

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	260015587
<b>Drinking-Water System Name:</b>	Highgate Well System
<b>Drinking-Water System Owner:</b>	Municipality of Chatham-Kent
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January-December 2007

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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;">                 Chatham-Kent PUC Office                  325 Grand Ave E                  Box 1191                  Chatham, ON                  N7M 5L8             </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" type="text"/></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 style="width: 100px; height: 20px;" type="text"/></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
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**

The Highgate Water Supply System became operational on October 1, 2003 and is located at the same site as the former Highgate Pure Water System. This system consists of 2 raw water wells which pump the water through 5 micron and 1 micron pleated filters. The water then goes into 10 pressure tanks. Along with disinfecting the water with Sodium Hypochlorite, the water is also disinfected with an ultraviolet system. The water then flows into the distribution system.

**List all water treatment chemicals used over this reporting period.**

Sodium Hypochlorite

**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.**

The Quartz Sleeves and Ultra Violet Lamps were replaced as per manufacturers scheduled maintenance program.....\$2300.00  
 The Pre and Post Filters were replaced.....\$1600.00

**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
Jun 8	Loss of chlorine residual			Resample, Restore Disinfectant & Flush Mains	June 8
Jun 25	Loss of chlorine residual			Resample, Restore Disinfectant & Flush Mains	June 25
Aug 14	Loss of chlorine residual			Resample, Restore Disinfectant & Flush Mains	Aug 14
Sept 12	Loss of chlorine residual			Resample, Restore Disinfectant & Flush Mains	Sept 12
Nov 11	Loss of chlorine residual			Resample, Restore Disinfectant & Flush Mains	Nov 11
Nov 18	Loss of Chlorine residual			Resample, Restore Disinfectant, Flush Mains & Boil Water	Nov 18
Nov 29	Loss of Chlorine residual			Resample, Restore Disinfectant & Flush Mains	Nov 29

**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 Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
<b>Raw</b>	102	0-0	0-0		
<b>Treated</b>	55	0-0	0-0	52	<10-420
<b>Distribution</b>	140	0-0	0-0	52	<10-120

**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 #)
<b>Turbidity</b> Schedule 7-3 (1) Raw Turbidity	24	0.125-0.880 NTU's
<b>Chlorine</b>	8760	0.83-2.50 mg/L
<b>Fluoride</b> (If the DWS provides fluoridation)	Fluoride Not provided	

***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 2007	Result Well 1	Result Well 2	Unit of Measure
C of A 6826-5XNQ9K 04 May 2004	Raw--Organic Nitrogen	Jan 9	0.1	0.1	mg/L
		Apr 3	0.3	0.3	
		Jul 3	0.1	0.1	
		Oct 1	0.1	0.1	
as above	Raw--Methane	Jan 9	18	23	L/m3
		Apr 3	40	33	
		Jul 3	41	35	
		Oct 1	48	33	
as above	Point of Entry Fluoride	Jan 9	1.7		mg/L
		Apr 3	1.3		
		Jul 3	1.5		
		Oct 1	1.6		
as above	Point of Entry Sodium	Jan 16	100,000		ug/L
		Apr 3	120,000		
		Jul 3	110,000		
		Oct 1	100,000		

**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	Jan 16	<1	ug/L	No
Arsenic	Jan 16	<1	ug/L	No
Barium	Jan 16	360	ug/L	No
Boron	Jan 16	730	ug/L	No
Cadmium	Jan 16	<0.1	ug/L	No
Chromium	Jan 16	<5	ug/L	No
Lead	Jan 16	0.5	ug/L	No
Mercury	Jan 9	<0.0001	mg/L	No
Selenium	Jan 16	<2	ug/L	No
Sodium Next reportable date: Sept 1, 2009	Oct 1	100	mg/L	Reported Sept 01, 2004 AWQI32335
Uranium	Jan 16	<0.2	ug/L	No
Fluoride Next reportable date: May 3, 2010	Oct 1	1.6	mg/L	Reported May 03, 2005 AWQI54224
Nitrite	Oct 1	<0.01	mg/L	No
Nitrate	Oct 1	<0.1	mg/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
Alachlor	Jan 9	<0.5	ug/L	No
Aldicarb	Jan 9	<5.0	ug/L	No
Aldrin + Dieldrin	Jan 9	<0.012	ug/L	No
Atrazine + N-dealkylated metabolites	Jan 9	<1.0	ug/L	No
Azinphos-methyl	Jan 9	<2	ug/L	No
Bendiocarb	Jan 9	<2.0	ug/L	No
Benzene	Jan 9	<0.1	ug/L	No
Benzo(a)pyrene	Jan 9	<0.0090	ug/L	No
Bromoxynil	Jan 9	<0.50	ug/L	No
Carbaryl	Jan 9	<5.0	ug/L	No
Carbofuran	Jan 9	<5.0	ug/L	No
Carbon Tetrachloride	Jan 9	<0.1	ug/L	No
Chlordane (Total)	Jan 9	<0.012	ug/L	No
Chlorpyrifos	Jan 9	<1.0	ug/L	No

