

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

<b>Drinking-Water System Number:</b>	220003332
<b>Drinking-Water System Name:</b>	Wheatley Water 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 1- December 31, 2006

<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 P.U.C.                  325 Grand Ave.East                  P.O. Box 1191                  Chatham, ON                  N7M 5L8             </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">N/A</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; padding: 5px; width: fit-content; margin: 0 auto;">N/A</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
A portion of Mersea Township	220004992
A portion of Lakeshore Township	260004995

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 cause taste, odor and color in drinking water. The water then passes through the gravity filters into the clearwell, where is it disinfected with Chlorine before being pumped into the distribution system. The Distribution System pressure is regulated by an elevated storage tower with a capacity of 1525 m3.

The Wheatley Water Treatment Plant has completed a major construction project which included a Transmission Main to supply the community of Tilbury and surrounding area.

**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

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

In the year 2006, the Wheatley WTP had various maintenance expenses:

- |                               |             |
|-------------------------------|-------------|
| 1. Chlorine Equipment/Repairs | \$27,415.60 |
| 2. Intake Maintenance         | \$15,194.76 |
| 3. Hach Meter Calibrations    | \$ 4,820.00 |

Chemicals purchased as follows: \$31,867.89 of Alum from General Chemical, \$21,037.35 of KLARAID from GE BETZ, \$2,279.62 of Carbon from Brenntag and \$19,908.74 of Chlorine/Hypo from Brenntag.

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 5/06	Background >200	Background >200	MFU/100	2 consecutive samples, results zero	Jan 7/06

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 - 680	0 - >2000	24	16 - >2000
Treated	52	0	0	24	0 - <10
Distribution	975	0	0	518	0 - 100

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 – 1.88 (<15min)
Chlorine	8760	0.18 – 2.03
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
Backwash Suspended Solids	S.S.	January	3	mg/L
Backwash Suspended Solids	S.S.	February	8	mg/L
Backwash Suspended Solids	S.S.	March	8	mg/L
Backwash Suspended Solids	S.S.	April	9	mg/L
Backwash Suspended Solids	S.S.	May	9	mg/L

Backwash Suspended Solids	S.S.	June	8	mg/L
Backwash Suspended Solids	S.S.	July	11	mg/L
Backwash Suspended Solids	S.S.	August	10	mg/L
Backwash Suspended Solids	S.S.	September	14	mg/L
Backwash Suspended Solids	S.S.	October	38	mg/L
Backwash Suspended Solids	S.S.	November	7	mg/L
Backwash Suspended Solids	S.S.	December	9	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	Exceedence
Antimony	November 13/06	<1	ug/L	No
Arsenic	November 13/06	<1	ug/L	No
Barium	November 13/06	19	ug/L	No
Boron	November 13/06	25	ug/L	No
Cadmium	November 13/06	<0.1	ug/L	No
Chromium	November 13/06	<5	ug/L	No
Lead	November 13/06	<0.5	ug/L	No
Mercury	November 13/06	<0.0001	mg/L	No
Selenium	November 13/06	<2	ug/L	No
Sodium	November 13/06	9100	ug/L	No
Uranium	November 13/06	<0.2	ug/L	No
Fluoride	March 14/06	0.1	mg/L	No
Nitrite	November 13/06	<0.1	mg/L	No
Nitrate	November 13/06	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	Exceedence
Alachlor	March 14/06	<0.50	ug/L	No
Aldicarb	March 14/06	<5.0	ug/L	No
Aldrin + Dieldrin	March 14/06	<0.012	ug/L	No
Atrazine + N-dealkylated metabolites	March 14/06	<1.0	ug/L	No
Azinphos-methyl	March 14/06	<2	ug/L	No
Bendiocarb	March 14/06	<2.0	ug/L	No
Benzene	March 14/06	<0.1	ug/L	No
Benzo(a)pyrene	March 14/06	<0.0090	ug/L	No
Bromoxynil	March 14/06	<0.50	ug/L	No
Carbaryl	March 14/06	<5.0	ug/L	No
Carbofuran	March 14/06	<5.0	ug/L	No
Carbon Tetrachloride	March 14/06	<0.1	ug/L	No
Chlordane (Total)	March 14/06	<0.012	ug/L	No
Chlorpyrifos	March 14/06	<1.0	ug/L	No
Cyanazine	March 14/06	<1.0	ug/L	No
Diazinon	March 14/06	<1.0	ug/L	No
Dicamba	March 14/06	<1.0	ug/L	No
1,2-Dichlorobenzene	March 14/06	<0.2	ug/L	No

1,4-Dichlorobenzene	March 14/06	<0.2	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	March 14/06	<0.024	ug/L	No
1,2-Dichloroethane	March 14/06	<0.2	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	March 14/06	<0.1	ug/L	No
Dichloromethane	March 14/06	1.9	ug/L	No
2-4 Dichlorophenol	March 14/06	<0.50	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	March 14/06	<1.0	ug/L	No
Diclofop-methyl	March 14/06	<0.90	ug/L	No
Dimethoate	March 14/06	<2.5	ug/L	No
Dinoseb	March 14/06	<1.0	ug/L	No
Diquat	March 14/06	<7	ug/L	No
Diuron	March 14/06	<10	ug/L	No
Glyphosate	March 14/06	<10	ug/L	No
Heptachlor + Heptachlor Epoxide	March 14/06	<0.012	ug/L	No
Lindane (Total)	March 14/06	<0.006	ug/L	No
Malathion	March 14/06	<5.0	ug/L	No
Methoxychlor	March 14/06	<0.024	ug/L	No
Metolachlor	March 14/06	<0.50	ug/L	No
Metribuzin	March 14/06	<5.0	ug/L	No
Monochlorobenzene	March 14/06	<0.1	ug/L	No
Paraquat	March 14/06	<1	ug/L	No
Parathion	March 14/06	<1.0	ug/L	No
Pentachlorophenol	March 14/06	<0.50	ug/L	No
Phorate	March 14/06	<0.50	ug/L	No
Picloram	March 14/06	<5.0	ug/L	No
Polychlorinated Biphenyls(PCB)	March 14/06	<0.05	ug/L	No
Prometryne	March 14/06	<0.25	ug/L	No
Simazine	March 14/06	<1.0	ug/L	No
THM (show latest annual average)	March 14/06		ug/L	No
Temephos	March 14/06	<10	ug/L	No
Terbufos	March 14/06	<0.70	ug/L	No
Tetrachloroethylene	March 14/06	<0.1	ug/L	No
2,3,4,6-Tetrachlorophenol	March 14/06	<0.50	ug/L	No
Triallate	March 14/06	<1.0	ug/L	No
Trichloroethylene	March 14/06	<0.1	ug/L	No
2,4,6-Trichlorophenol	March 14/06	<0.50	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	March 14/06	<1.0	ug/L	No
Trifluralin	March 14/06	<1.0	ug/L	No
Vinyl Chloride	March 14/06	<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
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**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)**