



AQWEST

DOH REPORT

MOU - DRINKING WATER QUALITY

REPORTING PERIOD 01 OCTOBER 2017 TO 31 DECEMBER 2017

JANUARY 2018

REPORT TEMPLATE VERSION: 2.0.4

Document Revision

Version #	Date Changed	Requested By	Changes
1.2.2	5/10/2012		*Radiological Units to be Corrected *Header to be repeated on tables on new pages *Add Section for Assumptions *Note any value that has a less than symbol to have Zero (0) value *Remove compliance % for items that do not have AWDG Limits *Remove Raw Water ADWG Guidelines *Include Max Value for ADWG Limits *5th Percentile to be removed *Report to include document history *Include Calculations in assumptions section
1.2.3	18/10/2012		*Added Micro Results
2.0.0	9/01/2013	K Woods	*Moved Report to Excel Template
2.0.1	10/01/2014	Water Quality Committee	*Added chlorine residual explanations
2.0.2	20/05/2015	Water Quality Committee	*Remove technical zero statement from assumptions
2.0.3	19/10/2016	B Labza	* Updated Assumptions and Explanations
2.0.4	17/10/2017	K Woods	*Updated 2004 ADWG to 2011 ADWG (as of 1st July 2017) *Updated Number of Compliant Zones to Number of Compliant Samples

Assumptions and Explanations

- 1) Field Assessable Tests (Chlorine Residual and pH) are undertaken by competent sampling staff from both Aqwest and City of Bunbury
- 2) As noted in ADWG 2011, 0.6mg/L is the odour threshold of chlorine residual for most people. In some instances it may be necessary to exceed the aesthetic guideline to maintain an effective disinfection residual throughout the system
- 3) Datasets presented and used for analysis in the report are from the Aqwest monitoring program which have been classed as assessable
- 4) Rounding has been undertaken for chlorine residual results to one decimal place to match ADWG, with values less than 5 rounded down and values equal or greater than 5 rounded up.

1 Introduction

1.1 Water Provider Information

Name: Aqwest
Address: 5 Mackinnon Way, Bunbury
Telephone: +61 8 9780 9500
Facsimile: +61 8 9780 9509
Company Email: aqwest@aqwest.com.au
Chief Executive Officer: Brad Bevis
CEO E-Mail: brad.bevis@aqwest.com.au
DOH Liaison Officer: Gary Hallsworth
DOH Liaison Officer Email: gary.hallsworth@aqwest.com.au

1.2 System Information

Aqwest supplies potable water to a customer population base of approximately 33,000 with an average system demand of 18ML/day. Aqwest supplies potable water via 6 water treatment plants, 4 reservoirs and 9 pump stations which all feed into one large interconnected zone.

1.3 Performance Summary

Table 1 shows the overall performance of Aqwest against the 2011 ADWG for the period of 01 October 2017 to 31 December 2017.

Table 1: Aqwest Performance Summary Table

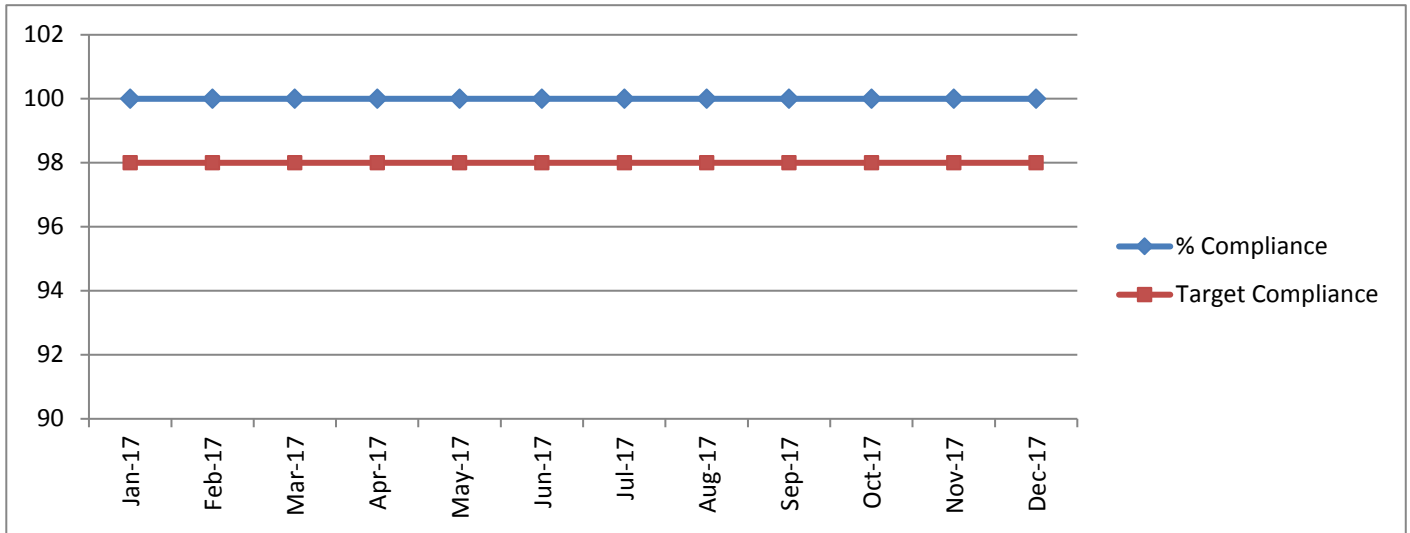
	Compliance From 01 October 2017 to 31 December 2017			
	Number of Samples	Number of Compliant Samples	% Compliant Samples	% Sample Compliance 12 Month Rolling Period
<i>Microbiological Quality</i>				
Escherichia coli	134	134	100	100
Naegleria	134	134	100	100
<i>Chemical Quality</i>				
Health Related	150	150	100	100
Non-Health Related	150	150	100	99.33

2 Microbiological

2.1 Microbiological Charts

The following charts graphically represent the microbiological information displayed in Table 1.

