



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

## **Annual Summary Report**

**February 5, 2018**

Antonietta Giofu  
Director of Engineering & Public Works  
Corporation of the Town of Amherstburg  
P.O. Box 159  
271 Sandwich St. S,  
Amherstburg, Ontario  
N9V 2Z3

Dear Mrs. Giofu:

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

Attached is the 2017 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 31<sup>st</sup> of each year for the preceding calendar year. This report covers the period of January 1, 2017 to December 31, 2017.

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 2017 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, this Summary Report is to be provided to the members of the municipal council. Please ensure this distribution.

Section 12 of O. Reg. 170/03, requires the Summary Report be made available for inspection by any member of the public during normal business hours, without charge. The report 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 report. If you have any questions, please feel free to contact Operations Manager, Dan Rawlins or myself at (519) 736-5447.

Sincerely,

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

## ANNUAL SUMMARY REPORT FOR THE AMHERSTBURG WTP

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, 2017 to December 31, 2017. 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.

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.

Table 1 lists the non-compliance with the Safe Drinking Water Act, Regulation 170/03, PTTW, MDWL and DWWP during 2017 for the Amherstburg WTP.

### Table 1

Drinking Water Legislation	Requirement(s) the system failed to meet	Measures taken to correct the failure	Status (complete or outstanding)
Ontario Regulation 170/03	April 8, 2017 - Non-compliance for filter effluent turbidity not being measured every 15 minutes.	<p>On April 8, 2017, Filter effluent turbidity meter failed to measure and record the turbidity in the effluent of filter #1. The operator noticed the sudden change in turbidity (from 0.057 to 0.001 NTU) which the turbidity meter bulb burnt out causing an "error reading". The operator followed procedure of taking the filter out of service to set up for backwashing although there were no measurements taken every 15 minutes during the shut-down of filter #1 (approximately 59 minutes in total). At 06:11, filter #4 was placed into service in order to remove filter #1 out of service which took place at 06:42. At no point did any water quality be compromised to the treatment system.</p> <p>2. Follow up discussions with the operator took place Tuesday April 11th.</p>	Complete
Procedure of Disinfection of Drinking Water in Ontario	March 24, 2017 - Routine maintenance was being performed on chemical feed pump. Pump was functioning but feed line was not restored to the open position.	<p>On March 30, 2017 - A complete review of the alum feed system with the operator involved in this matter which included;</p> <ul style="list-style-type: none"> <li>- A review consisted of the alum storage facility and how the storage tanks are filled, emptied, switch over, alarm, venting and documentation.</li> <li>- A review of the alum pumping system and how the electrical is set up, the functions of the drive units, the main breaker, the local disconnect, the suction side piping and valves, the discharge side piping and valves, the calibration cylinder including proper draw down for dosage/feed verification checks and documentation.</li> <li>- A review of all legislative documents pertaining to the reasoning of a coagulant must be continuously fed.</li> </ul> <p>Lastly a flow meter with detection alarm was installed to prevent future occurrences.</p>	Complete
Ontario Regulation 170/03	October, 2017 - Non-compliance for filter effluent turbidity #1 not meeting the 95% rule	<ul style="list-style-type: none"> <li>• Filter #1 was in service for a total of 72 minutes for the month of October, 2017.</li> <li>• The allotted time to be over 0.3 NTU is 3.6 minutes in which the month of October results equaled 7 minutes and therefore did not meet the 95% rule.</li> </ul> <ol style="list-style-type: none"> <li>1. On October 6th, transmitter failure occurred for Filter #1 flow causing the operator to shut down the filter and further investigate. An Instrumentation Technician from another area was called upon to troubleshoot as to the reasoning of the failed transmitter with no prevail, it was determined that replacement was needed or further troubleshooting was needed by the local Instrumentation Technician when available, to ensure filter flow was captured. After a couple attempts on October 6th and 10th, the Operating Authority decided to keep Filter #1 until the local Instrumentation Technician can check on this when he returns from his leave.</li> <li>2. On October 15th, Filter #1 was drained in order to prep for Filter #1 effluent valves to be replaced.</li> <li>3. On October 16th, a false Filter #1 turbidity alarm came thru although this filter was out of service.</li> <li>4. On October 19th, 2 of 3 Filter #1 effluent valves were replaced.</li> <li>5. On October 20th, Filter #1 the last effluent valve was replaced.</li> <li>6. On October 31st, the local Instrumentation Technician further troubleshoot the flow transmitter however due to Filter #1 being empty and now waiting on top up of anthracite thru filter maintenance, confirmation of instrument will occur one filter is backwashed and placed back in service.</li> <li>7. A spare flow transmitter has been ordered and will be installed if needed.</li> </ol>	Complete

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 below on pages 4 & 5, a copy of the quantities and flow rates of the water withdrawn from the Detroit River and treated/distributed from the Amherstburg WTP during 2017.

