

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	Tullow
Organisation	Uisce Éireann
Scheme Code	0100PUB1131
County	Carlow
Site Visit Reference No.	SV31950

Report Detail	
Issue Date	07/05/2025
Prepared By	Sean O'Leary

Site Visit Detail			
Date Of Inspection	10/04/2025	Announced	No
Time In	10:30	Time Out	12:00
EPA Inspector(s)	Sean O'Leary Emma Sinnott		
Additional Visitors	Becci Cantrell		
Company Personnel	Uisce Éireann: James Byrne and Denis McGrath. Carlow County Council (working in partnership with Uisce Éireann): Darren Leonard.		

> Summary of Key Findings

1. The audit found that Tullow Water Treatment Plant was operating and performing well in providing clean and wholesome water to the public supply.
2. The media depth of each filter could not be confirmed at the audit and there is no automatic filter backwash in place based on turbidity, headloss and time.

> Introduction

The Tullow Public Water Supply (PWS) supplies an average of 985 m³/day of water, serving a population of 3,059 (EDEN).

The source for the supply is the River Slaney. Treatment consists of coagulation, flocculation, clarification, rapid gravity filtration, pH correction, chlorination, fluoridation and sludge treatment.

The audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome water focusing on the protozoal barriers in place at the treatment plant

> Supply Zones Areas Inspected

The raw water intake, alum dosing system, pH adjustment system, clarification tanks, rapid gravity filters, and chlorination dosing system were inspected at the water treatment plant (WTP).



1.1

Are the filters designed and managed in accordance with EPA guidance?

Answer

No

Comment

1. There are 2 rapid gravity filters in place at the Tullow water treatment plant. There are no media gauges installed in the filters to assist with monitoring of the depth of filter media at present. Uisce Éireann could not confirm the current media depth of the two rapid gravity filters.

2. Uisce Éireann confirmed filter media replacement occurred last 15 years ago.

3. Uisce Éireann confirmed that automatic backwashing is not activated on the filters due to a small clearwater tank. Backwashing is not triggered by the turbidity alarm setpoints or triggered by headloss. Each filter is manually backwashed every two days.

4. Uisce Éireann confirmed a high turbidity alarm of 0.2 NTU was in operation for each filter, turbidity levels were controlled through manual backwashes. The filter turbidity trends inspected during the audit were satisfactory.

Recommendations

Subject	Audit Recommendations	Due Date	07/06/2025
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> <p>1. a) Undertake an assessment of the depth and condition of the media in each rapid gravity filter, b) ensure the depth of media in each filter is a minimum of 1m, c) install a media depth gauge in each filter d) install automatic backwashing of each filter based on turbidity, headloss, and time.</p> <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 07/06/2025 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>		