out prior to the treated water entering the distribution system. Iron and manganese sequestering is accomplished using sodium silicate. Raw and treated water flow rates are monitored using a single magnetic flow meter located on the treated water discharge header. One well is for standby use only and is exercised weekly to refresh water quality. A 1290 cubic meter elevated, reinforced concrete in ground reservoir provides storage and augments pressure to the distribution.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite
Sodium silicate

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

Valve replacement

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
2009/03/16	Low Chlorine	0.12	mg/L	Reset Cl2 pump and back flush	2009/03/16
2009/03/18	Low Chlorine	0.04	mg/L	Reset relay switch and back flush	2009/03/18
2009/12/30	Low Chlorine	0.02	mg/L	Fix cl2 pump airlock and back flush	2009/12/30

Microbiological testing done under the 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 #)
Raw - RW1	52	0 - 0	0 - 3		-
Raw - RW2	52	0 - 0	0 - 0		-
Treated - TW	52	0 - 0	0 - 0	52	0 - 12
Distribution - DW	164	0 - 0	0 - 0	163	0 - 41

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	8760	0-2.04 NTU
Chlorine	8760	0-2.01 mg/L
Fluoride (If the DWS provides fluoridation)	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
Not Applicable				

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

Parameter	Sample Date	Result Value	Exceedance
Antimony: Sb (ug/L) - TW	2008/01/14	0.040	No
Arsenic: As (ug/L) - TW	2008/01/14	< 0.20	No
Barium: Ba (ug/L) - TW	2008/01/14	133.00	No
Boron: B (ug/L) - TW	2008/01/14	28.00	No
Cadmium: Cd (ug/L) - TW	2008/01/14	< 0.0030	No
Chromium: Cr (ug/L) - TW	2008/01/14	0.80	No
*Lead: Pb (ug/L)	2008/01/14	0.11	No
Mercury: Hg (ug/L) - TW	2008/01/14	< 0.020	No
Selenium: Se (ug/L) - TW	2008/01/14	< 1.00	No

Sodium: Na (mg/L) - TW	2008/01/14	14.80	No
Uranium: U (ug/L) - TW	2008/01/14	0.92	No
Fluoride Residual: Mean (mg/L) - TW	2008/01/14	0.17	No
Nitrite (mg/L) - TW	2009/01/14	< 0.0050	No
Nitrite (mg/L) - TW	2009/04/02	< 0.0050	No
Nitrite (mg/L) - TW	2009/07/07	< 0.0050	No
Nitrite (mg/L) - TW	2009/10/05	< 0.0050	No
Nitrate (mg/L) - TW	2009/01/14	< 0.013	No
Nitrate (mg/L) - TW	2009/04/02	< 0.013	No
Nitrate (mg/L) - TW	2009/07/07	< 0.013	No
Nitrate (mg/L) - TW	2009/10/05	< 0.013	No

*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	N/A		
Distribution	N/A		

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	2008/01/14	< 0.11	No
Aldicarb (ug/L) - TW	2008/01/14	< 0.30	No
Aldrin + Dieldrin (ug/L) - TW	2008/01/14	< 0.067	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	2008/01/14	< 0.12	No
Azinphos-methyl (ug/L) - TW	2008/01/14	< 0.21	No
Bendiocarb (ug/L) - TW	2008/01/14	< 0.13	No
Benzene (ug/L) - TW	2008/01/14	< 0.37	No
Benzo(a)pyrene (ug/L) - TW	2008/01/14	< 0.0040	No
Bromoxynil (ug/L) - TW	2008/01/14	< 0.33	No
Carbaryl (ug/L) - TW	2008/01/14	< 0.16	No
Carbofuran (ug/L) - TW	2008/01/14	< 0.37	No
Carbon Tetrachloride (ug/L) - TW	2008/01/14	< 0.41	No
Chlordane:Total (ug/L) - TW	2008/01/14	< 0.11	No
Chlorpyrifos (ug/L) - TW	2008/01/14	< 0.18	No
Cyanazine (ug/L) - TW	2008/01/14	< 0.18	No
Diazinon (ug/L) - TW	2008/01/14	< 0.081	No



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Dicamba (ug/L) - TW	2008/01/14	< 0.20	No
1,2-Dichlorobenzene (ug/L) - TW	2008/01/14	< 0.50	No
1,4-Dichlorobenzene (ug/L) - TW	2008/01/14	< 0.21	No
Dichlorodiphenyltrichloroethane(DDT) + metabolites (ug/L) - TW	2008/01/14	< 0.14	No
1,2-Dichloroethane (ug/L) - TW	2008/01/14	< 0.43	No
1,1-Dichloroethylene (ug/L) - TW	2008/01/14	< 0.41	No
Dichloromethane (ug/L) - TW	2008/01/14	< 0.34	No
2,4-Dichlorophenol (ug/L) - TW	2008/01/14	< 0.15	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW	2008/01/14	< 0.19	No
Diclofop-methyl (ug/L) - TW	2008/01/14	< 0.40	No
Dimethoate (ug/L) - TW	2008/01/14	< 0.12	No
Dinoseb (ug/L) - TW	2008/01/14	< 0.36	No
Diquat (ug/L) - TW	2008/01/14	< 1.00	No
Diuron (ug/L) - TW	2008/01/14	< 0.087	No
Glyphosate (ug/L) - TW	2008/01/14	< 6.00	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW	2008/01/14	< 0.11	No
Lindane: (ug/L) - TW	2008/01/14	< 0.056	No
Malathion (ug/L) - TW	2008/01/14	< 0.091	No
Methoxychlor (ug/L) - TW	2008/01/14	< 0.14	No
Metolachlor (ug/L) - TW	2008/01/14	< 0.092	No
Metribuzin (ug/L) - TW	2008/01/14	< 0.12	No
Monochlorobenzene (ug/L) - TW	2008/01/14	< 0.58	No
Paraquat (ug/L) - TW	2008/01/14	< 1.00	No
Parathion (ug/L) - TW	2008/01/14	< 0.18	No
Pentachlorophenol (ug/L) - TW	2008/01/14	< 0.15	No
Phorate (ug/L) - TW	2008/01/14	< 0.11	No
Picloram (ug/L) - TW	2008/01/14	< 0.25	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW	2008/01/14	< 0.040	No
Prometryne (ug/L) - TW	2008/01/14	< 0.23	No
Simazine (ug/L) - TW	2008/01/14	< 0.15	No
THM (ug/L)	2009	29.00	No
Temephos (ug/L) - TW	2008/01/14	< 0.31	No
Terbufos (ug/L) - TW	2008/01/14	< 0.12	No
Tetrachloroethylene (ug/L) - TW	2008/01/14	< 0.45	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	2008/01/14	< 0.14	No
Triallate (ug/L) - TW	2008/01/14	< 0.10	No
Trichloroethylene (ug/L) - TW	2008/01/14	< 0.38	No
2,4,6-Trichlorophenol (ug/L) - TW	2008/01/14	< 0.25	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW	2008/01/14	< 0.22	No
Trifluralin (ug/L) - TW	2008/01/14	< 0.12	No
Vinyl Chloride (ug/L) - TW	2008/01/14	< 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
Not Applicable			

