



Annual Summary Report

March 14, 2012

Lou Zarlenga
Manager of Public Services
Corporation of the Town of Amherstburg
P.O. Box 159
271 Sandwich St. S,
Amherstburg, Ontario
Canada N9V 2Z3

Dear Mr. Zarlenga:

Re: Safe Drinking Water Act, O. Reg. 170/03 Schedule 22 Summary Report

Attached is the 2011 Summary Report for the Amherstburg Water Treatment Plant. This report has been completed based on the information obtained from the water treatment plant records and in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act, which requires a Summary Report to be prepared not later than March 31st of each year for the preceding calendar year. This report covers the period of January 1, 2011 to December 31, 2011.

Please remember that any Orders that you have received directly from the MOE should be reviewed. Where non-compliance with the Order is evident and it is not included in the attached 2011 Summary Report, then we recommend that this information be added to the Summary Report. Note: Schedule 22-2 (a) specifies that the summary report is given to, in the case of a drinking water system owned by a municipality, the members of the municipal council for the Town of Amherstburg, and is not intended for distribution to the Ministry of the Environment.

After your review and inclusion of any additional information, these Summary Reports are to be provided to the members of the municipal council. Please ensure this distribution.

Section 12 of O. Reg. 170/03, requires the Summary Reports be made available for inspection by any member of the public during normal business hours, without charge. The reports should be made available for inspection at the office of the municipality, or at a location that is reasonably convenient to the users of the water system.

Please find enclosed reports. If you have any questions, please feel free to contact Manager, Brian LaBute, at (519) 736-5447.

Sincerely,

Dan Mitchell
Process & Compliance Technician
Amherstburg/LaSalle Cluster (Essex West Hub)
Ontario Clean Water Agency

SUMMARY REPORTS FOR MUNICIPALITIES

Report

This report is a summary of water quality information for the Amherstburg WTP, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1, 2011 to December 31, 2011. The Amherstburg WTP is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by The Ontario Clean Water Agency on behalf of The Corporation of the Town of Amherstburg.

Who gets a copy of the Summary Report?

- in the case of a drinking-water system owned by a municipality, the members of the municipal council;
- in the case of a drinking-water system owned by a municipal service board established under section 195 of the *Municipal Act, 2001*, the members of the municipal service board; or
- in the case of a drinking-water system owned by a corporation, the board of directors of the corporation.

What must the Summary Report contain?

The report must,

- (a) list the requirements of the Act, the regulations, the system's approval and any order that the system **failed to meet** at any time during the period covered by the report and specify the duration of the failure; and
- (b) for each failure referred to in clause (a), describe the measures that were taken to correct the failure.

The following table 1 lists the requirements that the system failed to meet and the measures taken to correct the failure:

Table 1

Drinking Water Legislation	List the requirement(s) the system failed to meet	Specify the duration of the failure (i.e. date(s))	Describe the measures taken to correct the failure	Status (complete or outstanding)
Safe Drinking Water Act	None to report	-----	-----	-----
Ontario Regulations (e.g. O.Reg 170/03)	None to report	-----	-----	-----
Municipal Drinking Water License #026-101 System Drinking Water Works Permit #026-201	None to report	-----	-----	-----
Provincial Officer's Order #1-94ROT	None to report	-----	-----	-----

What else must the Summary Report contain?

The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows and daily instantaneous peak flow rates.

Please find attached a copy of the quantities and flow rates of the water withdrawn from the Detroit River and treated/distributed from the Amherstburg WTP during 2011.

2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval.

By comparison, the raw water and treated water flows did not exceed the legislative requirement. No max day treated flow exceeded 80% of the rated treated capacity for the reporting period.

Table 2

Flow	Requirement	Maximum Daily Flow	Requirement	Maximum Flow Rate
2011	Maximum Allowable (per day)	Maximum Achieved (per day)	Maximum Allowable (per minute)	Maximum Achieved (per minute)
Raw Flow	22,900,000 L/d Permit to Take Water (#3750-7FAHRN)	21,968,640 L/d	15,903 L/min Permit to Take Water (#3750-7FAHRN)	15,256 L/min
Treated Flow	18,184 m ³ /d Municipal Drinking Water License #026-101 System Drinking Water Works Permit #026-201	11,951 m ³ /d	_____	_____

When Does the Summary Report Get Submitted?

If a report is prepared for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31.

