



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

405 Clitherow Street
P.O. Box 909
Harrow, ON N0R 1G0
Tel: (519) 738-3038
Fax: (519) 738-3993
whiggins@ocwa.com

February 20, 2018

Mr. Andy Graf
Manager, Environmental Services
Town of Essex
120 Sinasac St.
P.O. Box 359
Harrow, ON N0R 1G0

Dear Mr. Graf:

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

Attached is the 2017 Summary Report for the Harrow-Colchester South 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 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 Essex, 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 also 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.

Sincerely,

Warren Higgins
Process & Compliance Tech.
Ontario Clean Water Agency

cc: Chris Nepszy, Director of Infrastructure and Development, Town of Essex
Karen Burgess, Senior Operations Manager, OCWA



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Annual Summary Report

Harrow-Colchester South Water Treatment Plant

2017

Prepared for: The Corporation of the Town of Essex

By: Warren Higgins
Ontario Clean Water Agency

Table of Contents

Section Number	CONTENTS	Page Number
1	"Compliance with the Safe Drinking Water Act and Regulation 170/03" "Compliance with the Municipal Drinking Water License 029-101" Statement of Compliance	3
2	"Non-Compliance with the Safe Drinking Water Act, Regulation 170/03 and the Municipal Drinking Water License 029-101" Details of the non-compliance issues as well as how and when any non-compliance issues were corrected.	3
3	Summary and discussion of quantity of water supplied	4
APPENDICES		
Appendix A	Annual volume record of the Harrow-Colchester South Water Treatment Plant January 1, 2017 – December 31, 2017	5

SECTION 1

Compliance with the Safe Drinking Water Act and Regulation 170/03

This report is a summary of water quality information for the Harrow-Colchester South Water Treatment Plant and published in accordance with Schedule 22 of Ontario's Safe Drinking Water Act, Ontario Regulation 170/03 for the reporting period of January 1, 2017 to December 31, 2017. The Harrow-Colchester South Water Treatment Plant is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Essex.

Compliance with the Municipal Drinking Water License 029-101

The Harrow-Colchester South Water Treatment Plant was operated and maintained in such a manner that the water supplied to the consumers serviced by the system satisfied all the requirements in the Safe Drinking Water Act, the Regulations and the MDWL 029-101.

SECTION 2

Non-Compliance with the Safe Drinking Water Act, Regulation 170/03 and MDWL & DWWP

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Notice of Resolution
January 31, 2017	Microbiological	Lab reported one Total Coliform	N/A	Ministry of Health required resampling - one upstream and one downstream, and again 24 hours later. All resample results were negative.	Feb 03, 2017
March 7, 2017	Physical/ Chemical	PLC maintenance resulted in the Alum pumps not feeding.	N/A	Alum pumps were returned to service and filter effluent turbidity's were monitored for breakthrough. No breakthrough was observed.	March 7, 2017
August 2, 2017	Physical/ Chemical	It was identified in the annual MOECC Inspection that since June 25, 2015 there have been three instances of significant coagulant loss. As per O. Reg. 170/03, s. 1-2(2). The owner of a drinking water system and the operating authority for the system shall ensure the following: 3. The water treatment equipment required by section 1-3 or 1-4 is	N/A	A flow sensor device was installed on the coagulant feed system that alarms to Security One which then notifies an operator when no flow is detected.	December 01, 2017

		operated in a manner that achieves the design capabilities it is required to have under that section. To meet the disinfection credits, the filtration process must use a chemical coagulant at all times when the treatment plant is in operation.			
--	--	---	--	--	--

SECTION 3

Summary and discussion of quantity of water supplied

In accordance with Schedule 22-2 (3) *“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 rate.*
2. *A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval must be discussed.*

The rated capacity specified in the Municipal Drinking Water License 029-101 for the Harrow-Colchester South Water Treatment Plant is 10,228 m³/day. The maximum daily flow for the reporting period was 5,086 m³/day on June 17, 2017.

The Permit to Take Water (Number 4088-9KDN6D) states the maximum amount of water taken is 21,154 L/min and 30,458,000 L/day. The maximum amount of water flow taken in 2017 was 5,940 L/min on June 17 and again on Aug 17. The maximum amount of water taken in 2017 was 5,086,000 L/day on June 17th. The Permit to Take Water limit was not exceeded during this reporting period.

Attached in Appendix A, are the average daily volume (m³) and maximum daily volume (m³). Also noted is the % of Design Volume for each.

The quantity of water supplied during the reporting period did not exceed the rated capacity of this facility.

Appendix A

Harrow-Colchester South Water Treatment Plant Annual Volume Record for 2017

Design Treated Flows: 10, 228 m³/day

Month	Average Daily Volume (m³)	% of Design Volume	Maximum Daily Volume (m³)	% of Design Volume
January	2,223	22	2,546	25
February	2,225	22	2,596	25
March	2,281	22	2,556	25
April	2,654	26	3,549	35
May	3,011	29	4,232	41
June	3,777	37	5,086	50
July	3,540	35	4,560	45
August	3,640	36	4,363	44
September	3,066	30	3,622	35
October	2,667	26	3,421	33
November	2,337	23	2,863	28
December	2,227	22	2,806	27