

ANNUAL REPORT (Section 11)

Drinking-Water System Number:	210000149
Drinking-Water System Name:	Amherstburg Water Treatment Plant
Drinking-Water System Owner:	Corporation of the Town of Amherstburg
Drinking-Water System Category:	Large municipal residential system
Period being reported:	January 1, 2009 to 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 [<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 Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <table border="1" style="width: 100%;"> <tr> <td>Amherstburg Water Treatment Plant Town of Amherstburg</td> </tr> </table>	Amherstburg Water Treatment Plant Town of Amherstburg	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <table border="1" style="width: 100%;"> <tr> <td style="height: 20px;"></td> </tr> </table> <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> <table border="1" style="width: 100%;"> <tr> <td style="width: 100px; height: 20px;"></td> </tr> </table> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>		
Amherstburg Water Treatment Plant Town of Amherstburg				

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

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

A surface water treatment plant, with a rated capacity of 18,184 cubic meters per day, consisting of:

1. An intake crib 155 meters into the Detroit River and connected through a 900mm pipe to the Low Lift Pumping Station.
2. A low lift pumping station equipped with wet well, three vertical turbine pumps, a coarse bar screen, an automatic traveling screen and two 50mm chlorine solution feed lines and a chlorine diffuser.
3. A solids-contact upflow clarifier with overflow chamber, chemical feed line, sludge blow off line, sludge scraper and recirculation system.
4. Four rapid sand filters with dual media of anthracite and silica sand including a backwash system.
5. A filter effluent clearwell with transfer conduit to the reservoir.
6. A 14900m³ underground storage reservoir.
7. A high lift pumping station equipped with three vertical turbine pumps, a fluoride feed line/diffuser, a chlorine solution feed line/diffuser and a filter backwash pump.

List all water treatment chemicals used over this reporting period

1. Aluminum Sulphate
2. Powdered Activated carbon
3. Chlorine gas
4. Hydrofluosilicic acid
5. Polymer (Nalco 8103)
6. Polymer (Nalco 8184)
7. Polymer (Nalco 8181)

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

<p>Installed:</p> <ul style="list-style-type: none"> 1) Upgrade lighting in Low Lift room - \$2,362.50 2) Fluoride Analyzer - \$1,067.12 3) CL-17 Analyzer - \$4,501.92 4) Chlorination Line - \$8,279.25 5) Platform for Clarifier motor drive - \$3,255.00 6) 3" Pneumatic butterfly valve - \$4,294.50 7) 4" Pneumatic butterfly valve - \$4,987.50 8) Alum rebuild kit - \$1,563.85 <p>Repaired:</p> <ul style="list-style-type: none"> 1) Johnson Low Lift pump - \$23,277.71 2) 4 Gate cylinders - \$1,718.05 3) Rebuild valve - \$5,151.11 4) Clarifier pit access ladder - \$1,993.56 5) Alum room access ladder - \$2,152.50 6) Plant generator repairs - \$3,634.05 7) Water proofing of Fluoride tank - \$2,992.50 8) CL-17 repairs - \$1,476.42 9) DR2800 repairs - \$2,116.40 10) Polymer pump repair parts - \$2,942.52 11) Substation maintenance - \$2,400.00 <p>Replaced:</p> <ul style="list-style-type: none"> 1) Gate valves - \$1,540.06 2) 16" gate valve - \$4,305.00 3) Vacuum regulator - \$3,168.94 4) Phone lines - \$6,884.69

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

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
04/16/2009	Peak Flow Rate	Exceedance	l/m	PTTW (#3750-7FAHRN) criteria have been posted above Low Lift controller to ensure compliance.	04/17/2009

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

	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 #)	Number of Background Samples	Range of Background Results (min #)-(max #)
Raw	52	6-700	50-14,300	0	0-0	52	200-16,800
Treated	52	0-0	0-0	52	0-11	52	0-0
Distribution	416	0-0	0 - 0	212	0-200	416	0 - 11

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 – 0.41 NTU
Chlorine	8760	0.62 – 1.62 mg/L
Fluoride (If the DWS provides fluoridation)	8760	0.12 – 1.01 mg/L

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 #0896-7JHHW8 Dated on 09/22/2008	Nitritotriacetic Acid	07/13/2009	<0.03	mg/L
	Backwash/wastewater			
	Suspended Solid	12/03/2009	273	mg/L
	Free Chlorine	12/03/2009	0.09	mg/L
	Suspended Solid	11/11/2009	357	mg/L
	Free Chlorine	11/11/2009	0.36	mg/L
	Suspended Solid	10/06/2009	530	mg/L
	Free Chlorine	10/06/2009	0.05	mg/L
	Suspended Solid	09/01/2009	278	mg/L
	Free Chlorine	09/01/2009	0.07	mg/L
	Suspended Solid	08/10/2009	1520	mg/L
	Free Chlorine	08/10/2009	0.31	mg/L
	Suspended Solid	07/14/2009	176	mg/L
	Free Chlorine	07/14/2009	0.83	mg/L

