



Region of Waterloo

**2017 Summary Report
Addendum**

2017 Summary Report Addendum – Region of Waterloo Water Services

The Non-Compliance issues listed in Table 1 below were discovered after the original 2017 Summary Report was presented to Regional Council. As result, this addendum has been issued.

Table 1 – Summary of Non-Compliance Issues under the Safe Drinking Water Act (SDWA), Municipal Drinking Water Licenses (MDWL), Drinking Water Works Permits (DWWPs), Permits to Take Water (PTTW) and the Ontario Water Resources Act (OWRA).

Date 2017	Description	Root Cause	Preventative/ Corrective
Permit to Take Water (PTTW)			
Sept 1 21:01-21:16; (14 minutes)	Roseville Permitted instantaneous flow rate exceeded.	Mechanical valve sticking and administrative change to reporting system	Informed staff of PTTW requirements and investigated mechanical issues.
Sept 2 03:36-04:00; (24 minutes)			
09:54-10:14; (20 minutes)			
21:42-22:12; (30 minutes)			
Sept 4 23:34-00:06; (32 minutes)			
Sept 5 07:24-07:36; (12 minutes)			
21:12-21:22; (10 minutes)			
Sept 7 07:22-07:42; (20 minutes)			
Sept 16 10:44-11:16; (32 minutes)			
Sept 17 04:38-04:56; (18 minutes)			
Sept 30 08:48-09:10; (18 minutes)			
Oct 2 18:24-18:36; (12 minutes)	Maryhill Permitted instantaneous flow rate exceeded.	Administrative change to reporting system and awareness	Informed staff of PTTW requirements.
Oct 11 20:42-20:56; (14 minutes)			
April 26 16:08-16:22; (14 minutes)			
June 12 21:38-21:48; (10 minutes)			
July 6 17:00-17:14; (14 minutes)			
July 8 02:42-02:52; (10 minutes)			
July 19 02:28-02:52; (24 minutes)			
July 21 14:38-14:50; (12 minutes)			
July 22 02:04-02:24; (20 minutes)			
Aug 1 05:32-05:42; (10 minutes)			
Aug 2 03:34-03:56; (22 minutes)			
Aug 12 00:34-00:58; (24 minutes)			
Aug 19 13:12-13:22; (10 minutes)			

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Date	Description	Root Cause	Preventative/ Corrective Action
MDWL – Schedule C, Calibration of Flow Measuring Devices			
2017	Ayr (A3), K34, K11A, Wellesley Discharge Flow meters were not verified within the required timeframe.	Scheduling error.	Flow meters calibrated and schedule revised. Annual review of schedule will occur.

Appendix C – Treated Water Flow Data

The following table summarizes the flow rates from Roseville in 2017, including MDWL Schedule C- Table 1 flow limits and treated water monthly average daily volumes. The first issuance of the 2017 Summary Report included a statement that the September and October flow exceedances were less than 10 minutes. Further investigation has demonstrated that this was not the case. As result, this addendum has been issued. See Table 1 for related Permit to Take Water (PTTW) flow exceedances.

Roseville Drinking Water System – Wells (R5, R6)			
Month	Raw Peak Flow Rate (L/s)	Treated – Max Day (MDWL Limit= 357.7 m ³ /day)	Monthly Average (m ³ /d)
January	4.52*	68	57
February	4.49*	67	56
March	4.51*	70	56
April	4.49*	87	60
May	4.52*	102	65
June	4.56*	125	92
July	4.52*	125	94
August	7.71*	117	93
September	6.67**	110	91
October	5.02**	93	70
November	4.49*	81	66
December	4.50*	89	64
Average			72
Maximum	7.71	125	

*Less than 10 minute flow spike, typically on start-up. **See Table 1 for PTTW exceedances.

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Maryhill Drinking Water System – Maryhill WTP- Wells (MH1, MH2)			
Month	Raw Peak Flow Rate (L/s)	Treated – Max Day (MDWL Limit= 157 m ³ /day)	Monthly Average (m3/d)
January	1.21	73	56
February	1.18	77	55
March	1.87*	71	61
April	3.21**	79	58
May	2.24*	78	61
June	3.79**	79	52
July	2.00**	77	55
August	3.40**	70	62
September	1.93*	77	63
October	2.18*	70	62
November	2.00*	64	60
December	2.00*	68	61
Average			59
Maximum	3.79	79	

*Less than 10 minute flow spike, typically on start-up. **See Table 1 for PTTW exceedances.