



Drinking Water Audit Report

County:	Clare	Date of Audit:	28/10/2015
Plant(s) visited:	Ardtaggle & O'Brien's Bridge Water Treatment Plants.	Date of issue of Audit Report:	27/11/2015
		File Reference:	DW2013/83
		Auditors:	Mr Niall Dunne
Audit Criteria:	<ul style="list-style-type: none"> • The <i>European Union (Drinking Water) Regulations 2014 (S.I. 122 of 2014)</i>. • The <i>EPA Handbook on the Implementation of the Regulations for Water Services Authorities for Public Water Supplies (ISBN: 978-1-84095-349-7)</i> • The recommendations specified in the <i>EPA Drinking Water Report</i>. • The recommendations in any previous audit reports. 		

MAIN FINDINGS

- i. **There is no chlorine residual monitor in place at the Ardtaggle reservoir. Ardtaggle is part of the O'Brien's Bridge supply. The installation of a chlorine monitor was a recommendation of a previous audit report issued on the 29/05/2014. The EPA issued a direction on the 19/11/2015 to Irish Water for the installation of an operational chlorine monitor at this location by the 1st February 2016.**

1. INTRODUCTION

Under the *European Union (Drinking Water) Regulations 2014* the Environmental Protection Agency is the supervisory authority in relation to Irish Water and its role in the provision of public water supplies. This audit was carried out to assess the disinfection system for this supply.

The Ardtaggle borehole supplements the O'Brien Bridge reservoir. No consumers are served by the Ardtaggle borehole. The O' Briens Bridge water treatment plant was also visited as part of this audit.

Photographs taken by Niall Dunne during the audit are attached to this report and are referred to in the text where relevant.

The opening meeting commenced at 10.00am at the Ardtaggle reservoir. The scope and purpose of the audit were outlined at the opening meeting. The audit process consisted of interviews with staff, review of records and observations made during an inspection of the treatment plant. The audits observations and recommendations are listed in Section 2 and 4 of this report. The following were in attendance during the audit.

Representing Irish Water: (* indicates that person was also present for the closing meeting)

Deirdre O'Loughlin; Compliance Specialist - Irish Water.

Duane O'Brien; Regional Operations - Irish Water.

Rory O' Dea; Senior E.H.O - HSE.

Anthony Mc Namara; Senior Executive Engineer - Clare County Council (CCC).

Patricia Ryan; Area Technician - CCC.

Eamon Burke; Caretaker - CCC.

Representing the Environmental Protection Agency:

Niall Dunne: Inspector – EPA.

2. AUDIT OBSERVATIONS

The audit process is a random sample on a particular day of a facility's operation. Where an observation or recommendation against a particular issue has not been reported, this should not be construed to mean that this issue is fully addressed.

1. Chlorination and Disinfection

- a. Duty standby chlorine dosing pumps were in place at the Ardtaggle reservoir, (see photograph 1). No chlorine residual monitors and no chlorine alarms were in place.
- b. In subsequent correspondence, 13/11/2015, IW confirmed auto switchover between the pumps was in place.
- c. The installation of the continuous chlorine residual monitor was a recommendation of a previous audit carried out on the 20/05/2014.
- d. Duty and standby UV units were in place at the O'Brien's Bridge treatment plant, (see photograph 2). CCC stated that the UV units were connected to a recording device, but that there have been issues with the recording device.

3. AUDITORS COMMENTS

A direction was issued to Irish Water on the 19/11/2015 for the installation of a continuous chlorine residual monitor at the Ardtaggle chlorine dosing point. The monitor should be alarmed and is required to be linked to a recording device to ensure any failure of the dosing system is immediately detected. The monitor and alarm are required to be installed by the 1st February 2016. The installation of the chlorine residual monitor and chlorine alarm are dealt with under this direction.

A duty standby UV system is in place at the O' Briens Bridge treatment plant. IW is required to submit two months compliant UVT/UVI monitoring data to ensure that the UV system has remained within its validation range at all times.

Irish Water must ensure that all chlorine dosing systems and UV disinfection systems under their responsibility are in compliance with *EPA Advice Note No. 3: E.coli in Drinking Water*.

4. RECOMMENDATIONS

1. Irish Water is requested to submit two months UVT/UVI and flow data for this supply to ensure that the UV units have operated within their validation range at all times.

FOLLOW-UP ACTIONS REQUIRED BY IRISH WATER

During the audit Irish Water representatives were advised of the audit findings and the actions that must be taken as a priority by Irish Water to address the issues raised. This report has been reviewed and approved by Ms Yvonne Doris, Drinking Water Team Leader.

Irish Water should submit a report to the Agency within one month of the date of this audit report detailing how it has dealt with the recommendation above. The report should include details on the action taken and planned to address the recommendation, including timeframe for commencement and completion of any planned work.

A direction has been issued by the Agency under a separate cover legally requiring specific recommendations to be implemented by Irish Water.

The EPA also advises that the findings and recommendations from this audit report should, where relevant, be addressed at all other treatment plants operated and managed by Irish Water.

Please quote the File Reference Number DW2013/83 in any future correspondence in relation to this Report.

Report prepared by:



Date:

27/11/2015

Inspector

Photograph 1: Duty standby chlorine dosing pumps at the Ardtaggle reservoir, there was no chlorine residual monitor and no alarm.



Photograph 2: Duty standby UV units at the O'Brien's Bridge supply. Two months UVI/UVT and flow data is required to ensure UV units have remained within their validation range at all times.