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 found in table 2, the raw water and treated water flows did not exceed the legislative requirement. The treated flow was 69% of the rated capacity for the reporting period.

**Table 2**

<b>Flow</b>	<b>Requirement</b>	<b>Rated Capacity</b>	<b>Maximum Flow Rate Obtained</b>	<b>Date of the Maximum Flow</b>
Raw Flow	Permit to Take Water (#3750-7FAHRN)	22,900,000 L/d	13,305,000 L/d	June, 2017
		15,903 L/min	9,325.00 L/min	June, 2017
Treated Flow	MDWL #026-101	18,184 m <sup>3</sup> /d	12,576.00 m <sup>3</sup> /d	June, 2017


## Facility Flow Summary

Drinking-Water System Number: 210000149  
 Drinking-Water System Name: AMHERSTBURG DRINKING WATER SYSTEM  
 Drinking-Water System Owner: Title Holder: Municipality  
 Drinking-Water System Category: Large Municipal Residential  
 Municipal Drinking Water License: 026-101  
 Period being reported: Jan-17 to Dec-17




Month	Raw Water						Treated Water			
	Monthly Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)	Daily Flow Peak Flow Rate (L/min)	Number of Days of Water Taking	Monthly Total (m3/month)	Daily Flow Average (m3/day)	Daily Flow Maximum (m3/day)		
Jan	204283.00	6589.77	7800.00	5389.00	31	196383.00	6334.94	7509.00		
Feb	183024.00	6536.57	7168.00	8835.00	28	175056.00	6252.00	7006.00		
Mar	204609.00	6600.29	7669.00	5620.00	31	197927.00	6384.74	7002.00		
Apr	211683.00	7056.10	8000.00	5775.00	30	203660.00	6788.67	7889.00		
May	242179.00	7812.23	9572.00	6701.00	31	232578.00	7502.52	8960.00		
Jun	293477.00	9782.57	13305.00	9325.00	30	288002.00	9600.07	12576.00		
Jul	288628.00	9310.58	10910.00	7876.00	31	287198.00	9264.45	11763.00		
Aug	289156.00	9327.61	11794.00	9156.00	31	280008.00	9032.52	10980.00		
Sep	242142.00	8071.40	9705.00	7073.00	30	235426.00	7847.53	9365.00		
Oct	225597.00	7277.32	8343.00	6285.00	31	222610.00	7180.97	8550.00		
Nov	208570.00	6952.33	8006.00	6247.00	30	200100.00	6670.00	7613.00		
Dec	217500.00	7016.13	7970.00	5788.00	31	207609.00	6697.06	7688.00		
<b>Total</b>	<b>2810848.00</b>	<b>92332.91</b>	<b>110242.00</b>	<b>84070.00</b>	<b>365</b>	<b>2726557.00</b>	<b>89555.46</b>	<b>106901.00</b>		
<b>Avg</b>	<b>234237.33</b>	<b>7694.41</b>	<b>9186.83</b>	<b>7005.83</b>	<b>30</b>	<b>227213.08</b>	<b>7462.96</b>	<b>8908.42</b>		
<b>Max</b>	<b>293477.00</b>	<b>9782.57</b>	<b>13305.00</b>	<b>9325.00</b>	<b>31</b>	<b>207609.00</b>	<b>9600.07</b>	<b>12576.00</b>		

Report Submitted By: Dan Mitchell,  
Process Compliance Technician,  
Amherstburg/LaSalle Cluster (Essex Region),  
Ontario Clean Water Agency

Signature  Date March 5, 2018

Received By: Antonietta Giofu

Signature  Date March 5, 2018

Confirmed By Resolution of Council: Apr. 9, 2018  
Resolution # 20180409-105

Signature  Date April 18/18