

# Site Visit Report

Under the *European Union (Drinking Water) Regulations 2023*, the Environmental Protection Agency (EPA) is the supervisory authority in relation to Uisce Éireann and its role in the provision of public drinking water supplies. This audit was carried out to assess the performance of Uisce Éireann in providing clean and wholesome water to the public water supply named below.

The audit process is a sample of the performance of a water treatment plant and public water supply on a given date.

Water Supply Zone	
<b>Name of Installation</b>	Carndonagh (Mixed Supply)
<b>Organisation</b>	Uisce Éireann
<b>Scheme Code</b>	0600PUB1007
<b>County</b>	Donegal
<b>Site Visit Reference No.</b>	SV34936

Report Detail	
<b>Issue Date</b>	01/05/2026
<b>Prepared By</b>	Veronica Boland

Site Visit Detail			
<b>Date Of Inspection</b>	15/04/2026	<b>Announced</b>	Yes
<b>Time In</b>	13:30	<b>Time Out</b>	14:40
<b>EPA Inspector(s)</b>	Veronica Boland		
<b>Additional Visitors</b>			
<b>Company Personnel</b>	Uisce Éireann: Damien Doherty, Geraldine Friel.  Donegal County Council (working in partnership with Uisce Éireann): Brian McCallian.		

## > Summary of Key Findings

1. The audit found that the Carndonagh Public Water Supply (PWS) was operating satisfactorily on the day of the audit.
2. The groundwater boreholes were not capped to ensure adequate protection, in accordance with *EPA Advice Note No. 14: Borehole Construction and Wellhead Protection*.
3. Residual chlorine monitoring in the network is not carried out several times a week at different points of the network.

**Uisce Éireann should submit a report to the EPA on or before the 03/06/2026 detailing the actions taken and planned, with timescales, to close out the 3 recommendations in this audit report.**

## > Introduction

The Cardonagh (Mixed Supply) PWS produces approximately 2,760m<sup>3</sup>/day of treated water, and serves a population of approximately 5,905 people. The raw water is sourced from two groundwater boreholes. Treatment of the combined water consists of chlorination disinfection.

## > Supply Zones Areas Inspected

The Carndonagh WTP treatment processes and the two groundwater boreholes.



## 1. Source Protection

	Answer
1.1	Is the abstraction source(s) adequately protected against contamination? <b>Comment</b> 1. The two boreholes supplying the Cardonagh PWS are located in different locations, both approximately 1 kilometre from the WTP. The boreholes are contained within locked, dry chambers, however the boreholes were not capped in accordance with the requirements of the <i>EPA Drinking Water Advice Note 14: Borehole Construction and Wellhead Protection</i> . <b>Recommendations:</b> 1. Ensure that all boreholes are capped and maintained in accordance with <i>EPA Advice Note No. 14: Borehole Construction and Wellhead Protection</i> .



	Answer
2.1 Is there a suitable monitoring frequency for residual chlorine in the network with records available?	No
<b>Comment</b>	
<p>1. Records reviewed of results for residual chlorine in the network indicated compliant results, however monitoring is only carried out once a week.</p>	
<b>Recommendation:</b>	
<p>2. Ensure that monitoring of residual chlorine is undertaken several times a week at different points of the network to include network extremities.</p>	

	Answer
2.2 Are suitable plant shutdowns/inhibits in place to prevent the entry of inadequately treated water entering the distribution network?	No
<b>Comment</b>	
<p>1. There is a turbidity monitor located on the pumpline from each borehole at the point of chlorination. These turbidity monitors have shutdown alarms of 0.5 NTU with a 3 minute delay, and 1 NTU with a 1 minute delay.</p>	
<p>2. The chlorine residual verification monitors (CL002, CL003) are located on the pumpline to the inlet of treated water reservoir. The CL002 and CL003 shutdown setpoints are 0.5 (low) and 1.5 (high), both with a time delay of 15 minutes. The <i>EPA Water Treatment Manual: Disinfection</i> recommends a 5 minute time delay in this regard.</p>	
<b>Recommendation:</b>	
<p>3. Investigate the feasibility of reducing the chlorine residual setpoint time delays to align more closely with the <i>EPA Water Treatment Manual: Disinfection</i>.</p>	

## Recommendations

### **Actions required by Uisce Éireann**

During the audit, Uisce Éireann representatives were advised of the audit findings and that action must be taken by Uisce Éireann to address the issues raised.

**Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the recommendations raised in this report without delay.**

### **Response to Audit Report**

Uisce Éireann should submit a report to the EPA on or before the date specified in the Summary of Key Findings detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

The EPA advises that the findings and recommendations from this report should, where relevant, be addressed at other public water supplies.

### **Publication of Reports**

Audit reports are published to the EPA's website, [www.epa.ie](http://www.epa.ie), typically 1 month after the audit report is issued to Uisce Éireann.