

Annual Summary Report
For The
Aylmer Distribution System
2014

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Overview

This Summary Report for the Aylmer Distribution System is generated in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation for the reporting period of January 1st, 2014 to December 31st, 2014. The Aylmer Distribution System (waterworks number 260002136) is categorized as Large Municipal Residential Drinking Water System. It is operated under the Municipal Drinking Water Licence (MDWL) #044-101 and Drinking Water Works Permit (DWWP) #044-201.

The Town of Aylmer is supplied water by the Aylmer Secondary System which delivers water from the Elgin Middlesex Pumping Station to the town limits by means of a 450 mm water main.

Compliance

The annual inspection of the Aylmer Distribution System was conducted on June 11, 2014 by Ministry of the Environment inspector Stephen Dunn. One non-compliance with regulatory requirements was identified.

O.Reg 170/03 Sched. 6-1.1(1) specifies that when a sample is required every week, it must be taken at least five days and not more than ten days after a sample was taken in the previous week. On one occasion the samples taken between weeks exceeded the required ten days. Samples were taken on December 23, 2013 and then not again until Jan 3, 2014. After reviewing the remaining sampling activity, it was decided that no further actions were required.

Requirements

The 2014 Summary Report for the Aylmer Distribution System is submitted to satisfy Schedule 22 of Ontario Regulation 170/03. As described in O.Reg 170.03, the report must:

- a) List the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence and any orders applicable to the system that were not met at any time during the reporting period and
- b) For each requirement not met in part a), specify the duration of the failure and the measures that were taken to correct the failures

The Summary Report must also include the following information to assist the owner in assessing the capability of the system to meet existing and future uses:

- 1) A summary of the quantities and flow rates of the water supplied during this period covered by the report, including monthly average and maximum daily flows
- 2) A comparison of the summary results to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence or if the system is receiving all of its water from another system under an agreement, to the flow rates specified in that agreement

Table 1

Drinking Water Legislation	List of requirements the system failed to meet	Duration of the failure	Measures that were taken to correct problem	Status: (complete or incomplete)
Safe Drinking Water Act				
Ontario Regulations	Exceeded max. period between weekly sampling O.Reg 170/03 Sched 6-1.1(1)	Dec 23, 2013 to Jan 3, 2014	Sampled on reg. schedule	Complete
	Exceeded max acceptable con. as set out in O.Reg 169/03 Sched 2: 17.8 ug/l AWQI #116893	Original sample was taken Apr 9/14. Resample April 14/14 and 15/14	Flushed lines and resampled for lead content as per Health Unit/MOE directions.	Complete
DWL #044-101. DWWP #044-201 (as of Aug. 4/11)				
Provincial Officer's Order No.				
Works permit/ Licence				

Table 1 lists the requirements that the system failed to meet and the measures taken to correct the failure

Water Quantity Summary

Table 2 provides an overview of the flows entering the Aylmer Distribution System at Chamber 16 as recorded by the SCADA system.

Table 2

	Total Flow (m3)	Average Daily Flow (m3/day)	Max Daily Flow (m3/day)	Min Daily Flow (m3/day)	Total Reverse Flow (m3)
January	96329	3107	4186	2714	4431
February	88441	3158	3760	2856	3913
March	101594	3277	3693	2833	4872
April	96229	3207	3656	2449	4177
May	109323	3526	4608	3056	4602
June	115884	3862	4552	3297	3579
July	105666	3408	4149	2061	3668
August	122827	3962	5131	3109	2584
September	103795	3459	3961	2580	4131
October	107635	3472	3838	3263	4901
November	109108	3636	4056	3340	5844
December	105498	3403	4074	3340	5903
Total	1262329	3466	5131	2061	52605

Flow data for the period Jan 1, 2014 to Dec 31, 2014

The maximum daily flow to the system occurred on August 15, 2014 with a daily total of 5131 m³. The total flow from the EMPS to Aylmer averaged 3466 m³/day. The numbers change when one takes into account the reverse flow through the meter at Chamber 16. When the reverse flow is subtracted from the total flow, the annual flow drops to 1209724 m³ for the year 2014. This also changes the average daily flow from 3466 to 3322 m³/day for 2014.

Using the figure 130 l/sec as the EMPS pump capacity, the total daily flow for the Aylmer Secondary line is 11232 m³/day. The current average daily flow (3466 m³/day) uses only 30.8 % of the system's capacity. This number is slightly higher than the previous year's total of 29.5% capacity and very close to the 2012 figure (30.5%).

This information is collected in order to assist the owner in assessing the present capacity of the water system. A copy of this report shall be submitted to Council no later than March 31, 2015.