

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	Kilally (Kilworth)
Organisation	Uisce Éireann
Scheme Code	0500PUB1208
County	Cork
Site Visit Reference No.	SV34816

Report Detail	
Issue Date	11/03/2026
Prepared By	Maeve McHugh

Site Visit Detail			
Date Of Inspection	25/02/2026	Announced	Yes
Time In	11:45	Time Out	12:45
EPA Inspector(s)	Maeve McHugh David O'Malley		
Additional Visitors			
Company Personnel	Uisce Éireann: Claire Hurley, Sharon O'Dwyer, Denis Hayes. Cork County Council (working in partnership with Uisce Éireann): Tony Hally		

> Summary of Key Findings

1. There is no continuous turbidity monitor with alarms and inhibits in operation at the treatment plant in order to prevent inadequately treated water entering the supply.
2. There is a low chlorine residual shutdown and a high chlorine residual shutdown. There are however, no warning level alarm setpoints for residual chlorine.
3. Group A monitoring was not carried out at the required frequency in 2024.

Uisce Éireann should submit a report to the EPA on or before 13/04/2026 detailing the actions taken and planned, with timescales, to close out the ten recommendations in this audit report.

> Introduction

The Kilally (Kilworth) Public Water Supply (PWS) supplies an average of 117 m³/day, serving a population of 486. It is a groundwater supply. Historically it was fed by a nearby spring which was replaced initially by a shallow (approximately 20m) borehole and was supplemented more recently with the addition of a second, deeper (400m), borehole when the shallower borehole ran dry seasonally. Both boreholes are situated at the water treatment plant (WTP) site. They are pumped concurrently and the shallower borehole is the more productive of the two yielding 14 m³/hr, compared to 6 m³/hr for the deeper borehole. Treatment consists of chlorination. Treated water is pumped and stored in an on-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 WTP and the procedures in place to ensure appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

The treatment plant and associated equipment and monitors and both wellheads were inspected during the audit.



1. Alarms, Inhibits & Oversight Audits 2026

	Answer	
1.1	Is there a documented site specific incident response and incident escalation process?	No
Comment		
There was an incident response and incident escalation flowchart on the wall inside the plant building, however the site specific information on alarm setpoints was not included.		
Recommendation:		
1. Update the incident response and incident escalation flowchart to include the site specific information on alarm and inhibit setpoints.		

	Answer	
1.2	Did staff confirm they have received training on the site specific incident response and incident escalation process?	Yes
Comment		
Staff confirmed that training on incident response was covered as part of 'toolbox talks'.		
Recommendation:		
2. Ensure that additional training, specific to incident response and incident escalation, is provided to appropriate staff following the required updates to the incident response and incident escalation flowchart.		

	Answer	
1.3	Is suitable continuous monitoring in place to verify treatment performance?	No
Comment		
There is no turbidity monitor in operation at the WTP to prevent inadequately treated water entering the supply network.		
Recommendation:		
3. Install a turbidity monitor with appropriate alarms and shutdowns to prevent inadequately treated water entering the supply.		

	Answer	
1.4	Are suitable alarm settings in place to alert operators to deteriorating water quality or the failure of a critical treatment process?	No
Comment		

There is a low chlorine residual shutdown of 0.4 mg/l (for 300 seconds) and a high chlorine residual shutdown of 2 mg/l (for 300 seconds). There are no warning level alarm setpoints for low and high residual chlorine.

Recommendation:

4. Install appropriate high and low chlorine alarms at the WTP to alert operational staff in the event of a failure of critical treatment processes.

		Answer
1.5	Is there a documented procedure for responding to specific alarms?	No
Comment		
There are no procedures in place for responding to specific alarms.		
Recommendation:		
5. Ensure that a documented, site specific, procedure is in place setting out how critical alarms are responded to. The procedure should focus on actions to be taken by operators and engineers at the plant including actions following alarms and shutdowns.		

		Answer
1.6	Did staff confirm they have been trained on the alarm response procedure?	No
Comment		
Recommendation:		
6. Ensure that relevant staff are trained on the alarm response procedure.		

		Answer
1.7	Are there appropriate procedures covering verification of alarms and inhibits status following maintenance or other work on site?	No
Comment		
There are no procedures covering verification of alarms and inhibits status following maintenance or other work on site.		
Recommendation:		
7. Ensure that the alarm response procedure includes actions to verify the status of alarms and shutdowns following maintenance or other work on site.		



2. Site Specific Issues

	Answer
2.1 Is Group A and Group B monitoring carried out at the required frequency.	No
Comment	
Based on 2024 and 2025 monitoring data submitted subsequent to the audit Group A monitoring was carried out twice in 2024, rather than four times per year as required by the Drinking Water Regulations 2023, as amended. The frequency of Group B monitoring in 204 and 2025 was satisfactory.	
Recommendation:	
8. Ensure that Group A and Group B monitoring is carried out at the required frequency.	

	Answer
2.2 Is the abstraction source(s) adequately protected against contamination?	No
Comment	
The treatment plant is located in a mainly agricultural area. Based on the 2024 and 2025 monitoring data submitted subsequent to the audit, two samples were monitored for Group B parameters, one in 2024 and one in 2025. In each of the two samples nitrate was detected (at 35.8 mg/l in the 2024 sample and at 15.1 mg/l in the 2025 sample). While these levels do not constitute parametric failures they may be indicative of contamination from agricultural or other activity.	
Recommendation:	
9. Liaise with Cork County Council to ensure that local landowners have been written to in accordance with the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022, as amended.	

	Answer
2.3 Has UÉ identified the protozoal compliance log treatment requirement for the water treatment plant?	No
Comment	
The source has been assigned a default 3 log protozoal treatment requirement.	
Recommendation:	
10. Complete a Source and Sanitary Survey to confirm the default 3 log protozoal treatment requirement for the supply.	

Recommendations

Actions required by Uisce Éireann

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.

Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the recommendations raised in this report without delay.

Response to Audit Report

Uisce Éireann should submit a report to the EPA on or before the date specified in the Summary of Key Findings detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

The EPA advises that the findings and recommendations from this report should, where relevant, be addressed at other public water supplies.

Publication of Reports

Audit reports are published to the EPA's website, www.epa.ie, typically 1 month after the audit report is issued to Uisce Éireann.