

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	Carrigbyrne
Organisation	Uisce Éireann
Scheme Code	3300PUB0120
County	Wexford
Site Visit Reference No.	SV30263

Report Detail	
Issue Date	08/08/2024
Prepared By	David O'Malley

Site Visit Detail			
Date Of Inspection	25/07/2024	Announced	Yes
Time In	12:30	Time Out	13:30
EPA Inspector(s)	David O'Malley Sean O'Leary		
Additional Visitors			
Company Personnel	Uisce Éireann: Denis McGrath Wexford County Council (working in partnership with Uisce Éireann): John Breen, Fionnuala Callery, Ian Veale and Kyle Lambert.		

> Summary of Key Findings

1. There are no high turbidity alarms or shutdowns at the plant to prevent inadequately treated water entering the supply.
2. An Alarm and Inhibit review has not been carried out for the supply.

> Introduction

The Carrigbyrne Public Water Supply (PWS) supplies an average of 466 m³ of water, serving a population of 873 (2024 EDEN). The source for the supply is two boreholes. Treatment consists of pH correction using caustic soda and chlorination disinfection. Treated water is pumped and 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 and the procedures in place to ensure appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

The two boreholes, caustic soda dosing system and the chlorine dosing system at the water treatment plant were inspected.



1. Management and Control

		Answer
1.1	Has the protozoal compliance log treatment requirement been identified for the water treatment plant?	No
Comment		
1. Uisce Éireann stated that the protozoal compliance log treatment requirement has not been determined for the supply.		



2. Alarms, Inhibits & Oversight Audits 2024

	Answer
2.1	Are suitable alarm settings in place to alert operators to deteriorating water quality or the failure of a critical treatment process?
	No
Comment	
1. The turbidity high alarm and shutdown is not enabled due to a plant start-up and shutdown issue.	

	Answer
2.2	Has UÉ carried out an alarm and inhibit review at the water treatment plant?
	No
Comment	
1. Uisce Éireann stated that an alarm and inhibit review has not taken place at the water treatment plant.	

Recommendations

Subject	Audit Recommendations	Due Date	10/09/2024
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. Review and implement turbidity alarms and shutdowns to ensure that the plant operates in accordance with the turbidity log performance criteria as outlined in the <i>EPA Water Treatment Manual: Filtration</i>.2. Complete an Alarm and Inhibit review to protect treatment processes and treated water quality.3. i) Confirm the protozoal log treatment requirement for the supply and ii) provide details of how any protozoal log treatment deficit, if identified how will it be addressed. <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 10/09/2024 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>		