End



Ontario Clean Water Agency
Monthly Process Data Report

Municipality: Town of Amherstburg formerly (Twp of Malden, Twp of Anderdon, Town of Amherstburg)
 Facility: [5819] - Amherstburg Water Treatment Plant & Distribution System
 Works: [210000149] - Amherstburg Water Treatment Plant & Distribution System
 Classification: Class 2 Water Distribution, Class 3 Water Treatment
 Water Source: Detroit River

Period: 01/01/2011 to 12/31/2011
 Served Population: 20,699
 Total Design Capacity(m³/day): 18,184.0

	Jan/2011	Feb/2011	Mar/2011	Apr/2011	May/2011	Jun/2011	Jul/2011	Aug/2011	Sep/2011	Oct/2011	Nov/2011	Dec/2011	<-- Summary -->
Raw Water/Flows - Raw Water													
Raw Flow: Sum (m3/d)													
Avg	7,355.194	7,506.393	7,146.097	7,685.0	8,336.228	9,944.5	10,794.097	9,048.903	7,914.933	7,517.613	7,030.1	7,219.516	8,129.759
Max	7,690.0	8,216.0	7,652.0	9,108.0	10,074.0	12,243.0	13,434.0	10,929.0	9,754.0	8,786.0	7,686.0	8,698.0	13,434.0
Min	6,835.0	6,945.0	6,115.0	6,871.0	7,164.0	7,448.0	8,334.0	7,366.0	6,755.0	6,915.0	6,653.0	6,629.0	6,115.0
Sum	228,011.0	210,179.0	221,529.0	230,550.0	258,423.0	298,335.0	334,617.0	280,516.0	237,448.0	233,046.0	210,903.0	223,805.0	2,967,362.0
Raw Flow: Peak (L/min)													
Avg	5,222.613	5,471.464	5,201.903	5,717.767	6,069.484	7,385.667	8,654.129	7,200.0	6,024.8	5,579.645	5,048.233	5,320.066	6,079.09
Max	5,720.0	9,110.0	7,245.0	7,649.0	7,249.0	8,883.0	15,256.0	13,566.0	8,531.0	6,883.0	5,454.0	6,839.0	15,256.0
Min	5,081.0	4,774.0	4,335.0	4,989.0	5,123.0	5,803.0	6,407.0	5,736.0	4,802.0	4,951.0	4,613.0	4,746.0	4,335.0
Sum	161,901.0	153,201.0	161,259.0	171,533.0	187,844.0	221,570.0	268,278.0	223,200.0	180,744.0	172,969.0	151,447.0	164,922.0	2,218,868.0
Treated Water/Flows - Treated Water													
Treated Flow (m3/d)													
Avg	6,628.355	6,852.038	6,585.032	7,174.667	7,891.677	9,157.067	10,206.032	8,402.806	7,361.3	6,941.871	6,543.233	6,718.774	7,543.989
Max	7,632.0	7,901.0	7,303.0	7,761.0	9,674.0	11,564.0	11,951.0	9,514.0	9,058.0	8,124.0	7,048.0	7,692.0	11,951.0
Min	68.0	6,255.0	6,142.0	6,628.0	6,893.0	701.0	8,088.0	7,517.0	6,383.0	6,294.0	6,014.0	6,285.0	68.0
Sum	205,479.0	191,857.0	204,136.0	215,240.0	244,642.0	274,712.0	316,387.0	260,487.0	220,839.0	215,198.0	196,297.0	208,282.0	2,753,556.0



**Ontario Clean Water Agency
Performance Assessment Report - Ground Water/Surface Water Supply**

Municipality: Town of Amherstburg formerly (Twp of Malden, Twp of Anderdon, Town of Amherstburg)
 Facility: [5819] - Amherstburg Water Treatment Plant & Distribution System
 Works: [210000149] - Amherstburg Water Treatment Plant & Distribution System
 Classification: Class 2 Water Distribution, Class 3 Water Treatment
 Water Source: Detroit River

Period: 01/01/2011 to 12/31/2011
 Served Population: 20,599
 Total Design Capacity(m3/day): 18,184.0

