



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220003332
Drinking-Water System Name:	Wheatley Water System
Drinking-Water System Owner:	Municipality of Chatham-Kent
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1- 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 [X] No []</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;"> <p>Chatham-Kent P.U.C. 325 Grand Ave. East P.O. Box 1191 Chatham, ON N7M 5L8</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <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:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">N/A</div> <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
3 rd & 4 th Concession Waterline Assoc.	260086203
Richardson Sideroad Waterline Assoc.	260086190
Cedar Inn Waterline Assoc.	260086177
Tecumseh Road Waterline Assoc.	260086151
Tilbury Townline Waterline Assoc.	260086164
3 rd Concession Waterline Assoc.	260086125
KOA Waterline Assoc.	260086138



Tilbury Golf & Curling Waterline Assoc	260086333
Leamington (Wheatley) Distribution System	260087048
Lighthouse Cove Distribution System	260003864

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 [X] 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 Wheatley Water Treatment Plant draws its water from Lake Erie, which is a surface water source. Large debris is screened out of the raw water as it is drawn into the treatment plant from the lake. Chlorine is added to the raw intake to control the growth of zebra mussels within the intake pipe. The raw water then passes through a 35-micron micro-strainer to remove algae and other fine particles. Aluminum sulphate and Polymer are added to achieve more effective settling in the clarifier. Activated carbon is added in the clarifier and is primarily used to remove dissolved organic matter that causes taste, odor and color in drinking water. The water then passes through the gravity filters into the clearwell, where it is disinfected with chlorine before being pumped into the distribution system. The distribution system pressure is regulated by an elevated storage tower in Wheatley, with a capacity of 1525 m3. The elevated storage tower in the community of Tilbury has a capacity of 5909 m3.

List all water treatment chemicals used over this reporting period

Gas Chlorine, Aluminum Sulphate (liquid), Activated Carbon, and Betz Dearborn Klar-Aid IC1179 (Polymer).

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Please provide a brief description and a breakdown of monetary expenses incurred

VFD Installation – Low Lift Pumps - \$16,000

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
Jan 6/09	Benzo(a) pyrene	0.02	ug/L	Re-sample	Jan 15/09

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	52	0 - 29	5 - 1670	0	0
Treated	52	0	0	52	0 - 10
Distribution	612	0	0	444	10 - 40

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	0.02 – 2.00
Chlorine	8760	1.20 – 1.82
Fluoride (If the DWS provides fluoridation)	0	0

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
C of A 4153-6QDJ2A	Suspended Solids	January	13	mg/L
07 Jul 2006		February	5	mg/L



	March	13	mg/L
	April	10	mg/L
	May	7	mg/L
	June	5	mg/L
	July	2	mg/L
	August	10	mg/L
	September	10	mg/L
	October	10	mg/L
	November	10	mg/L
	December	10	mg/L

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	Aug 10/09	<0.5	ug/L	No
Arsenic	Aug 10/09	<1	ug/L	No
Barium	Aug 10/09	23	ug/L	No
Boron	Aug 10/09	34	ug/L	No
Cadmium	Aug 10/09	<0.1	ug/L	No
Chromium	Aug 10/09	<5	ug/L	No
*Lead	Aug 10/09	<0.5	ug/L	No
Mercury	Aug 10/09	<0.001	ug/L	No
Selenium	Aug 10/09	<2	ug/L	No
Sodium	Aug 10/09	9500	ug/L	No
Uranium	Aug 10/09	<0.1	ug/L	No
Fluoride	Aug 10/09	0.1	mg/L	No
Nitrite	Aug 10/09	<0.01	mg/L	No
Nitrate	Aug 10/09	0.2	mg/L	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	52	0.5 – 4.4	0
Distribution	43	0.5 – 10.0	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	Aug 10/09	<0.5	ug/L	No
Aldicarb	Aug 10/09	<5	ug/L	No
Aldrin + Dieldrin	Aug 10/09	<0.01	ug/L	No



Atrazine + N-dealkylated metabolites	Aug 10/09	<1	ug/L	No
Azinphos-methyl	Aug 10/09	<2	ug/L	No
Bendiocarb	Aug 10/09	<2	ug/L	No
Benzene	Aug 10/09	<0.01	ug/L	No
Benzo(a)pyrene	Aug 10/09	<0.009	ug/L	No
Bromoxynil	Aug 10/09	<0.5	ug/L	No
Carbaryl	Aug 10/09	<5	ug/L	No
Carbofuran	Aug 10/09	<5	ug/L	No
Carbon Tetrachloride	Aug 10/09	<0.1	ug/L	No
Chlordane (Total)	Aug 10/09	<0.01	ug/L	No
Chlorpyrifos	Aug 10/09	<1	ug/L	No
Cyanazine	Aug 10/09	<1	ug/L	No
Diazinon	Aug 10/09	<1	ug/L	No
Dicamba	Aug 10/09	<1	ug/L	No
1,2-Dichlorobenzene	Aug 10/09	<0.2	ug/L	No
1,4-Dichlorobenzene	Aug 10/09	<0.2	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Aug 10/09	<0.2	ug/L	No
1,2-Dichloroethane	Aug 10/09	<0.2	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Aug 10/09	<0.1	ug/L	No
Dichloromethane	Aug 10/09	<0.5	ug/L	No
2-4 Dichlorophenol	Aug 10/09	<0.5	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Aug 10/09	<1	ug/L	No
Diclofop-methyl	Aug 10/09	<0.9	ug/L	No
Dimethoate	Aug 10/09	<3	ug/L	No
Dinoseb	Aug 10/09	<1	ug/L	No
Diquat	Aug 10/09	<7	ug/L	No
Diuron	Aug 10/09	<10	ug/L	No
Glyphosate	Aug 10/09	<10	ug/L	No
Heptachlor + Heptachlor Epoxide	Aug 10/09	<0.006	ug/L	No
Lindane (Total)	Aug 10/09	<0.006	ug/L	No
Malathion	Aug 10/09	<5	ug/L	No
Methoxychlor	Aug 10/09	<0.02	ug/L	No
Metolachlor	Aug 10/09	<0.5	ug/L	No
Metribuzin	Aug 10/09	<5	ug/L	No
Monochlorobenzene	Aug 10/09	<0.1	ug/L	No
Paraquat	Aug 10/09	<1	ug/L	No
Parathion	Aug 10/09	<1	ug/L	No
Pentachlorophenol	Aug 10/09	<0.5	ug/L	No
Phorate	Aug 10/09	<0.5	ug/L	No
Picloram	Aug 10/09	<5	ug/L	No
Polychlorinated Biphenyls(PCB)	Aug 10/09	<0.5	ug/L	No
Prometryne	Aug 10/09	<0.3	ug/L	No
Simazine	Aug 10/09	<1	ug/L	No
THM (NOTE: show latest annual average)	Average 2009	37.5	ug/L	No
Temephos	Aug 10/09	<10	ug/L	No
Terbufos	Aug 10/09	<0.5	ug/L	No
Tetrachloroethylene	Aug 10/09	<0.1	ug/L	No
2,3,4,6-Tetrachlorophenol	Aug 10/09	<0.5	ug/L	No
Triallate	Aug 10/09	<1	ug/L	No



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Trichloroethylene	Aug 10/09	<0.1	ug/L	No
2,4,6-Trichlorophenol	Aug 10/09	<0.5	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Aug 10/09	<1	ug/L	No
Trifluralin	Aug 10/09	<1	ug/L	No
Vinyl Chloride	Aug 10/09	<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	Result Value	Unit of Measure	Date of Sample