

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	North Roscommon Regional Water Supply Scheme
Organisation	Uisce Éireann
Scheme Code	2600PUB1012
County	Roscommon
Site Visit Reference No.	SV29563

Report Detail	
Issue Date	24/06/2024
Prepared By	Maria O'Connell

Site Visit Detail			
Date Of Inspection	29/05/2024	Announced	No
Time In	11:00	Time Out	13:30
EPA Inspector(s)	Maria O'Connell Anna Doyle		
Additional Visitors			
Company Personnel	Uisce Eireann: Vinny McGrath. Roscommon County Council (working in partnership with Uisce Eireann): Morris Mulhearn, John Farrell, Orla Sheehan, Michael Kelly.		

> Summary of Key Findings

1. The Uisce Éireann incident response procedure with site specific information including contacts for escalation and relevant trigger levels protecting critical processes was not displayed at the North Roscommon Regional WTP.
2. Temporary dosing arrangements are in place for the treatment of manganese levels at the plant and works to install permanent arrangements are progressing. Duty only pumps are in place for this temporary arrangement.

> Introduction

North Roscommon Regional PWS provides treated water for a population of 7874 in counties Roscommon and Sligo. Raw water is abstracted from Lough Gara. The design capacity of the plant is 10,000m³/day and average plant production is 5923m³/day. Uisce Éireann confirmed that a source and sanitary survey was undertaken in 2020 and a 3 Log protozoal treatment requirement has been assigned. Treatment consists of screening, coagulation (sulphuric acid, aluminium sulphate and polyelectrolyte), powdered activated carbon, clarification, filtration, UV, pH correction followed by chlorination and fluoridation. A potassium permanganate dosing trial was established at the plant last year and works are progressing to make this a permanent function. There are two reservoirs on the supply at Lissacurkia and Fairymount. This 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 treatment plant and appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

The audit included a site tour of treatment processes at North Roscommon Regional WTP with site personnel.



1. Source Protection

	Answer	
1.1	Is the abstraction source(s) adequately protected against contamination?	Yes
Comment		
1. Confirmation could not be provided at the time of the audit that recent written correspondence had been issued to local landowners in relation to their obligations under the <i>European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022</i> as amended.		



2. Filtration

		Answer
2.1	Are the filters designed and managed in accordance with EPA guidance?	No
Comment		
1. A filter record log is maintained at this plant however details of quarterly filter media depth assessments were not available as per <i>EPA Water Treatment Manual: Filtration</i> .		



3. Alarms, Inhibits & Oversight Audits 2024

		Answer
3.1	Is there a documented site specific incident response and incident escalation process?	No
	Comment	
	1. An Uisce Éireann documented site specific incident response and escalation process (with up to date site specific contacts and trigger levels/time delays) was not displayed on site.	
		Answer
3.2	Are critical alarms dialled out to operators?	Yes
	Comment	
	1. Critical alarms are dialed out to the site operator and caretaker however associated written procedures are not in place for responding to alarms generated at the plant and for verification of appropriate alarm response.	
		Answer
3.3	Has UÉ carried out an alarm and inhibit review at the water treatment plant?	Yes
		Answer
3.4	Is there appropriate oversight of alarm responses?	No
	Comment	
	1. Alarm responses are undertaken locally by the plant operator or caretaker however more frequent oversight and review of alarm responses by supervisory staff is required.	
		Answer
3.5	Is there a documented alarm response procedure?	No
		Answer
3.6	Are there appropriate procedures covering verification of alarms and inhibits status following maintenance or other work on site?	Yes
	Comment	

1. There are no written procedures covering verification of alarms and inhibits status following maintenance or other work at the plant however all works are overseen by the site operator and checks are conducted subsequent to works being undertaken. Such checks were not being recorded at the time of the audit.

Recommendations

Subject	North Roscommon Regional OEE Audit 2024	Due Date	29/07/2024
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. Display the Uisce Éireann Incident Response Procedure with site specific information including contacts for escalation and relevant trigger levels protecting critical processes at the water treatment plant.2. Develop and implement (i) an appropriate system for responding to alarms generated at the plant which allows for verification that an alarm has been responded to (ii) a documented procedure is in place for responding to and escalating all alarms generated at the water treatment plant. The procedure should clearly document the corrective actions and set out responsibilities, (iii) maintain a record of verification on alarms and inhibits following maintenance or other works at the plant and (iv) ensure training is provided to all relevant staff on the procedures and records are maintained on such training.3. Complete the installation of the permanent potassium permanganate dosing facilities and ensure that dosing arrangements have both duty and standby pump arrangements with automatic switch over in place.4. Provide confirmation that local landowners have been written to in relation to their obligations under the <i>European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022</i> as amended.5. Confirm that the filter log maintained on site contains records as outlined in the <i>EPA Water Treatment Manual: Filtration</i>. <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 29/07/2024 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>		