

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	
Name of Installation	Charleville
Organisation	Uisce Éireann
Scheme Code	0500PUB1103
County	Cork
Site Visit Reference No.	SV34835

Report Detail	
Issue Date	22/05/2026
Prepared By	Sean O'Leary

Site Visit Detail			
Date Of Inspection	22/04/2026	Announced	Yes
Time In	13:00	Time Out	14:15
EPA Inspector(s)	Sean O'Leary Maeve McHugh		
Additional Visitors			
Company Personnel	Uisce Éireann: John Sheahan and Claire Hurley. Cork County Council (working in partnership with Uisce Éireann): Gary Collins.		

> Summary of Key Findings

1. There are no chlorine monitors with alarms or inhibits to verify contact time has been achieved.
2. There are no alarms or inhibits on the turbidity monitor to prevent inadequately disinfected water entering the supply.
3. There is no documented site specific alarm response procedure in place at the treatment plant.

Uisce Éireann should submit a report to the EPA on or before 22/06/2026 detailing the actions taken and planned, with timescales, to close out the four recommendations in this audit report.

> Introduction

The Charleville Public Water Supply (PWS) supplies on average 5,999 m³/d and serves a population of 8,718 (EDEN figures).

Raw water is obtained from 4 no. boreholes (BH2, BH3, BH4 & BH5) adjacent to the Charleville Water Treatment Plant (WTP). Treatment consists of chlorination and fluoridation.

This audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome water with a focus on the operation of the plant.

> Supply Zones Areas Inspected

The chlorination dosing system, fluoridation system and pumps at the water treatment plant were inspected.



		Answer
1.1	Is there a documented alarm response procedure?	No
Comment		
<p>1. Uisce Éireann confirmed that there was no site specific documented alarm response procedure.</p> <p>Recommendation:</p> <p>1. Ensure that (i) a formal documented site-specific alarm response procedure is in place at the treatment plant and (ii) provide training to relevant staff (including relief and temporary staff) on the requirements of the alarm response procedure.</p>		

		Answer
1.2	Are suitable plant shutdowns/inhibits in place to prevent the entry of inadequately treated water entering the distribution network?	No
Comment		
<p>1. On the day of the audit there was no contact time verification chlorine monitor installed with appropriate alarms or shutdowns after the point of contact time on the network at Lisballyhea or Churchtown.</p> <p>2. Uisce Éireann confirmed that there are no turbidity monitors installed on two of the onsite boreholes (BH 4 and 5). Turbidity monitors are installed on the remaining boreholes 2 and 3. Turbidity readings are not trended or graphed to SCADA. There are no appropriate alarms or shutdowns installed on any of the boreholes.</p> <p>3. All 4 boreholes feed into one combined tank, where a turbidity monitor is installed and is connected and trending to SCADA. There are no appropriate alarms or inhibits installed on this combined turbidity monitor.</p> <p>4. Currently the lack of an alarm and inhibit setpoint fails to ensure the water turbidity remains below 1 NTU before disinfection.</p> <p>Recommendation:</p> <p>2. Complete the installation of a chlorine residual monitor at Lisballyhea Reservoir and the Churchtown Network, including appropriate warning alarms and plant shutdown setpoints to ensure target chlorine contact time is achieved and verified at all times.</p> <p>3. (i) Investigate the feasibility of installing turbidity monitors on boreholes 4 and 5, and (ii) installing run to waste on each of the off-site boreholes.</p> <p>4. Install appropriate turbidity alarms and shutdowns on the combined turbidity monitor to ensure the turbidity remains below 1 NTU before disinfection.</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, typically 1 month after the audit report is issued to Uisce Éireann.