

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	South Regional
Organisation	Uisce Éireann
Scheme Code	3300PUB1640
County	Wexford
Site Visit Reference No.	SV30271

Report Detail	
Issue Date	08/08/2024
Prepared By	David O'Malley

Site Visit Detail			
Date Of Inspection	25/07/2024	Announced	Yes
Time In	10:20	Time Out	12:15
EPA Inspector(s)	David O'Malley Sean O'Leary		
Additional Visitors			
Company Personnel	Uisce Éireann: Denis McGrath Wexford County Council (working in partnership with Uisce Éireann): John Breen, Fionnuala Callery, Liam Cullen and Kyle Lambert.		

> Summary of Key Findings

1. *Cryptosporidium* (0.0009 count/no. per 10L) was detected in the final treated water from a sample taken at the South Regional public water supply on the 19/06/2024. Following consultation with the HSE follow up sampling was undertaken weekly for the next three weeks. Subsequently, sample analysis for *Cryptosporidium* and *Gardia* came back negative.
2. The audit found that the South Regional water treatment plant was operating satisfactorily on the day of the audit.

> Introduction

The South Regional Public Water Supply (PWS) supplies an average of 5,801 m³/day of water, serving a population of 10,180 (EDEN 2024). The source for the supply is the River Owenduff with treatment consisting of alum dosing, polyelectrolyte dosing, clarification, rapid gravity filtration, chlorination and fluoridation. Treated water is pumped to an off-site reservoir.

The audit was undertaken in response to the detection of *Cryptosporidium* in a sample taken from the final treated water on 19/06/2024.

> Supply Zones Areas Inspected

Alum dosing system, polyelectrolyte dosing system, clarification, rapid gravity filters, chlorination dosing system and incident response procedures were inspected at the water treatment plant.



1. Incident Management

	Answer
1.1 Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?	Yes
Comment	
<p>On the 26/06/2024 Uisce Éireann received a <i>Cryptosporidium</i> result of 0.0009 count/No. per 10 litre from monthly <i>Cryptosporidium</i> sampling at the South Regional public water supply. In consultation with the HSE it was decided to sample for <i>Cryptosporidium</i> on a weekly basis. Analysis for <i>Cryptosporidium</i> and <i>Gardia</i> samples taken on the 25/06/2024, 26/06/2024, 02/07/2024, 10/07/2024 and 16/07/2024 came back as negative.</p> <p>Turbidity trends were viewed for individual turbidity filters and final turbidity for the week before and after the <i>Cryptosporidium</i> exceedance on the 19/06/2024. There was no breach of 0.5 NTU <i>Cryptosporidium</i> barrier for each of the four rapid gravity sand filters and for combined turbidity. All readings were under turbidity of 0.2 NTU.</p>	



2. Management and Control

	Answer
2.1	Has the protozoal compliance log treatment requirement been identified for the water treatment plant?
	No
Comment	
1. Uisce Éireann confirmed that a Source and Sanitary Survey has not been completed for the water treatment plant.	

	Answer
2.2	Are instrument calibrations within date?
	No
Comment	
1. The service sticker for the four online turbidity filters monitors and the chlorine monitor indicated that a service was due in April 2024.	



3. Site Specific Issues

	Answer
3.1 Has UÉ implemented findings from an alarm and inhibit review at the water treatment plant?	No
Comment	
1. Uisce Éireann stated that an alarm and inhibit review has been carried out at the water treatment plant. The report and findings are currently being completed.	

Recommendations

Subject	Audit Recommendations	Due Date	10/09/2024
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. Complete: (i) a source and sanitary survey to confirm the log treatment requirement for the supply and (ii) continue to monitor the supply in accordance with <i>Uisce Éireann's Rationale for Determining the Frequency of Cryptosporidium Monitoring in Public Supplies</i>.2. Implement the findings of the Alarm and Inhibit review to protect treatment processes and treated water quality.3. Ensure all plant monitors and equipment are calibrated or serviced in accordance with manufacturers instructions, and clearly labelled to show the next 'calibration due by' or 'service due by' date. <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 10/09/2024 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>		