	Suspended Solid	06/01/2009	612	mg/L
	Free Chlorine	06/01/2009	0.12	mg/L
	Suspended Solid	05/05/2009	74	mg/L
	Free Chlorine	05/05/2009	0.94	mg/L
	Suspended Solid	04/29/2009	322	mg/L
	Free Chlorine	04/29/2009	0.23	mg/L
	Suspended Solid	03/02/2009	67	mg/L
	Free Chlorine	03/02/2009	0.24	mg/L
	Suspended Solid	02/04/2009	105	mg/L
	Free Chlorine	02/04/2009	0.20	mg/L
	Suspended Solid	01/031/2009	133	mg/L
	Free Chlorine	01/031/2009	0.25	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	07/13/2009	0.12	µg/L	No
Arsenic	07/13/2009	0.6	µg/L	No
Barium	07/13/2009	14.5	µg/L	No
Boron	07/13/2009	17.9	µg/L	No
Cadmium	07/13/2009	0.004	µg/L	No
Chromium	07/13/2009	0.5	µg/L	No
Lead	07/13/2009	0.72(dist.sys.)	µg/L	No
Mercury	07/13/2009	0.03	µg/L	No
Selenium	07/13/2009	<1	µg/L	No
Sodium	07/13/2009	5.90	µg/L	No
Uranium	07/13/2009	0.015	µg/L	No
Fluoride	07/13/2009	0.27	mg/L	No
Nitrite	10/13/2009	<0.005	mg/L	No
	07/14/2009	<0.005		
	04/07/2009	<0.005		
	01/06/2009	<0.005		
Nitrate	10/13/2009	0.233	mg/L	No
	07/14/2009	0.350		
	04/07/2009	0.614		
	01/06/2009	0.985		

*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	268	0.00006 mg/L- Min 0.0108 mg/L- Max	1
Distribution	29	0.0001mg/L-Min 0.00112mg/L-Max	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	07/13/2009	<0.11	µg/L	No
Aldicarb	07/13/2009	<0.30	µg/L	No
Aldrin + Dieldrin	07/13/2009	<0.067	µg/L	No
Atrazine + N-dealkylated metabolites	07/13/2009	<0.14	µg/L	No
Azinphos-methyl	07/13/2009	<0.21	µg/L	No
Bendiocarb	07/13/2009	<0.13	µg/L	No
Benzene	07/13/2009	<0.32	µg/L	No
Benzo(a)pyrene	07/13/2009	<0.004	µg/L	No
Bromoxynil	07/13/2009	<0.33	µg/L	No
Carbaryl	07/13/2009	<0.16	µg/L	No
Carbofuran	07/13/2009	<0.37	µg/L	No
Carbon Tetrachloride	07/13/2009	<0.16	µg/L	No
Chlordane (Total)	07/13/2009	<0.11	µg/L	No
Chlorpyrifos	07/13/2009	<0.18	µg/L	No
Cyanazine	07/13/2009	<0.18	µg/L	No
Diazinon	07/13/2009	<0.081	µg/L	No
Dicamba	07/13/2009	<0.20	µg/L	No
1,2-Dichlorobenzene	07/13/2009	<0.41	µg/L	No
1,4-Dichlorobenzene	07/13/2009	<0.36	µg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	07/13/2009	<0.14	µg/L	No
1,2-Dichloroethane	07/13/2009	<0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	07/13/2009	<0.33	µg/L	No
Dichloromethane	07/13/2009	<0.35	µg/L	No
2-4 Dichlorophenol	07/13/2009	<0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	07/13/2009	<0.19	µg/L	No
Diclofop-methyl	07/13/2009	<0.40	µg/L	No
Dimethoate	07/13/2009	<0.12	µg/L	No

Dinoseb	07/13/2009	<0.36	µg/L	No
Diquat	07/13/2009	<1	µg/L	No
Diuron	07/13/2009	<0.087	µg/L	No
Glyphosate	07/13/2009	<6	µg/L	No
Heptachlor + Heptachlor Epoxide	07/13/2009	<0.11	µg/L	No
Linadane (Total)	07/13/2009	<0.056	µg/L	No
Malathion	07/13/2009	<0.091	µg/L	No
Methoxychlor	07/13/2009	<0.14	µg/L	No
Metolachlor	07/13/2009	<0.092	µg/L	No
Metribuzin	07/13/2009	<0.12	µg/L	No
Monochlorobenzene	07/13/2009	<0.30	µg/L	No
Paraquat	07/13/2009	<1	µg/L	No
Parathion	07/13/2009	<0.18	µg/L	No
Pentachlorophenol	07/13/2009	<0.15	µg/L	No
Phorate	07/13/2009	<0.11	µg/L	No
Picloram	07/13/2009	<0.25	µg/L	No
Polychlorinated Biphenyls(PCB)	07/13/2009	<0.04	µg/L	No
Prometryne	07/13/2009	<0.23	µg/L	No
Simazine	07/13/2009	<0.15	µg/L	No
THM (NOTE: show latest annual average)	2009	26.8 (Dist.Sys.)	µg/L	No
Temephos	07/13/2009	<0.31	µg/L	No
Terbufos	07/13/2009	<0.12	µg/L	No
Tetrachloroethylene	07/13/2009	<0.35	µg/L	No
2,3,4,6-Tetrachlorophenol	07/13/2009	<0.14	µg/L	No
Triallate	07/13/2009	<0.10	µg/L	No
Trichloroethylene	07/13/2009	<0.43	µg/L	No
2,4,6-Trichlorophenol	07/13/2009	<0.25	µg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	07/13/2009	<0.22	µg/L	No
Trifluralin	07/13/2009	<0.12	µg/L	No
Vinyl Chloride	07/13/2009	<0.17	µg/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
None			

(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)