

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	Sow Regional
Organisation	Uisce Éireann
Scheme Code	3300PUB1641
County	Wexford
Site Visit Reference No.	SV32578

Report Detail	
Issue Date	20/06/2025
Prepared By	Sean O'Leary

Site Visit Detail			
Date Of Inspection	20/05/2025	Announced	Yes
Time In	10:30	Time Out	12:00
EPA Inspector(s)	Sean O'Leary Emma Sinnott		
Additional Visitors	Becci Cantrell		
Company Personnel	Uisce Éireann: Denis McGrath, Edward Doyle and Ken Jones.		

> Summary of Key Findings

1. *Cryptosporidium* was detected in a final treated water sample taken at the Sow Regional public water supply on 24/11/2024 (0.01 count/no. per 10L). Following consultation with the HSE, follow up sampling was undertaken on two days and subsequently came back clear. The cause of the *Cryptosporidium* detection has not been identified following investigations undertaken.
2. Onsite borehole 2 should be capped to ensure that it is protected in accordance with EPA Advice Note No.14: Borehole Construction and Wellhead Protection.
3. Uisce Éireann should implement an action programme to improve the sludge handling facilities at the Killmallock Bridge Water Treatment Plant.

> Introduction

The Killmallock Bridge Water Treatment Plant is the largest of two water treatment plants that supply the Sow Regional Public Water Supply (PWS). The Sow Regional PWS supplies an average of 488 m³/day of water, serving a population of 11,485 (EDEN 2024). Ballinellard WTP, although not connected via the network also serves the Sow Regional PWS.

The source for the supply is the River Sow and two onsite boreholes. 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.

> Supply Zones Areas Inspected

The alum dosing system, pH adjustment system, flocculation system, clarification tanks, rapid gravity filters, chlorination dosing system and sludge treatment were inspected at the water treatment plant.



1. Incident Management

1.1

Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?

Answer

Yes

Comment

1. The EPA was notified on 27/11/2024 of a *Cryptosporidium* exceedance in a sample taken of the final water at the Sow Regional Water Treatment Plant (WTP) on 24/11/2024. Uisce Éireann monitor for *Cryptosporidium* and *Giardia* monthly as part of Uisce Éireann's Rationale for Determining the Frequency of *Cryptosporidium* Monitoring in Public Water Supplies. The sample, taken on 24/11/2024, was found to contain *Cryptosporidium* at 0.01 count/No. per 10 litre.

2. Uisce Éireann consulted with the HSE in relation to the exceedance. It was decided to resample the treated water for *Cryptosporidium*, inform the HSE of the results and to continue to monitor the operation of the plant.

3. The follow up *Cryptosporidium* samples were taken on 28/11/2024, 04/12/2024 and 11/12/2024 and were analysed by a contract laboratory. All three sample results came back clear.

4. Uisce Éireann reported that there were no issues at the WTP on the day of the exceedance. A review of the plant operations undertaken indicated that the treatment processes were operating normally during the time leading up to the detection.



2. Source Protection

2.1

Is the abstraction source(s) adequately protected against contamination?

Answer

No

Comment

1. Borehole number 2 had an unfitted cap, and a crack in the surrounding concrete. Water was lying on the concrete with clear signs of infiltration from the surrounding area.

2. Uisce Éireann were unable to confirm if the onsite bathroom had a connected septic tank and it was not known if there is a septic tank(s) located within the supply's zone of contribution.



3. Sludge Management

3.1

Is sludge arising from the treatment processes adequately managed?

Answer

No

Comment

1. Uisce Éireann stated that at times the sludge storage tank can reach its capacity.



4. Site Specific Issues

4.1

		Answer
Is there a documented procedure for responding to specific alarms?		No
Comment		
1. Uisce Éireann confirmed there was no specific alarm response procedure.		

Recommendations

Subject	Audit recommendations	Due Date	20/07/2025
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. Continue to monitor the supply in accordance with Uisce Éireann's Rationale for Determining the Frequency of <i>Cryptosporidium</i> monitoring in Public Water Supplies. 2. Source Protection: i. Ensure borehole number 2 is adequately protected against contamination. Uisce Éireann should have regard to EPA Advice Note No. 14: Borehole Construction and Wellhead Protection when carrying out any upgrade works; ii. Liaise with Wexford County Council to ensure inspection(s) are carried out on any nearby septic tank (s) within the water supply's zone of contribution to assess if they are operating optimally and do not present a risk to human health or the environment. 3. Undertake an assessment of the adequacy of the sludge treatment stage and carry out any necessary remedial works. 4. Ensure that: (i) a formal site specific alarm response procedure is in place at the treatment plant and (ii) provide training to relevant staff (including relief and temporary staff) on the requirements of the alarm response procedure <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 20/07/2025 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>		