

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	Ballinamona
Organisation	Uisce Éireann
Scheme Code	0500PUB1305
County	Cork
Site Visit Reference No.	SV35130

Report Detail	
Issue Date	07/05/2026
Prepared By	Anna Doyle

Site Visit Detail			
Date Of Inspection	21/04/2026	Announced	Yes
Time In	11:00	Time Out	11:25
EPA Inspector(s)	Anna Doyle Noel Cosgrove		
Additional Visitors			
Company Personnel	Uisce Éireann: Claire Hurley, Billy Taylor, Billy Mulcahy.		

> Summary of Key Findings

1. Disinfection consists of primary UV disinfection and secondary chlorination.
2. Install duty and standby chlorine dosing pumps with automatic switch in the event of the failure of one of the pumps.

Uisce Éireann should submit a report to the EPA on or before 07/06/2026 detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

> Introduction

The Ballinamona Water Treatment Plant (WTP) produces approximately 3m³/d of water serving a population 48 (EDEN figures). The audit focused on the disinfection system at Ballinamona WTP.

> Supply Zones Areas Inspected

This audit assessed the UV and chlorination disinfection system at Ballinamona WTP.



1. Disinfection Audits 2026

		Answer
1.1	Is chlorination used for primary disinfection?	No
		Answer
1.2	Did Uisce Éireann confirm the type of chlorine disinfectant in use?	Yes
	Comment	
	1. 10% Sodium Hypochlorite.	
		Answer
1.3	Are there duty and standby chlorine dosing pumps in place?	Yes
		Answer
1.4	Is there automatic switchover in the event of failure of one of the chlorine dosing pumps?	No
	Comment	
	1. There is a programmed automatic switchover of the dosing pumps every 10 minutes. In the event of a dosing pump failure a plant shutdown is triggered.	
	Recommendation:	
	1. Install duty and standby chlorine dosing pumps with automatic switch in the event of the failure of one of the pumps.	
		Answer
1.5	Is the chlorine dosing rate flow proportional?	Yes
		Answer
1.6	Is there a continuous residual chlorine monitor, with alarm, to verify chlorine dosing is taking place at the target level?	Yes
		Answer
1.7	Is there a continuous residual chlorine monitor, with alarm, at a suitable sample location after contact time has been completed?	Yes

		Answer
1.8	Can data trends from the online residual monitor be viewed on site?	Yes
		Answer
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?	Yes
		Answer
1.11	Have staff been trained on the chlorine alarm response procedure?	Yes
		Answer
1.12	Are chlorine alarms dialled out via a cascade system to allow a timely response by plant operators?	Yes
		Answer
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?	Yes
		Answer
1.14	Are service due / monitoring instrument calibration dates for the chlorine monitors within date?	Yes
		Answer
1.15	Is the residual chlorine level ≥ 0.1 mg/l at the extremity of the distribution network?	Yes
		Answer
1.16	Is monitoring of network residual chlorine undertaken several times per week?	Yes
		Answer
1.17	Is UV treatment used for primary disinfection?	Yes

		Answer
1.18	Are there duty and standby UV units in operation?	No
		Answer
1.19	Is there automatic changeover between the duty and standby UV units?	Not Applicable
		Answer
1.20	Is there automatic shut-off of the supply in the event of UV units failing or operating outside of their validated range?	Yes
		Answer
1.21	Is there continuous monitoring of the UV units to verify operation within validation range at all times?	Yes
		Answer
1.22	Can data trends from the online UV monitor(s) be viewed on-site?	Yes
		Answer
1.23	Is there a documented alarm response procedure for responding to UV alarms?	Yes
		Answer
1.24	Have staff been trained on the UV alarm response procedure?	Yes
		Answer
1.25	Are UV alarms dialled out via a cascade system to allow a timely response by plant operators?	Yes
		Answer
1.26	Are service due / monitoring instrument calibration dates for the UV units within date?	Yes

		Answer
1.27	Is the UV disinfection system validated to an appropriate international standard ?	Yes

		Answer
1.28	Did UÉ confirm that the UV disinfection system is operating within the validated range?	Yes

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.