

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	Stradbally
Organisation	Uisce Éireann
Scheme Code	3100PUB1093
County	Waterford
Site Visit Reference No.	SV29602

Report Detail	
Issue Date	02/12/2024
Prepared By	Sean O'Leary

Site Visit Detail			
Date Of Inspection	07/11/2024	Announced	Yes
Time In	10:45	Time Out	12:20
EPA Inspector(s)	Sean O'Leary Paul Buckley		
Additional Visitors			
Company Personnel	Uisce Éireann: Siobhán Clifford Waterford City and County Council (working in partnership with Uisce Éireann): David Hourigan, Lar Power and Dave Whelan		

> Summary of Key Findings

1. The audit found that the Stradbally water treatment plant was operating satisfactorily on the day of the audit.
2. A source and sanitary survey should be completed by Uisce Éireann to confirm the protozoal log treatment requirement for the water treatment plant.
3. There is currently no automatic filter backwash facility in place triggered by filter head loss. Filters are backwashed every 24 hours automatically and when the filter turbidity reaches 0.3 NTU.

> Introduction

The Stradbally Public Water Supply (PWS) supplies an average of 200 m³/day of water, serving a population of 663 (EDEN 2024).

The source for the supply is the River Tay. 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 source, alum dosing system, pH adjustment system, clarification tanks, rapid gravity filters, and chlorination dosing system were inspected at the water treatment plant



1. Protozoal Barriers Audits 2024

	Answer
1.1	Has UÉ identified the protozoal compliance log treatment requirement for the water treatment plant?
	No
Comment	
1. Uisce Éireann indicated that the supply has a 3 log treatment requirement subject to completion of a source and sanitary survey. Uisce Éireann stated that this will be completed by the end of Q4 2024.	

	Answer
1.2	Are alarms and shutdowns on each filter, on the combined filtered water and final water in accordance with the EPA Filtration Manual?
	No
Comment	
1. Uisce Éireann confirmed that the rapid gravity filters are manually backwashed once every 24 hours and an automatic backwash is triggered if turbidity reaches 0.3 NTU. However, Uisce Éireann confirmed there is no filter backwash initiated by head loss.	

Recommendations

Subject	Audit Recommendations	Due Date	02/01/2025
Action Text	<p>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendation's without delay.</p> <ol style="list-style-type: none">1. i) Confirm the protozoal log treatment requirement for the supply, ii) provide details of how any protozoal log treatment deficit, if identified, will be addressed, and iii) continue monitoring of the supply in line with the Uisce Éireann Rationale for Determining the Frequency of <i>Cryptosporidium</i> Monitoring in Public Water Supplies.2. Investigate the feasibility of installing automatic backwashes associated with headloss on each rapid gravity filter in accordance with the EPA Water Treatment Manual: Filtration <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 02/01/2025 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>		