

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	Newport RWSS
Organisation	Uisce Éireann
Scheme Code	2800PUB1004
County	Tipperary
Site Visit Reference No.	SV30646

Report Detail	
Issue Date	04/12/2024
Prepared By	David O'Malley

Site Visit Detail			
Date Of Inspection	13/11/2024	Announced	Yes
Time In	10:30	Time Out	12:30
EPA Inspector(s)	David O'Malley Becci Cantrell		
Additional Visitors			
Company Personnel	Uisce Éireann: Pat Duggan, Denis McGrath and Colin Cunningham. Tipperary County Council (working in partnership with Uisce Éireann): Matt O'Leary, Shane Boland, and Pat Spain.		

> Summary of Key Findings

1. A discharge of sludge from the Newport water treatment plant was detected on the 16/10/2024 entering the Mulkear River. The discharge was stopped upon observation. The audit confirmed that the discharge was due to a buoyancy aid lodged under the decanting arm that prevented the discharge to the outfall. A standard operating procedure was developed on 11/11/2024 to prevent a discharge from occurring in the future.
2. Uisce Éireann have completed part of the works associated with the recommendations from the previous audit of the plant undertaken on 28/02/2023. Remaining work needs to be done to assess the protozoal log treatment requirements for O' Gormans Well water treatment plant and Newport water treatment plant.

> Introduction

Newport Regional Public Water Supply (PWS) supplies a population of 7,451 with a volume of approximately 3,144 m³/day (2024 EDEN figures). Raw water is abstracted from the Mulkear River. Treatment includes raw water pH correction, coagulation (aluminium sulphate and polyelectrolyte), clarification, rapid gravity filtration and chlorination. Treated water (chlorinated) from O'Gormans Well Water Treatment Plant (WTP) is mixed with the treated water from the Newport Regional (WTP) at the Cully Reservoir where fluoridation takes place.

> Supply Zones Areas Inspected

The raw water intake, clarification, rapid gravity filtration, picket fence thickener, sludge balancing tank, washwater tank and outfall at the Mulkear River were inspected.



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?	Yes
Comment	
<p>1. At approximately 10.30am on 16/10/2024 the operator at the Newport water treatment plant (WTP) was carrying out routine cleaning of clarifier No.3. The wash water from cleaning the clarifiers is sent directly to the washwater tank. The sludge settles in the washwater tank and the top three to four inches of supernatant is released to the Mulkear River by a floating decanting arm. The operator during the cleaning was alerted by Inland Fisheries Ireland (IFI) officers that a brown liquid was being discharged from the WTP into the Mulkear river. The operator observed that the discharge was coming from the overflow pipe in the washwater tank, which soon ceased as the operator had stopped the cleaning of the clarifiers.</p> <p>2. The IFI notified the EPA of the discharge on the 17/10/24. Uisce Éireann did not notify the EPA of the discharge until 23/10/24.</p> <p>3. Cause of incident: After an investigation by Tipperary County Council it was observed that one of the four floating balls that lift the decanting arm got caught under the decanting arm lifting it above the surface of the sludge water. This prevented the supernatant from being discharged through the decanting arm and in turn the sludge water filled, and it was discharged through the overflow outlet pipe that led to the Mulkear River.</p> <p>4. Action taken: The chain connecting the decanting arm has been shortened to prevent the floating balls getting caught under the decanting arm by Tipperary County Council. Uisce Éireann and Tipperary County Council created a standard operating procedure (SOP) for the sludge management and supernatant discharge to the Mulkear river at the WTP. The SOP includes a setting of 7 NTU turbidity to open the outlet valve from washwater tank to the Mulkear River and closing at 11 NTU. Daily testing for turbidity and aluminium of supernatant in washwater tank and further control measures for the sludge balancing tank and the picket fence thickener have been developed.</p>	



2. Management and Control

2.1

	Answer
Have the recommendations from the previous EPA audit been satisfactorily addressed?	No
Comment	
<p>1. Outstanding recommendations from the audit undertaken at Newport PWS on the 28/02/2023:</p> <p>No.2. Confirm (i) the protozoal log treatment requirement for the O’Gormans Well source (ii) confirm how any protozoal log treatment deficit for the Newport WTP and O’Gormans Well WTP will be addressed following the completion of the alarm and inhibit review.</p> <p>No. 4. Progress the upgrade works for the bulk chemical storage areas (aluminium sulphate and caustic soda).</p> <p>2. Progress Update: Uisce Éireann confirmed the works are ongoing to determine the protozoal log treatment requirement for the O’Gormans Well WTP. If a deficit exists at O’Gormans Well WTP, an alarm and inhibit review of the Newport water treatment plant will take place.</p> <p>3. A further update on timelines will be provided by Uisce Éireann for the upgrade works on the bulk chemical storage areas (aluminium sulphate and caustic soda) at Newport WTP in the next file update.</p>	



3. Sludge Management

		Answer
3.1	Is sludge arising from the treatment processes adequately managed?	Yes
Comment		
1. The audit found that the discharge of sludge from the water treatment plant to the Mulkear River was due to a buoyancy aid lodged under the decanting arm that prevented the discharge of supernatant.		

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 recommendations without delay.</p> <ol style="list-style-type: none">1. Ensure that the SOP for sludge management and supernatant discharge to the Mulkear River is adhered to.2. Confirm (i) the protozoal log treatment requirement for the O’Gormans Well source (ii) confirm how any protozoal log treatment deficit for the Newport WTP and O’Gormans Well WTP will be addressed following the completion of the alarm and inhibit review.3. Progress the upgrade works for the bulk chemical storage areas (aluminium sulphate and caustic soda) at Newport WTP.4. Ensure that there is a procedure in place so that any sludge discharges to the river are notified to the EPA and IFI without delay. <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>		