



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220003378
Drinking-Water System Name:	Chatham Water System
Drinking-Water System Owner:	Municipality of Chatham-Kent
Drinking-Water System Category:	Large Municipal
Period being reported:	January 1 – December 31, 2008

<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 <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Number of Interested Authorities you report to: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input type="checkbox"/></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

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 Chatham Water Treatment Plant receives its raw water from the Kent County Raw Pumping Station. It utilizes the same raw water pumping station as the South-Kent WTP. The Raw Pumping Station supplies the water from Lake Erie to the stand pipe in Cedar Springs, and then flows to Chatham.

The process after upgrades includes: intake, screening, low lift pumping (raw water) surge tower, Actiflo micro-sand ballasted clarifiers (coagulation, injection of micro- sand and clarification), low lift pumping (settled water pumping), and filtration, treated water storage and high lift pumping. The distribution system includes 6 elevated tanks (Chatham, Paincourt, Mitchell’s Bay, Ebert’s, Dresden and Thamesville). Fluoride is also added to the water to prevent tooth decay.

Residue management process includes: equalization, flocculation, clarification, thickening and dewatering. The supernant from the clarifiers is discharged into the Thames River after dechlorination. A plate press is used for biosolids removal.

List all water treatment chemicals used over this reporting period

Gas Chlorine, Fluoride, Poly-Aluminum Chloride, Sodium-metasulphate.

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 2008, the Chatham WTP had the following maintenance expenses:

1. Boiler Replacement - \$33,948.00
2. Reservoir Hatches - \$20,800.00
3. Rotork & Eramosa Filter/Scada Upgrade - \$82,000.00

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
February 12	Lead Distribution Adverse	28.00	ug/L	Resample	February 29
February 13	Lead Distribution Adverse	11.00	ug/L	Resample	February 29
February 13	Lead Distribution Adverse	25.00	ug/L	Resample	February 29
February 13	Lead Distribution Adverse	18.00	ug/L	Resample	February 29



February 14	Lead Distribution Adverse	24.00	ug/L	Resample	February 29
February 20	Lead Distribution Adverse	19.00	ug/L	Resample	March 4
June 17	Lead Distribution Adverse	210.00	ug/L	Resample	July 9
June 25	Lead Distribution Adverse	14.00	ug/L	Resample and replace Fire Hydrant – June 17 & June 25 linked together	July 9

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	0-100	0-640	0	0
Treated	52	0	0	26	0-30
Distribution	1008	0	0	504	0-230

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	0.02-0.96
Chlorine	8760	1.18-2.26
Fluoride (If the DWS provides fluoridation)	8760	0.36-1.10

***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
Appended				

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	December 4/08	ND	ug/L	No
Arsenic	December 4/08	ND	ug/L	No
Barium	December 4/08	17	ug/L	No

Boron	December 4/08	20	ug/L	No
Cadmium	December 4/08	ND	ug/L	No
Chromium	December 4/08	ND	ug/L	No
*Lead				
Mercury	September 10/08	ND	ug/L	No
Selenium	December 4/08	ND	ug/L	No
Sodium	December 4/08	8000	ug/L	No
Uranium	December 4/08	ND	ug/L	No
Fluoride	November 18/08	0.5	mg/L	No
Nitrite	November 18/08	ND	mg/L	No
Nitrate	November 18/08	0.1	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	276	0.50-2.20	0
Distribution	85	0-210	8

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	September 10/08	ND	ug/L	No
Aldicarb	September 10/08	ND	ug/L	No
Aldrin + Dieldrin	September 10/08	ND	ug/L	No
Atrazine + N-dealkylated metabolites	September 10/08	ND	ug/L	No
Azinphos-methyl	September 10/08	ND	ug/L	No
Bendiocarb	September 10/08	ND	ug/L	No
Benzene	September 10/08	ND	ug/L	No
Benzo(a)pyrene	September 10/08	ND	ug/L	No
Bromoxynil	September 10/08	ND	ug/L	No
Carbaryl	September 10/08	ND	ug/L	No
Carbofuran	September 10/08	ND	ug/L	No
Carbon Tetrachloride	September 10/08	ND	ug/L	No
Chlordane (Total)	September 10/08	ND	ug/L	No
Chlorpyrifos	September 10/08	ND	ug/L	No
Cyanazine	September 10/08	ND	ug/L	No
Diazinon	September 10/08	ND	ug/L	No
Dicamba	September 10/08	ND	ug/L	No
1,2-Dichlorobenzene	September 10/08	ND	ug/L	No
1,4-Dichlorobenzene	September 10/08	0.045	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	September 10/08	ND	ug/L	No



1,2-Dichloroethane	September 10/08	ND	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	September 10/08	ND	ug/L	No
Dichloromethane	September 10/08	ND	ug/L	No
2-4 Dichlorophenol	September 10/08	ND	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	September 10/08	ND	ug/L	No
Diclofop-methyl	September 10/08	ND	ug/L	No
Dimethoate	September 10/08	ND	ug/L	No
Dinoseb	September 10/08	ND	ug/L	No
Diquat	September 10/08	ND	ug/L	No
Diuron	September 10/08	ND	ug/L	No
Glyphosate	September 10/08	ND	ug/L	No
Heptachlor + Heptachlor Epoxide	September 10/08	ND	ug/L	No
Lindane (Total)	September 10/08	ND	ug/L	No
Malathion	September 10/08	ND	ug/L	No
Methoxychlor	September 10/08	ND	ug/L	No
Metolachlor	September 10/08	ND	ug/L	No
Metribuzin	September 10/08	ND	ug/L	No
Monochlorobenzene	September 10/08	ND	ug/L	No
Paraquat	September 10/08	ND	ug/L	No
Parathion	September 10/08	ND	ug/L	No
Pentachlorophenol	September 10/08	ND	ug/L	No
Phorate	September 10/08	ND	ug/L	No
Picloram	September 10/08	ND	ug/L	No
Polychlorinated Biphenyls(PCB)	September 10/08	ND	ug/L	No
Prometryne	September 10/08	ND	ug/L	No
Simazine	September 10/08	ND	ug/L	No
THM (NOTE: show latest annual average)	Annual Average	42.1	ug/L	No
Temephos	September 10/08	ND	ug/L	No
Terbufos	September 10/08	ND	ug/L	No
Tetrachloroethylene	September 10/08	ND	ug/L	No
2,3,4,6-Tetrachlorophenol	September 10/08	ND	ug/L	No
Triallate	September 10/08	ND	ug/L	No
Trichloroethylene	September 10/08	ND	ug/L	No
2,4,6-Trichlorophenol	September 10/08	ND	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	September 10/08	ND	ug/L	No
Trifluralin	September 10/08	ND	ug/L	No
Vinyl Chloride	September 10/08	ND	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