

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	Ballina-Lisglennon
Organisation	Uisce Éireann
Scheme Code	2200PUB1004
County	Mayo
Site Visit Reference No.	SV33406

Report Detail

Issue Date	19/12/2025
Prepared By	Jennifer Brady

Site Visit Detail

Date Of Inspection	08/12/2025	Announced	No
Time In	11:00	Time Out	13:00
EPA Inspector(s)	Jennifer Brady Veronica Boland		
Additional Visitors	N/A		
Company Personnel	Uisce Éireann: Siobhan Sheridan & Paul Thomas. Mayo County Council (working in partnership with Uisce Éireann): Kevin Maheady & Noel Kearney.		

➤ **Summary of Key Findings**

1. Disinfection consists of Chlorination only.
2. Chlorine Ct settings at water treatment plant were lower than the Ct calculation submitted by Uisce Éireann.

➤ **Introduction**

The Ballina-Lisglenon Public Water Supply (PWS) produces approximately 5004 m3/day serving a population of 9,166. The Lisglenon PWS is sourced from Lough Conn and raw water is pumped by night from the abstraction point at the Wherrew water treatment plant to a water tank at Lisglenon. Treatment consists of disinfection via chlorination and treated water is stored at an on-site reservoir.

➤ **Supply Zones Areas Inspected**

This audit assessed the Chlorination disinfection system at the Ballina-Lisglenon Water Treatment Plant.



1. Disinfection Audits 2025

		Answer
1.1	Is chlorination used for primary disinfection?	Yes
1.2	Did Uisce Éireann confirm the type of chlorine disinfectant in use?	Yes
1.3	Are there duty and standby chlorine dosing pumps in place?	Yes
Comment		
1.4	Is there automatic switchover in the event of failure of one of the chlorine dosing pumps?	Yes
1.5	Is the chlorine dosing rate flow proportional?	Yes
1.6	Is there a continuous residual chlorine monitor, with alarm, to verify chlorine dosing is taking place at the target level?	Yes
1.7	Is there a continuous residual chlorine monitor, with alarm, at a suitable sample location after contact time has been completed?	Yes
1.8	Can data trends from the online residual monitor be viewed on site?	Yes
1.9	Are there low and high chlorine alarm settings on each chlorine monitor?	Yes

Answer	
1.10	Is there a documented alarm response procedure for responding to chlorine alarms?
1.11	Have staff been trained on the chlorine alarm response procedure?
1.12	Are chlorine alarms dialled out via a cascade system to allow a timely response by plant operators?
1.13	Is there automatic shutdown of the supply in the event of the chlorine level dropping below the low level or rising above the high chlorine alarm setting?
1.14	Are service due / monitoring instrument calibration dates for the chlorine monitors within date?
1.15	<p>Is the site specific target contact time being achieved?</p> <p>Comment</p> <p>Chlorine Ct to be achieved which was displayed on the WTP SCADA was set at 18.5mg.min.l. The plant operator confirmed that this was the target they were aiming to achieve, the pre-audit information provided by Uisce Éireann on the Ct sheet was different to this.</p>
1.16	Is the minimum effective contact time of 15 mg. min/l being achieved?
1.17	<p>Is the residual chlorine level \geq 0.1 mg/l at the extremity of the distribution network?</p> <p>Comment</p>

It was confirmed that plant operators obtain samples at the outlet of the reservoirs on the network several times a week as part of their chlorine residual monitoring. The network operators take the chlorine residual samples throughout the rest of the network including the extremities, however the frequency of this could not be confirmed at the audit.

Chlorine residual results reviewed at the audit, while compliant did not include locations at the extremity of the network.

Recommendations

Subject	Ballina-Lisglenon Disinfection Audit Recommendations	Due Date	19/01/2026
Action Text	<p>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendations without delay.</p> <ol style="list-style-type: none">1. Review plant operating Ct against the pre-audit Chlorine CT calculation sheet provided and ensure site specific target time is being achieved.2. Submit and ensure that residual free chlorine concentrations in the network extremities are at least 0.1 mg/l to maintain adequate disinfection.3. Ensure monitoring of residual chlorine is undertaken several times a week at different points of the network to include the network extremities. <p>Actions required by Uisce Éireann</p> <p>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.</p> <p>Uisce Éireann should submit a report to the EPA on above mentioned date detailing the actions taken and planned, with timescales, to close out the above recommendations.</p> <p>The EPA advises that the findings and recommendations from this audit report should, where relevant, be addressed at other public water supplies.</p>		