



WATER QUALITY 2003 ANNUAL REPORTS

St. Clair Water Distribution System 2003 Annual Report

Attached is a copy of the Township of St. Clair Water Distribution System 2003 Annual Report, Part III Form 2 Section 11, as required under Regulation 170/03 and the Safe Drinking Water Act. Copies of the report are available at the Township office, 1155 Emily Street, Mooretown, Ontario, N0N 1M0. The annual report and previous quarterly reports may also be viewed on the Township web site at <http://www.twp.stclair.on.ca/>. If you have any questions concerning this report please contact the Public Works Department at 519-867-2125.

Lambton Area Water Supply System (LAWSS) 2003 Annual Report

A copy of the 2003 LAWSS Annual Report is also available for inspection at the Township office. This report and previous quarterly reports will also be available for viewing on the LAWSS website at <http://www.rivernet.net/~lawss/>. These reports may also be obtained free of charge from LAWSS at:

Lambton Area Water Supply
1215 Fort St
Sarnia, Ontario, Canada
N7T 7J9

519-344-7429

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

Drinking-Water System Number:	260006464
Drinking-Water System Name:	St. Clair Township Distribution System
Drinking-Water System Owner:	The Corporation of the Township of St. Clair
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	April 1 – December 31, 2003

<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 []</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 []</p> <p>Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>St. Clair Civic Center 1155 Emily Street Mooretown, Ontario</p> </div>	<p><u>Complete for all other Categories.</u></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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List Drinking-Water Systems, which receive all of their drinking water from your system:

<p>Chatham-Kent (St.Clair Parkway) System St. Clair Parkway Commission Campground at Branton – Cundick Park St. Clair Parkway Commission Campground at Cathcart Park Fawn Island Owners Association</p>

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 Corporation of the Township of St. Clair operates the St. Clair Distribution System which consists of the Brigden Elevated Water Tower and the distribution watermains of the Township of St. Clair. The St. Clair Distribution System receives the majority of its water directly from the Lambton Area Water Supply System (LAWSS). The extreme northwest corner of the township receives its water from the LAWSS system through the City of Sarnia Distribution System. The LAWSS water treatment plant is located at the junction of Lake Huron and the St. Clair River in the City of Sarnia. Prior to distribution, the Lambton WTP adds chlorine and fluoride to the finished water. The water is re-chlorinated at White Line and the Sombra Water Tower for maintaining the free chlorine residual in the LAWSS distribution system. The water is re-chlorinated at the Brigden Elevated Water Tower for maintaining the free chlorine residual in the St. Clair 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

Describe

-Install a standby chemical metering pump at the Brigden Elevated Water Tower.
-Automate the chemical metering pumps so that they provide flow paced control of Sodium Hypochlorite feed at the Brigden Elevated Water Tower.
-Upgrade SCADA system to monitor free chlorine residual, water flow, high/low chlorine residual and low reservoir level at the Brigden Elevated Water Tower, as per C. of A. # 3083-5PWNZA.

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

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
May 22/03	Background Count	500	ct/100ml	resample/retest	May 22/03
Dec 30/03	Total Coliform	1	ct/100ml	resample/retest	Dec 31/03

Microbiological testing done under section 8 (2) during this reporting period

	Number of Samples	Range of E.Coli or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC BKG (Background Colony Counts) Samples	Range of HPC BKG Results (#-#)
Raw					
Treated					
Distribution	378	0-0	0-1	378	0-500

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#)
Turbidity		
Chlorine	171	0.50-1.33
Fluoride (If the DWS provides fluoridation)		

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 or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
Lead	April 11/03	.0018	mg/L	No
Mercury				
Selenium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

Summary of Organic parameters sampled during this reporting period or most recent

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4-Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Linadane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Promethyne				
Simazine				
THM (NOTE: show latest quarterly average)	Jan –Dec /03	0.038	mg/L	No
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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

(Only if category is large municipal residential, small municipal residential, large municipal non residential, small municipal non residential, large non municipal non residential)