

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	Kilmuckridge
Organisation	Uisce Éireann
Scheme Code	3300PUB1545
County	Wexford
Site Visit Reference No.	SV29628

Report Detail	
Issue Date	28/02/2024
Prepared By	David O'Malley

Site Visit Detail			
Date Of Inspection	01/02/2024	Announced	Yes
Time In	10:15	Time Out	11:30
EPA Inspector(s)	David O'Malley		
Additional Visitors			
Company Personnel	Uisce Éireann: Denis McGrath Wexford (in partnership with Uisce Éireann): Barry Hammell, Fionnuala Callery, Tom McLoughlin and Mick Kavanagh.		

> Summary of Key Findings

The audit found deficiencies at the WTP due to a lack of alarm setpoints or automatic shutdowns for turbidity.

An appropriate cascade system and associated procedures are not documented into a one pager and in a prominent position at the WTP.

A source and sanitary survey should be completed by Uisce Éireann to confirm the 3 log protozoal treatment requirement in place at the WTP.

> Introduction

The Kilmuckridge Public Water Supply (PWS) supplies an average of 364 m³/day of water, serving a population of 940. The source for the supply is a borehole, treatment consists of UV disinfection, chlorination and treated water is stored in an off-site 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 water treatment plant (WTP) and the procedures in place to ensure appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

The UV disinfection system, chlorination dosing system and pumps at WTP were inspected. The off-site reservoir, chlorine monitor and pumps were also inspected.



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. The protozoal compliance log treatment requirement assigned for the treatment plant is a 3 log requirement. A source and sanitary survey has not been completed to confirm the calculated log treatment value for the supply.	



2. Alarms, Inhibits & Oversight Audits 2024

	Answer
2.1	Are suitable plant shutdowns/inhibits in place to prevent the entry of inadequately treated water entering the distribution network?
	No
Comment	
1. There is a turbidity monitor located on the inlet pipe at Kilmuckridge WTP. There was no turbidity plant alarms or shutdown setpoints in place.	

	Answer
2.2	Is there a documented alarm response procedure?
	No
Comment	
1. Alarms are issued to mobile phones via SCADA to plant operators and supervisors and they are responded to accordingly. However, there is no documented process detailing the cascade system and associated procedures at the WTP.	

Recommendations

Subject	Audit Recommendations	Due Date	27/03/2024
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. Ensure turbidity monitor has appropriate alarm settings and inhibits.2. Uisce Éireann should a) ensure that there is a cascade system for responding to alarms generated at the plant b) ensure that there is 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 and c) ensure that all staff are trained on the alarm response procedures.3. Complete a source and sanitary survey and confirm the assigned log treatment requirement for the supply. <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 the above date, 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>		