Cyanazine	Jan 9	<1.0	ug/L	No
Diazinon	Jan 9	<1.0	ug/L	No
Dicamba	Jan 9	<1.0	ug/L	No
1,2-Dichlorobenzene	Jan 9	<0.2	ug/L	No
1,4-Dichlorobenzene	Jan 9	<0.2	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 9	<0.024	ug/L	No
1,2-Dichloroethane	Jan 9	<0.1	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 9	<0.1	ug/L	No
Dichloromethane	Jan 9	<0.5	ug/L	No
2-4 Dichlorophenol	Jan 9	<0.50	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 9	<1.0	ug/L	No
Diclofop-methyl	Jan 9	<0.90	ug/L	No
Dimethoate	Jan 9	<2.5	ug/L	No
Dinoseb	Jan 9	<1.0	ug/L	No
Diquat	Jan 9	<7	ug/L	No
Diuron	Jan 9	<10	ug/L	No
Glyphosate	Jan 9	<10	ug/L	No
Heptachlor + Heptachlor Epoxide	Jan 9	<0.012	ug/L	No
Lindane (Total)	Jan 9	<0.006	ug/L	No
Malathion	Jan 9	<5.0	ug/L	No
Methoxychlor	Jan 9	<0.024	ug/L	No
Metolachlor	Jan 9	<0.50	ug/L	No
Metribuzin	Jan 9	<5.0	ug/L	No
Monochlorobenzene	Jan 9	<0.1	ug/L	No
Paraquat	Jan 9	<1	ug/L	No
Parathion	Jan 9	<1.0	ug/L	No
Pentachlorophenol	Jan 9	<0.50	ug/L	No
Phorate	Jan 9	<0.50	ug/L	No
Picloram	Jan 9	<5.0	ug/L	No
Polychlorinated Biphenyls(PCB)	Jan 9	<0.05	ug/L	No
Prometryne	Jan 9	<0.25	ug/L	No
Simazine	Jan 9	<1.0	ug/L	No
THM (NOTE: show latest annual average)	Jan 9 Apr 3 Jul 3 Oct 1 Avg '07	80.7 60.8 97.1 108 86.65	ug/L	No
Temphos	Jan 9	<10	ug/L	No
Terbufos	Jan 9	<0.70	ug/L	No
Tetrachloroethylene	Jan 9	<0.1	ug/L	No
2,3,4,6-Tetrachlorophenol	Jan 9	<0.50	ug/L	No

Triallate	Jan 9	<1.0	ug/L	No
Trichloroethylene	Jan 9	<0.1	ug/L	No
2,4,6-Trichlorophenol	Jan 9	<0.50	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan 9	<1.0	ug/L	No
Trifluralin	Jan 9	<1.0	ug/L	No
Vinyl Chloride	Jan 9	<0.2	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	Date of Sample 2007	Result	Unit of Measure
<b>Fluoride</b>	Jan 9	1.7	mg/L
	Apr 3	1.3	mg/L
	Jul 3	1.5	mg/L
	Oct 1	1.6	mg/L
<b>Sodium</b>	Jan 16	100,000	ug/L
	Apr 3	120,000	ug/L
	Apr 16	100,000	ug/L
	Jul 3	110,000	ug/L
	Oct 1	100,000	ug/L
<b>THMs</b>	2007 four quarter moving annual average	86.7	Ug/L

**(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)**