

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	Daingean PWS
Organisation	Uisce Éireann
Scheme Code	2500PUB1006
County	Offaly
Site Visit Reference No.	SV28119

Report Detail	
Issue Date	05/09/2023
Prepared By	Lisa Noone

Site Visit Detail			
Date Of Inspection	23/08/2023	Announced	Yes
Time In	10:30	Time Out	11:40
EPA Inspector(s)	Lisa Noone Maria O'Connell		
Additional Visitors			
Company Personnel	Uisce Éireann: Joseph Moran, Paul Cahill. Offaly County Council (in partnership with Uisce Éireann: Gerry Mc Garrigle, Catherine Casey, Clodagh Graham.		

> Summary of Key Findings

1. The audit found that turbidity alarms were disabled at the time of the audit. The time delay associated with the turbidity alarm was not set at an appropriate level.
2. The incident response and escalation flowchart in place at Daingean Water Treatment Plant (WTP) did not contain site specific trigger levels, and there was no documented alarm response procedure in place.

> Introduction

Daingean Public Water Supply (PWS) serves a population of 1427 people and produces approximately 300-350m³ of treated water per day. Daingean WTP is a groundwater supply. Onsite treatment consists of a duty and standby chlorine dosing system with automatic switchover and treated water is pumped to Daingean Reservoir. Contact time is achieved via the rising mains and the reservoir.

The audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome water with a focus on the alarms and inhibits in place at the treatment plant and the procedures in place to ensure appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

All treatment processes on site were inspected as part of the audit. The offsite reservoir at Daingean was not inspected.



1. Alarms, Inhibits & Oversight Audits 2023

		Answer
1.1	Is there a documented site specific incident response and incident escalation process?	Yes
	Comment	
	1. An Uisce Éireann incident response and escalation process flowchart was available on site, however it did not contain trigger levels specific to Daingean WTP.	
		Answer
1.2	Are suitable alarm settings in place to alert operators to deteriorating water quality or the failure of a critical treatment process?	No
	Comment	
	1. Raw water turbidity alarms were set at 1NTU with a time delay of 3,600 seconds (1 hour). 2. These alarms were not enabled at the time of audit.	
		Answer
1.3	Is there a documented alarm response procedure?	No

Recommendations

Subject	Daingean Audit Recommendations	Due Date	05/10/2023
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 appropriate alarm setpoints are in place for turbidity and enabled at the WTP to protect the disinfection process.2. Update the Uisce Éireann incident response and escalation flowchart with site specific trigger levels protecting critical processes at the water treatment plant and ensure training is provided to all operational staff.3. Put a documented procedure in place for responding to and escalating all alarms generated at the water treatment plant. The procedure should clearly document the corrective actions and set out delegation of responsibilities.4. Ensure residual chlorine monitoring is carried out in the network several times a week. <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 05/10/2023 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>		