

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	Gorey Rural
Organisation	Uisce Éireann
Scheme Code	3300PUB1513
County	Wexford
Site Visit Reference No.	SV32058

Report Detail

Issue Date	12/12/2025
Prepared By	Sean O'Leary

Site Visit Detail

Date Of Inspection	23/10/2025	Announced	Yes
Time In	12:50	Time Out	14:00
EPA Inspector(s)	Sean O'Leary		
Additional Visitors			
Company Personnel	Uisce Éireann: Denis McGrath, Bríd Whelan, Noel Sullivan and Vincent Kilduff. Wexford County Council (working in partnership with Uisce Éireann): Barry Hammel.		

➤ Summary of Key Findings

1. The UV disinfection system has not been operational at Gorey Rural Water Treatment Plant since 02/12/24 and the EPA were not notified by Uisce Éireann of this incident until 23/10/2025. The audit found that the incident was not suitably escalated and managed in order to maintain water quality. The UV disinfection system was not operational on the day of the audit and at present there is no treatment barrier in place to prevent *Cryptosporidium* entering the supply. It was found that the ultraviolet (UV) unit had been taken out of operation due to a manganese issue causing damage to the UV bulb.

2. Uisce Éireann could not confirm if the HSE were notified of the shutdown of the UV disinfection system.

➤ Introduction

The Gorey Rural Public Water Supply (PWS) supplies an average of 5,801 m³/day of water, serving a population of 13,114.

The source for the supply is 13 boreholes, these include Barnadown Upper boreholes A + B, Barnadown Lower boreholes A + B, Ballinamona boreholes A + B, Mountforest borehole, Toberanierin borehole, Essex Bridge boreholes A + B, Barnadown Wood West boreholes A + B and Ballykale borehole. Treatment consists of primary chlorination and secondary UV disinfection (the latter currently not operational).

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).

➤ Supply Zones Areas Inspected

The chlorination dosing system and pumps at the water treatment plant were inspected.



1. Incident Management

	Answer
1.1	Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?
Comment	<p>1. A UV disinfection system was installed in 2022 under the County Wexford Disinfection Programme to provide secondary disinfection including 3 log inactivation of <i>Cryptosporidium</i> at the Gorey Rural WTP. Uisce Éireann confirmed there had been significant maintenance issues due to a manganese issue from one of the boreholes affecting the UV bulb.</p> <p>2. Uisce Éireann said that the UV disinfection system was switched off on the 02/12/24 due to the persistent manganese issues and associated issues with UV bulb maintenance.</p> <p>3. The shutdown of the UV disinfection system was not notified to the EPA as an incident. Uisce Éireann could not confirm if the HSE were notified of the shutdown of the UV disinfection system. Uisce Éireann confirmed that monitoring of each off-site borehole as per the Uisce Éireann Rationale for Determining the Frequency of <i>Cryptosporidium</i> in Public Water Supplies is ongoing.</p> <p>4. The delay in notifying the EPA of the switching off of the UV disinfection system meant that a risk assessment of the incident did not commence in a timely manner.</p>



2. Alarms, Inhibits & Oversight Audits 2025

2.1

Are suitable plant shutdowns/inhibits in place to prevent inadequately treated water entering the distribution network?

Answer

Yes

Comment

1. Uisce Éireann confirmed there is a suitable shutdown in place ensuring turbidity remains below 1 NTU prior to and after chlorination.

2. Uisce Éireann confirmed turbidity alarm and inhibit setpoints on each of the 13 boreholes were set above the 1 NTU limit (high alarm at 2.5 NTU for 1,200 seconds and high high inhibit at 5 NTU for 1,200 seconds).

2.2

Is there a documented procedure for responding to specific alarms?

Answer

No

Comment

1. There is no documented alarm response procedure for responding to specific alarms at the WTP.



3. Site Specific Issues

3.1

Has the protozoal compliance log treatment requirement been identified for the water treatment plant?

Answer

No

Comment

1. Uisce Éireann indicated that the Gorey Rural WTP has a 3 log treatment requirement subject to completion of a source and sanitary survey.

Recommendations

Subject	Audit Recommendations	Due Date	12/01/2026
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 UV disinfection system is reinstated and operates within its validated range at all times, to ensure an adequate <i>Cryptosporidium</i> barrier at Gorey Rural water treatment plant.2. Confirm that the HSE have been informed that there is no <i>Cryptosporidium</i> barrier operational at the water treatment plant.3. Ensure that there is a documented communications protocol for the reporting of incidents in Gorey Rural PWS so the relevant parties involved are alerted promptly and a timely assessment of the risk to public health can be undertaken, and ensure that all relevant staff are trained in the protocol and understand the incidences in which it should be used.4. Continue monitoring of the supply in line with the Uisce Éireann Rationale for Determining the Frequency of <i>Cryptosporidium</i> Monitoring in Public Water Supplies.5. Install appropriate turbidity alarms and shutdowns on each of the off-site boreholes.6. Ensure that: (i) a formal site specific alarm response procedure is in place at the treatment plant, and (ii) provide training to relevant staff (including relief and temporary staff) on the requirements of the alarm response procedure.7. Complete (i) a Source and Sanitary Survey to confirm the log treatment requirement for the Gorey Rural WTP, and (ii) provide a timeframe to address any treatment log deficit that exists. <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 12/01/2025 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>		