

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	Thurles Regional Water Supply
Organisation	Uisce Éireann
Scheme Code	3700PUB1042
County	Tipperary
Site Visit Reference No.	SV30496

Report Detail	
Issue Date	31/10/2024
Prepared By	David O'Malley

Site Visit Detail			
Date Of Inspection	30/09/2024	Announced	Yes
Time In	10:30	Time Out	13:00
EPA Inspector(s)	David O'Malley Sean O'Leary		
Additional Visitors			
Company Personnel	Uisce Éireann: Pat Duggan. Glanua (Operator under DBO contract to Uisce Éireann): David Flanagan, Micheal Harte and Richard Quirke.		

> Summary of Key Findings

1. A discharge of sludge from Thurles Regional water treatment plant was detected on the 11/09/2024 entering the River Suir. The audit confirmed that the discharge was due to incorrect settings on the backwash in the sludge settlement tanks.
2. The audit found that drinking water quality at Thurles Regional water treatment plant was not affected from the 08/09/2024 to the 18/09/2024.

> Introduction

The Thurles Public Water Supply (PWS) supplies an average of 4,951 m³ of water, serving a population of 11,424 (2024 EDEN). The source for the supply is the River Clodiagh. Treatment consists of coagulation, flocculation, clarification, rapid gravity filtration, UV disinfection, pH correction, chlorination, fluoridation and sludge treatment.

> Supply Zones Areas Inspected

The backwash settlement tanks, picket fence thickener, outfall tank and the outfall at the River Suir.



1. Incident Management

1.1

	Answer
Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?	No
Comment	
<p>1. Inland Fisheries Ireland (IFI) notified the water treatment plant operators (Glanua) at Thurles Regional water treatment plant (WTP) on Wednesday 11/09/2024 of brown liquid observed downstream and sludge at the outfall of the Thurles Regional WTP into the River Suir. Supernatant from the sludge settlement tanks is discharged at the outfall to the River Suir. On the 12/09/2024 the IFI Officer provided split samples taken at the outfall to the River Suir to Glanua. Uisce Éireann reported the incident to the EPA on the 18/09/2024.</p> <p>On the 15/09/2024 Uisce Éireann received a complaint of white water observed downstream of the outflow from the Thurles Regional WTP. Uisce Éireann stated that at this time of the year the river is at a low level. When the supernatant is pumped into the river, the pressure causes the water to become aerated creating a white colour in the waterbody. The audit found that chlorine residual and turbidity trends observed for the treated water were not affected between the 08/09/2024 and the 18/09/2024.</p> <p>2. Cause of incident: After an investigation Uisce Éireann identified that the turbidity setpoints on the sludge settlement tanks at the WTP were changed to facilitate a backwash but they were not reinstated.</p> <p>3. Action taken: Uisce Éireann reinstated the backwash turbidity setpoints on the sludge settlement tanks at the WTP on the 11/09/2024. On 16/09/2024 under the advice of the IFI, Uisce Éireann carried out remedial works to the sludge discharged at the outfall of the River Suir and took water samples for analysis.</p>	



2. Sludge Management

	Answer
2.1 Is sludge arising from the treatment processes adequately managed?	No
Comment	
1. The audit found that the discharge of sludge from the water treatment plant to the River Suir was due to turbidity setpoints on the sludge settlement tanks being changed to facilitate a backwash but they were not reinstated.	

Recommendations

Subject	Thurles reactive audit	Due Date	28/11/2024
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. i) submit the findings of the investigations into why the backwash settlement tanks alarms were disabled and not reinstated ii) include in the findings the length of time the alarms were disabled and the quantity of material discharged.2. Put in place a plan to ensure alarms are reinstated and tested following any maintenance works that require alarms to be adjusted or disabled.3. Review sample analysis at outfall and coordinate with Inland Fisheries Ireland to ensure clean up at outfall to River Suir is adequate.4. Investigate installing a turbidity monitor with alarms and shutdowns at outfall tank. <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 28/11/2024 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>		