TagGrpTag	01/2011	02/2011	03/2011	04/2011	05/2011	06/2011	07/2011	08/2011	09/2011	10/2011	11/2011	12/2011	<- Total ->	<- Avg. ->	<- Max. ->	<- Min ->	Criteria->
Raw: Flows																	
RW Raw: Total Flow (m3/mth)	228,011.0	210,179.0	221,529.0	230,550.0	258,423.0	296,335.0	334,617.0	280,516.0	237,448.0	233,046.0	210,903.0	223,805.0	2,967,362.0				
RW Raw: Avg Day Flow(m3/day)	7,355.19	7,506.39	7,146.1	7,685.0	8,336.23	9,944.5	10,794.1	9,048.9	7,914.93	7,517.61	7,030.1	7,219.53	8,129.78				
RW Raw: Max Day Flow(m3/day)	7,690.0	8,216.0	7,662.0	9,108.0	10,074.0	12,243.0	13,434.0	10,929.0	9,754.0	8,786.0	7,666.0	8,698.0			13,434.0		22,900.0
Treated: Flows																	
TW Treated: Total Flow (m3/mth)	205,479.0	191,857.0	204,136.0	215,240.0	244,642.0	274,712.0	316,387.0	260,487.0	220,639.0	215,198.0	196,297.0	208,282.0	2,753,556.0				
TW Treated: Avg Day Flow (m3/day)	6,628.38	6,852.04	6,585.03	7,174.67	7,891.68	9,157.07	10,206.03	8,402.81	7,361.3	6,941.87	6,543.23	6,718.77	7,543.99				
TW Treated: Max. Day Flow (m3/day)	7,632.0	7,901.0	7,303.0	7,761.0	9,674.0	11,564.0	11,951.0	9,514.0	9,058.0	8,124.0	7,048.0	7,692.0			11,951.0		18,184.0
Turbidity																	
RW Raw: Max. Turbidity (NTU)	155.0	69.8	227.0	315.0	239.0	71.6	38.0	31.6	73.7	95.0	265.0	182.0			315.0		
TW Treated: Min. Turbidity (NTU)	0.03	0.03	0.04	0.04	0.04	0.03	0.02	0.03	0.04	0.03	0.03	0.05					0.02
TW Treated: Max. Turbidity (NTU)	0.07	0.05	0.1	0.15	0.19	0.06	0.09	0.08	0.09	0.08	0.09	0.1			0.13		
Filter Eff.: Min Turbidity (NTU)	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03					0.02
FT1 Filter Eff.: Min Turbidity (NTU)	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04					0.03
FT2 Filter Eff.: Min Turbidity (NTU)	0.02	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.04					0.02
FT3 Filter Eff.: Min Turbidity (NTU)	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04					0.02
FT4 Filter Eff.: Min Turbidity (NTU)	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03					0.02
Filter Eff.: Max Turbidity (NTU)	0.17	0.12	1.59	0.18	0.17	0.07	0.07	0.27	0.18	0.15	0.15	0.17			1.59		1.0
FT1 Filter Eff.: Max Turbidity (NTU)	0.08	0.09	0.27	0.13	0.11	0.06	0.07	0.27	0.17	0.11	0.11	0.17			0.27		1.0
FT2 Filter Eff.: Max Turbidity (NTU)	0.1	0.1	1.59	0.18	0.1	0.06	0.07	0.18	0.18	0.11	0.12	0.17			1.59		1.0
FT3 Filter Eff.: Max Turbidity (NTU)	0.17	0.12	0.17	0.09	0.16	0.06	0.06	0.09	0.12	0.14	0.15	0.17			0.17		1.0
FT4 Filter Eff.: Max Turbidity (NTU)	0.1	0.09	0.14	0.11	0.17	0.07	0.04	0.1	0.1	0.15	0.12	0.14			0.17		1.0
Chemical Parameters																	
TW Treated: Max Nitrite (ug/L)	0.01			0.01			0.01			0.01			0.01				1.0
TW Treated: Max Nitrate (ug/L)	1.05			2.01			0.5			0.33					2.01		10.0
DW Dist.: Max Lead (ug/L)							0.49								0.49		10.0
DW Dist.: Max THM (ug/L)	8.8			23.0			47.0				65.0				65.0		100.0
Chlorine Residuals																	
RW Treated: Min Free Cl2 Resid. (mg/L)	0.99	1.0	0.99	1.05	0.99	1.03	0.97	1.0	0.92	1.05	1.04	1.02					0.92
TW Treated: Min Free Cl2 Resid. (mg/L)	0.97	0.99	0.98	1.01	0.97	1.03	1.0	0.99	0.9	1.03	1.04	1.03					0.9
RW Treated: Max Free Cl2 Resid. (mg/L)	1.3	1.22	1.28	1.34	1.29	1.28	1.31	1.22	1.32	1.33	1.32	1.31					1.34
TW Treated: Max Free Cl2 Resid. (mg/L)	1.3	1.57	1.32	1.35	1.27	1.23	1.31	1.2	1.29	1.28	1.33	1.31					1.57
DW Dist.: Min Free Cl2 Resid. (mg/L)	0.61	0.65	0.64	0.58	0.57	0.73	0.6	0.51	0.51	0.61	0.65	0.5					0.5
DW Dist.: Max Free Cl2 Resid. (mg/L)	1.11	1.15	1.14	1.18	1.09	1.09	0.98	1.04	1.08	1.11	1.11	1.11					1.18
Bacteriological Samples Collected:																	
Raw Bactl (# samples)	4.0	4.0	5.0	4.0	5.0	4.0	4.0	5.0	4.0	5.0	4.0	4.0	52.0				
Treated Bactl (# samples)	4.0	4.0	5.0	4.0	5.0	4.0	4.0	5.0	4.0	5.0	4.0	4.0	52.0				
Distribution Bactl (# samples)	32.0	32.0	40.0	32.0	40.0	32.0	34.0	40.0	32.0	40.0	32.0	32.0	418.0				
Distribution HPC (# samples)	16.0	16.0	20.0	16.0	20.0	16.0	16.0	20.0	16.0	20.0	16.0	16.0	208.0				
Treated Adverse (# samples)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Distribution Adverse (# samples)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Distribution Max. HPC	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	20.0	40.0				40.0

Report Submitted By: Brian LaBute,
Manager,
Essex West Hub,
Ontario Clean Water Agency

Signature _____ **Date** _____

Received By: _____

Signature _____ **Date** _____

Confirmed By Resolution of Council:

Signature _____ **Date** _____