

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	St Louis, National School, Rathkenny
Organisation	Uisce Éireann
Scheme Code	2300PUB2006
County	Meath
Site Visit Reference No.	SV30655

Report Detail	
Issue Date	05/12/2024
Prepared By	Lisa Noone

Site Visit Detail			
Date Of Inspection	13/11/2024	Announced	Yes
Time In	11:00	Time Out	11:45
EPA Inspector(s)	Lisa Noone		
Additional Visitors			
Company Personnel	Uisce Éireann: Joseph Moran, Roisin Byrne, Jamie Blacoe, Daniel Pusz Meath County Council (working in partnership with Uisce Éireann): Joe McDermott		

> Summary of Key Findings

1. The audit found that the alarm and inhibits in place for turbidity and UV were not appropriate to ensure a timely and effective response by operational staff and to ensure adequate disinfection prior to distribution to the network.
2. An appropriate alarm dial-out system and incident escalation flowchart were not in place for responding to incidents and alarms generated at the plant.
3. There was no procedure in place for verification of alarms and inhibits status following maintenance or other work on site.

> Introduction

The St Louis National School (NS) Public Water Supply (PWS) produces circa. 8 m³/day of water serving St Louis NS in Rathkenny Co. Meath. During school term, the population of St Louis NS is approximately 44 people. Raw water is abstracted from a single borehole located at the Water Treatment Plant (WTP) and treatment consists of UV disinfection.

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 borehole and treatment processes on-site were inspected as part of the audit.



1. Alarms, Inhibits & Oversight Audits 2024

	Answer
1.1	No
Comment	
1. The Uisce Éireann incident escalation flowchart was displayed at the WTP, however site specific contacts were not up-to-date due to recent staff changes.	

	Answer
1.2	No
Comment	
1. Alarms are dialled out to the plant caretaker only. Alarms do not cascade out further than that to a standby caretaker or supervisory staff within Meath County Council or Uisce Éireann.	

	Answer
1.3	No
Comment	
1. The following alarm/inhibit setpoints are in place at St Louis NS WTP for UV and turbidity; <ul style="list-style-type: none">• UV dose rate low low alarm (shutdown) - 40mJ/cm² with a time delay of 15 minutes• Turbidity high high alarm (shutdown) - 1NTU with a time delay of 15 minutes.	
2. The time delays in place for UV and turbidity are considered too long to allow a timely and effective response by operational staff and to ensure adequate disinfection prior to distribution to the network.	

	Answer
1.4	No
Comment	
1. Trends submitted before the audit contained periods of time where data appeared to not be captured accurately. Operational staff confirmed that intermittent communications issues had been experienced over the previous month due to signal loss and outdated technology which was preventing the trending of treatment plant performance data on the SCADA system.	

1.5

Are there appropriate procedures covering verification of alarms and inhibits status following maintenance or other work on site?

Answer

No

Recommendations

Subject	St Louis National School Audit Recommendations	Due Date	10/01/2025
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 confirm alarm set points and time delays in place at the plant for UV and turbidity.2. Ensure that the Uisce Éireann Incident Communication Response Guidance Form displayed at the WTP contains site specific information including up-to-date contacts for escalation.3. Ensure (i) that critical alarms are dialled out to plant operators and relevant supervisory personnel (ii) there is a cascade system for responding to alarms generated at the plant.4. Develop a procedure and deliver appropriate training (i) covering the verification of alarms/shutdowns status following maintenance or other works completed at the treatment plant.5. Resolve the communications issue between the WTP and the SCADA system to ensure that treatment process data is captured and available at all times. <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 due 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>		