

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	Arles 2 PWS
Organisation	Uisce Éireann
Scheme Code	1600PUB1104
County	Laois
Site Visit Reference No.	SV32010

Report Detail	
Issue Date	11/04/2025
Prepared By	Lisa Noone

Site Visit Detail			
Date Of Inspection	19/03/2025	Announced	Yes
Time In	11:00	Time Out	12:15
EPA Inspector(s)	Lisa Noone		
Additional Visitors			
Company Personnel	Uisce Éireann: Linda Doran, Maria Lloyd. Laois County Council (working in partnership with Uisce Éireann):		

> Summary of Key Findings

1. Arles Water Treatment Plant serving Arles 2 Public Water Supply was operating satisfactorily on the day of the audit.
2. There is no treated water storage in the supply leaving consumers vulnerable to plant outages.
3. There are no turbidity monitors in place post filtration to ensure that water is adequately prepared for disinfection.

> Introduction

Arles 2 Public Water Supply (PWS) produces circa. 17 m³/day of water serving a population of approximately 32 residential properties. Raw water is abstracted from a single borehole located at the Water Treatment Plant (WTP). Treatment consists of filtration via two Turbidex filters, two filox filters for iron and manganese removal, disinfection via chlorination, and treated water polishing via a cartridge filter.

The audit was undertaken 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

The borehole and treatment processes on-site were inspected as part of the audit.



1. Management and Control

1.1

Is the water treatment plant resilient enough to cope with significant variations in raw water quality or demand?

Answer

No

Comment

1. There is no treated water storage at the WTP or in the supply.
2. The borehole pump is required to be switched out on a quarterly basis due to iron and manganese build-up leaving consumers vulnerable to these plant outages during maintenance.



2. Alarms, Inhibits & Oversight Audits 2025

2.1

Is suitable continuous monitoring in place to verify treatment performance?

Answer

No

Comment

1. A continuous turbidity monitor with auto shutdown is in place for final water following polishing via the cartridge filter. There is no turbidity monitor in place post filtration to verify effectiveness of the Turbidex filters and iron and manganese filters or to verify that turbidity is <1NTU at disinfection.

2.2

Are plant performance trends accessible remotely?

Answer

No

Comment

1. A newly appointed caretaker does not yet have SCADA access to view performance trends and inform their work.

2.3

Are there appropriate procedures covering verification of alarms and inhibits status following maintenance or other work on site?

Answer

No

Recommendations

Subject	Arles 2 Audit Recommendations	Due Date	12/05/2025
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. Consider possible measures to enhance the resilience of the Arles WTP and address the lack of treated water storage prior to the distribution network.2. Install a continuous monitor for combined filter turbidity to assess overall filter performance and to verify that turbidity is <1NTU prior to chlorination. Ensure that appropriate warning alarms/plant shutdowns are in place in to protect the turbidity element of the disinfection barrier.3. Ensure that operational staff have remote access to plant performance trends and have been adequately trained in the use of SCADA to inform their work.4. Develop a procedure and deliver appropriate training covering the verification of alarms/shutdowns status following maintenance or other works completed at the treatment plant. <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 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>		