

# 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	Athboy
Organisation	Uisce Éireann
Scheme Code	2300PUB1001
County	Meath
Site Visit Reference No.	SV32953

Report Detail	
Issue Date	25/09/2025
Prepared By	Lisa Noone

Site Visit Detail			
Date Of Inspection	02/09/2025	Announced	Yes
Time In	10:30	Time Out	12:00
EPA Inspector(s)	Lisa Noone		
Additional Visitors			
Company Personnel	Uisce Éireann: Joseph Moran, Conor Flanagan, Aaron Murray, Daniel Pusz, James Beirne.		

## > Summary of Key Findings

1. The audit found that automatic shutdown of the plant as well as specific alarms are disabled due to ongoing investigative and remedial works as part of the commissioning phase of the Uisce Éireann Disinfection Programme. Works are expected to be completed by Q4 2025 when alarms/inhibits should be enabled and the post-dosing chlorine residual monitor should be re-instated by Uisce Éireann.
2. Three properties remain on property-specific Boil Water Notices due to receiving untreated water from the raw water rising main.

## > Introduction

Athboy Public Water Supply (PWS) supplies an average of 1,500 m<sup>3</sup>/day of water, serving a population of approximately 5,300 people. Raw water is abstracted from two boreholes (Coille Dois and Trim Road boreholes) located off-site, with treatment consisting of chlorination.

The audit was undertaken to assess progress on outstanding recommendations from the EPA audit carried out in 2023, and to assess Uisce Éireann's performance in producing clean and wholesome water with a focus on the alarms and inhibits in place at the WTP and the procedures in place to ensure appropriate oversight of treatment processes.

## > Supply Zones Areas Inspected

All treatment processes at Athboy WTP were inspected. The two off-site boreholes were not inspected as part of the audit.



## 1. Management and Control

1.1

Have the recommendations from the previous EPA audit been satisfactorily addressed?

**Answer**

No

**Comment**

1. It was confirmed at the audit that three properties remain on a Boil Water Notice (BWN) due to their connection to the raw water rising main. These three properties are being provided with untreated water and have been placed on property specific BWNs since 24/02/2023. Uisce Éireann stated at the audit that this issue remains under review. This issue was raised at a previous EPA audit carried on 21/02/2023 and remains open.



## 2. Alarms, Inhibits & Oversight Audits 2025

2.1

Is there a documented site specific incident response and incident escalation process?

Answer

Yes

**Comment**

1. The Uisce Éireann incident escalation flowchart was displayed at the WTP. However, this was last updated in 2023 and contact information and site specific trigger levels were not up-to-date.

2.2

Were online monitors operational?

Answer

No

**Comment**

1. The post-dosing chlorine analyser CI001 was not in operation at the time of the audit. Installation works under the Uisce Éireann Disinfection Programme were completed in Q4 2024, however commissioning remains incomplete due to an airlock issue which has been identified affecting CI001. Chlorine is currently being dosed under Control Option A (flow proportional) until commissioning is complete.

2. Remedial work design and a schedule of works has been agreed for Q3/Q4 2025, to include the installation of an air scouring valve to minimise airlocks.

2.3

Are suitable alarm settings in place to alert operators to deteriorating water quality or the failure of a critical treatment process?

Answer

No

**Comment**

1. Alarms for turbidity, UVT and the post-dosing chlorine analyser (CI001) are programmed however they are not enabled due to commissioning issues as outlined in section 2.2 above.

2. A 9-minute time delay is in place for chlorine residual post contact-time. This is considered too long to allow a timely and effective response by operational staff and to ensure a chlorine residual in excess of 0.1mg/l is being maintained in the network.

3. Whilst the final water turbidity alarm is not enabled, a 1 NTU alarm setpoint is installed with a 6-minute time delay. This time delay is considered too long to ensure a turbidity of less than 1NTU prior to disinfection.

2.4

Are dial out arrangements suitable to allow a timely response?

Answer

No

**Comment**

1. Critical alarms are dialled-out on a group-basis to both caretakers and are responded to depending on whoever is on call, however there is no way of verifying that alarms have been responded to.
2. Supervisors are not currently included in alarm dial outs.

	Answer
2.5	<p>Are suitable plant shutdowns/inhibits in place to prevent inadequately treated water entering the distribution network?</p> <p>No</p> <p><b>Comment</b></p> <p>1. All plant shutdowns are currently disabled due to the commissioning issues outlined in section 2.2.</p>
2.6	<p>Is there appropriate oversight of plant performance trends?</p> <p>No</p> <p><b>Comment</b></p> <p>1. Uisce Éireann should ensure appropriate oversight of plant performance trends at all times, specifically when chlorine, turbidity and UVT alarms and plant shutdowns are disabled.</p>
2.7	<p>Is there a documented procedure for responding to specific alarms?</p> <p>No</p>
2.8	<p>Are there appropriate procedures covering verification of alarms and inhibits status following maintenance or other work on site?</p> <p>No</p>

Subject	Athboy Audit Recommendations	Due Date	27/10/2025
Action Text	<p><b>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendations without delay.</b></p> <ol style="list-style-type: none"> <li>1. Outstanding recommendations from 2023 audit: Ensure that all properties connected to Uisce Éireann assets in the Athboy PWS are receiving adequately treated water, and re-issue BWNs to the affected properties.</li> <li>2. Disinfection: (i) Advance plans for remedial work and commissioning of the plant under the Uisce Éireann Disinfection Programme, and reinstate the CI001 online monitor upon completion of works, (ii) Ensure all alarms and plant shutdowns are enabled upon commissioning of the plant, and (iii) Review and confirm alarm set points and time delays in place for chlorine residual and turbidity.</li> <li>3. Ensure that there are robust systems of reviews and checks on the water treatment plant performance data which should include regular review of SCADA trends by operational and supervisory staff, in particular when plant alarms and shutdowns are disabled.</li> <li>4. Ensure that the Uisce Éireann Incident Communication Response Guidance Form displayed at the WTP contains site specific information including contacts for escalation and relevant site specific trigger levels protecting critical processes at the WTP.</li> <li>5. Develop a procedure and deliver appropriate training (i) covering the verification of alarms/shutdowns status following maintenance or other works completed at the treatment plant, and (ii) for responding to and escalating all alarms generated at the water treatment plant. Both procedures should clearly document the corrective actions and set out delegation of responsibilities.</li> <li>6. Put in place an appropriate cascade system for responding to alarms generated at the plant which allows for verification that an alarm has been responded to.</li> </ol> <p><b>Actions required by Uisce Éireann</b></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 or before the above due 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>		