Graph 1: Rolling 12 Months Escherichia coli Compliance against the 2011 ADWG.



Graph 2: Rolling 12 Months Naegleria Compliance against the 2011 ADWG.

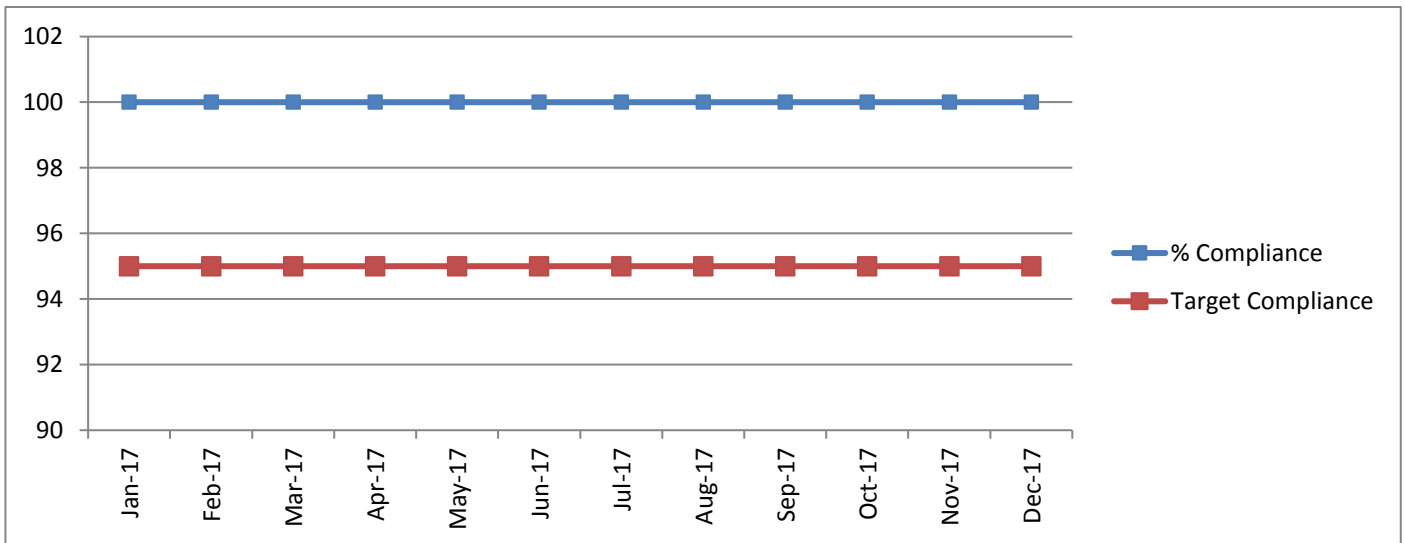


Table 2 lists those sample locations where non-compliant microbiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2011 ADWG.

Table 2: Non-Compliant Microbiological Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

3 Health Related

Table 3 lists those sample locations where non-compliant health related results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2011 ADWG.

Table 3: Non-Compliant Health Related Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

4 Non-Health Related (Aesthetic) Chemical

Table 4 lists those sample locations where non-compliant non-health related (Aesthetic) results were detected, and the remedial actions taken if required. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2011 ADWG.

Note: Customer perception of water quality is heavily influenced by aesthetic concerns, and in an era of increasing public expectations of water suppliers, these aesthetic issues may need to be addressed in order to improve customer satisfaction.

Table 4: Non-Compliant Non-Health Related (Aesthetic) Chemical Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

5 Radiological Related

Table 5 lists those sample locations where non-compliant Radiological results were detected, and the remedial actions taken to rectify these non-compliances. An unpopulated table indicates that for the period of analysis, all results were compliant with the 2011 ADWG.

Note: Latest Radiological testing completed February 2017

Table 5: Non-Compliant Radiological Related Chemical Results and Remedial Action.

Sample Date	Sample Location	Parameter	Result	Units	Guideline	Comment

6 Planned Sampling Summary

Table 6 shows the number of samples that were planned for the reporting period, and the number of accessible samples already taken.

Table 6: Planned sampling regime and actual assessable samples taken.

	Number of Samples Planned to be taken	Number of samples actually taken	% of planned samples taken
Microbiological	143	130	90.9%
Physical Chemical	159	143	89.9%

Table 7: Location and reason for missed samples

Date	Location	Schedule	Reason	
5/12/2017	Tech 1 Bore	BQA	Offline, not used for Production	
5/12/2017	Hastie North Bore	BQA	Offline at time of sampling	
5/12/2017	Hastie South Bore	BQA	Offline at time of sampling	
2/10/2017	Mangles Reservoir	RMA1	Mangles Reservoir currently offline for Reservoir Integrity Study Project.	
9/10/2017	Mangles Reservoir	RMA2		
16/10/2017	Mangles Reservoir	RMA3		
23/10/2017	Mangles Reservoir	RMA4		
30/10/2017	Mangles Reservoir	RMA1		
6/11/2017	Mangles Reservoir	RMA2		
13/11/2017	Mangles Reservoir	RMA3		
20/11/2017	Mangles Reservoir	RMA4		
27/11/2017	Mangles Reservoir	RMA1		
4/12/2017	Mangles Reservoir	RMA2		
11/12/2017	Mangles Reservoir	RMA3		
18/12/2017	Mangles Reservoir	RMA4		
27/12/2017	Mangles Reservoir	RMA1		
Total	16			