

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	Letterkenny
Organisation	Uisce Éireann
Scheme Code	0600PUB1110
County	Donegal
Site Visit Reference No.	SV30179

Report Detail	
Issue Date	08/11/2024
Prepared By	Veronica Boland

Site Visit Detail			
Date Of Inspection	11/10/2024	Announced	Yes
Time In	11:00	Time Out	14:00
EPA Inspector(s)	Veronica Boland		
Additional Visitors			
Company Personnel	Uisce Éireann: Geraldine Friel, Fionnuala Dunbar, John Gallagher. Donegal County Council (working in partnership with Uisce Éireann): Kieran Friel, Martin Duddy, James McHugh.		

> Summary of Key Findings

1. The audit found that Goldrum Water Treatment Plant (WTP) is well operated and managed and performing well in providing clean and wholesome water to the Letterkenny Public Water Supply (PWS) and operational records are well maintained.
2. Treated water storage capacity at the Letterkenny WTP is limited with a maximum of 2.5 to 3 hours supply in the event of plant shutdown posing a risk to the continuity of supply on activation of critical process shutdowns.

> Introduction

The Letterkenny Public Water Supply (Goldrum Water Treatment Plant) produces an average of 11,160m³ (EDEN figure is 8,072 m³/day) of treated water and serves a population of 19,647 people (EDEN figure). Raw water is abstracted from a combination of three lake sources, Lough Salt, Lough Greenan and Lough Keel. Treatment processes include coagulation and clarification, dissolved air flotation, rapid gravity filtration, UV units as an additional barrier to cryptosporidium, and disinfection using chlorination. The treated water goes to an on-site reservoir with a capacity equivalent to 3 hours treated water storage. A Log 3 treatment requirement is assigned to Goldrum WTP.

This audit was undertaken as part of the EPA's routine assessment of the largest 26 public water supplies in Ireland.

> Supply Zones Areas Inspected

The treatment plant processes and treated water storage were inspected as part of the audit. The raw water sources were not inspected.



1. Filtration

		Answer
1.1	Are the filters designed and managed in accordance with EPA guidance?	No
	Comment	
	<p>1. There are no filter depth gauges installed on the RGFs at Goldrum WTP. Media depth gauges have been acquired and are on site but have not yet been installed.</p> <p>2. The backwash supernatant is recycled back to the head of the plant. Staff advised at the audit that the turbidity meter pump on the backwash recycle line was not working and that a new sample pump was required.</p>	
		Answer
1.2	Does monitoring indicate that the filters are operating effectively?	Yes



2. Management and Control

	Answer
2.1 Have the recommendations from the previous EPA audit been satisfactorily addressed?	No
Comment	
<p>1. Two recommendations remain unaddressed from a previous EPA audit on 22/06/2022, relating to reservoir capacity and orthophosphate dosing.</p> <p>2. The previous EPA audit stated 'the lack of treated water storage has been recognised within an Asset Improvement Plan for Letterkenny PWS. Plans for providing additional storage are being progressed through Irish Water Asset Strategy but no completion date is available'. At the EPA audit on 11/10/2024, Uisce Éireann staff stated that the need for additional treated water storage was recognised but had not been progressed. There is space available on-site to facilitate an increase in treated water storage capacity.</p> <p>3. The previous EPA audit dated 22/06/2022 recommended that any necessary commissioning and repairs to the orthophosphate dosing processes be completed prior to the implementation of dosing at the Goldrum WTP. At the EPA audit on 11/10/2024, Uisce Éireann staff advised that there was no orthophosphate dosing taking place on-site.</p>	

Recommendations

Subject	Letterkenny (Goldrum WTP) Audit 2024 Recommendations	Due Date	06/12/2024
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. Advance the provision of additional treated water storage to enhance the resilience and security of the Letterkenny PWS.2. Ensure that the integrity of the ortho-phosphate dosing processes, controls and chemical storage is checked, and any necessary repairs and commissioning is completed prior to the implementation of dosing at Goldrum Water Treatment Plant.3. Install a media depth gauge for each filter.4. Repair and/or install a pump to re-instate the turbidity meter on the backwash recycle line. <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 06/12/2024 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>		