



Drinking Water Audit Report

County:	Waterford	Date of Audit:	22/03/2018
Plant(s) visited:	Comeragh ((Briska Lower) 3100PUB1022	Date of issue of Audit Report:	17/04/2018
		File Reference:	DW2018/31
		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), as amended.</i> • <i>The 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> • EPA Drinking Water Advice Notes No.s 1 to 15. • The recommendations in any previous audit reports. 		

MAIN FINDINGS

- i. According to Waterford City and County Council there is inadequate contact time at the first consumers of this supply. Irish Water should confirm the contact time and should immediately seek the advice of the HSE if it is inadequate, <15 mg/min/l.
- ii. Irish Water propose to connect this supply to the Fewes public water supply by Q1 2019. Irish Water must ensure that this connection is expedited, especially if it confirmed that there is inadequate contact time to the first consumers.
- iii. On the 01/03/2018 during Storm Emma a precautionary boil water notice (pBWN) was placed on this supply due to a frozen chlorine line. Irish Water should ensure that remedial measures are put in place to prevent a reoccurrence of this incident at this and other drinking water treatment plants.

1. INTRODUCTION

Under the *European Union (Drinking Water) Regulations 2014* as amended, 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 in response to a precautionary boil water notice (pBWN) being placed on this supply from 01/03/2018 to 08/03/2018 during Storm Emma.

The water treatment plant serves a population of 26 and delivers a volume of 2 m³/day. This plant consists of a bored well and chlorine disinfection. Irish Water propose to connect this supply to the Fewes PWS and to decommission the Comeragh (Briska Lower) treatment plant by Q1 2019.

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 13.25 at Comeragh (Briska Lower) WTP (see photograph 1). 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:

Brian O' Leary - Operations Lead; Irish Water (IW);

Siobhan Clifford - Drinking Water Compliance Analyst; Irish Water (IW);

Representing Waterford City and County Council:

Ken Walsh - Water Services Engineer; Waterford City and County Council (WCCC);

Declan Halpin - Technician Waterford City and County Council (WCCC);

James Power - Water Caretaker; Waterford City and County Council (WCCC).

Representing the Environmental Protection Agency:

Niall Dunne- EPA Inspector.

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.	<p>Source Protection</p> <ul style="list-style-type: none"> a. The source for the supply is a bored well. The well is located within the chlorine dosing building and is protected with a wellhead cover. b. Waterford City and County Council (WCCC) did not know the depth or construction of the borehole.
2.	<p>Disinfection</p> <ul style="list-style-type: none"> a. Disinfection consists of duty and assist chlorine dosing pumps. The assist pump starts when chlorine levels < 0.5mg/l. b. On the 01/03/2018 the caretaker was alerted, via his phone, that chlorine dosing had stopped. At the time WCCC staff were unable to visit the site due to extremely cold weather conditions. A pBWN was placed on the supply. c. The pBWN was lifted on the 08/03/2018, when WCCC staff could revisit the site and after three clear microbiological samples were recorded. d. On investigation, the drop in the chlorine levels was due to a frozen chlorine line. e. WCCC staff stated that there is inadequate contact time to the first consumers on this supply.
3.	<p>Management and Control</p> <ul style="list-style-type: none"> a. During Storm Emma WCCC and Irish Water set up a 'WhatsApp' communication group among the staff. IW stated that this was very beneficial and assisted communications during the event.

3. AUDITORS COMMENTS

The main issue with this treatment plant is that, according to Waterford City and County Council, there is inadequate contact time to the first consumer on this supply. Irish Water propose to connect this supply to the Fewes PWS by Q1 2019. In the interim Irish Water should calculate the contact time, and if it is inadequate, < 15 mg/min/l to the first consumer, Irish Water should seek the advice of the HSE.

A pBWN was placed on this supply on 01/03/2018, due to a chlorine line freezing. IW should review all similar drinking water treatment plants under their remit to ensure that remedial measures are put in place at drinking water treatment plants to prevent incidents such as this reoccurring.

It was noted during the audit that Irish Water and the local authority set up a 'WhatsApp' group to communicate among staff during Storm Emma. According to Irish Water this was very beneficial. This is a novel communication approach and should be considered by Irish Water during similar events.

4. RECOMMENDATIONS

General

Disinfection

1. Irish Water should submit the chlorine contact time calculation to the Agency. If the contact time is less than the required 15 mg/min/l at the first consumer's property, Irish Water should;
 - a. seek the advice of the HSE immediately.
 - b. submit proposals, with timeframes, for the resolution of the contact time issue on this supply.
2. A pBWN was placed on this supply due to a chlorine line freezing during Storm Emma. Irish Water should review all treatment plants under their remit to ensure remedial measures are in place to prevent reoccurrence of incidents such as this.

FOLLOW-UP ACTIONS REQUIRED BY IRISH WATER

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

Irish Water should submit a report to the Agency within two weeks of the date of this audit report detailing how it has dealt with these issues of concern. The report should include details on the action taken and planned to address the various recommendations, including timeframe for commencement and completion of any planned work.

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 DW2018/31 in any future correspondence in relation to this Report.

Report prepared by:



Date:

17/04/2018

Inspector

Photograph 1: Comeragh (Briska Lower) WTP.

