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	Templemore RWSS (Zone 2)
Organisation	Uisce Éireann
Scheme Code	2800PUB1027
County	Tipperary
Site Visit Reference No.	SV32045

Report Detail

Issue Date	10/04/2025
Prepared By	David O'Malley

Site Visit Detail

Date Of Inspection	06/03/2025	**Announced**	Yes
Time In	13:50	**Time Out**	14:50
EPA Inspector(s) **Additional Visitors**	David O'Malley		
Company Personnel	Uisce Éireann: Denis McGrath and Donal Ryan. Tipperary County Council (working in partnership with Uisce Éireann): Shane Boland and John Lloyd.		

Summary of Key Findings

1. There is no online turbidity monitor with alarms and inhibits in place at Whitefield water treatment plant to prevent inadequately treated water from entering the supply.

2. There is no standby UV unit at the water treatment plant in the event of failure of the duty unit.

3. There is no SCADA system to ensure remote access to plant process information by operational and supervisory staff.

Introduction

The Templemore (Zone 2) Public Water Supply (PWS) supplies an average of 193 m3/day of water, serving a population of 386. The source for the supply is a borehole, treatment consists of UV (primary disinfection) and chlorination at Whitefield water treatment plant (WTP). Treated water is pumped directly into network.

Supply Zones Areas Inspected

The UV disinfection system, chlorination dosing system, borehole and pumps were inspected at the WTP.

1. Source Protection

		Answer
1.1	Is the abstraction source(s) adequately protected against contamination?	No

Comment

1. The area surrounding the dip tube was not adequately sealed.

2. Disinfection

		Answer
2.1	Are duty and standby chlorine pumps/ UV units in operation?	No

Comment

1. There is only a duty UV unit in operation at the WTP.

3. Management and Control

		Answer
3.1	Has the protozoal compliance log treatment requirement been identified for the water treatment plant?	No
	Comment	
	1. A default log score of 3 has been determined for the WTP.	

4. Alarms, Inhibits & Oversight Audits 2025

		Answer
4.1	Is there a documented site specific incident response and incident escalation process?	No

Comment

1. There is not a documented site specific incident response and incident escalation process posted at the WTP.

		Answer
4.2	Is suitable continuous monitoring in place to verify treatment performance?	No

Comment

1. There is no turbidity monitor in operation at the WTP to prevent inadequately treated water entering the supply network.

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

Comment

1. There are no warning alarms in place for the UV disinfection system at the WTP.

		Answer
4.4	Are critical alarms dialled out to operators?	No

Comment

1. Low and high level chlorine alarms are sent via text message to operators.

2. UV disinfection alarms are not dialled out to operators.

		Answer
4.5	Are suitable plant shutdowns/inhibits in place to prevent inadequately treated water entering the distribution network?	No

Comment

1. There is no chlorine shutdown in place at the WTP.

2. There is no shutdown setpoints in place for the UV disinfection system at the WTP.

		Answer
4.6	Are plant performance trends accessible by operational staff at the water treatment plant?	No

Comment

1. UV plant performance trends are not accessible by operational staff at the WTP.

		Answer
4.7	Are plant performance trends accessible remotely?	No

Comment

1. The WTP does not have a SCADA system in place to access performance trends by operational staff remotely. Operational staff are on site daily to assess the plants operation. A water quality chart recorder is in place at the WTP to record the chlorine residual on a 24 hour basis.

		Answer
4.8	Is there a documented procedure for responding to specific alarms?	No

Comment

1. There is not a documented alarm response procedure at the WTP.

Recommendations

Subject	Audit Recommendations	Due Date	12/05/2025
Action Text	**Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendations without delay.** 1. Install a turbidity monitor with appropriate plant alarms and shutdown to prevent inadequately treated water entering the supply. 2. Ensure that there are duty and standby UV disinfection units with automatic switchover in place at Whitefield WTP in the event of failure of the UV disinfection units. 3. Put in place appropriate alarms and shutdowns for the UV unit and shutdowns for chlorine dosing as detailed in the EPA Water Treatment Manual: Disinfection. 4. Put in place a SCADA system to ensure access to critical plant process information and trended performance data by operational and supervisory staff at the WTP and remotely. 5. Ensure that the Uisce Éireann Incident Communications Response Guidance Form with site specific information including contacts for escalation and relevant trigger levels protecting critical processes is displayed at the treatment plant and ensure that training on incident response in line with the guidance form is undertaken by all staff. 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. i) Confirm the protozoal log treatment requirement for the supply, and ii) provide details of how any protozoal log treatment deficit, if identified, will be addressed. 8. Ensure the borehole is adequately capped. Uisce Éireann should have regard to EPA Advice Note No. 14: Borehole Construction and Wellhead Protection when carrying out these works. **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 should submit a report to the EPA on or before 12/05/2025 detailing the actions taken and planned, with timescales, to close out the above recommendations. The EPA advises that the findings and recommendations from this audit report should, where relevant, be addressed at other public water supplies.		