

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	Monaghan
Organisation	Uisce Éireann
Scheme Code	2400PUB1024
County	Monaghan
Site Visit Reference No.	SV34892

Report Detail	
Issue Date	02/06/2026
Prepared By	Veronica Boland

Site Visit Detail			
Date Of Inspection	25/05/2026	Announced	Yes
Time In	13:30	Time Out	16:00
EPA Inspector(s)	Veronica Boland Mary Grimes		
Additional Visitors			
Company Personnel	Uisce Éireann: Jim McQuaid, Brian McEnenaney, Geraldine Friel, Regina Burke.		

> Summary of Key Findings

1. There was no combined filtered water turbidity monitor with appropriate alarms and inhibits installed at the WTP.
2. At the audit, the chlorine residual (post contact time) shutdown setpoints were not enabled at the WTP.
3. Notwithstanding the above, the audit found that the Crosses water treatment plant (WTP) was operating and performing well and had good record management.

Uisce Éireann should submit a report to the EPA on or before the 07/07/2026 detailing the actions taken and planned, with timescales, to close out the 4 recommendations in this audit report.

> Introduction

The Monaghan public water supply (PWS) is supplied from the Crosses water treatment plant (WTP) and produces approximately 2,929m³/day of treated water, serving a population of 7,759 in Monaghan town, as well as a population of 854 for the Hollywood Scotstown and Bellanode PWS. The raw water is sourced from four groundwater boreholes located approximately 6 kilometres from the WTP. Treatment at the WTP consists of pre-treatment iron and manganese removal via aeration, rapid gravity filtration, chlorination and fluoridation.

Monaghan PWS is also supplemented by Togan WTP which supplies approximately 50m³/hr constantly to Gortakeegan Reservoir where it is mixed with water from Crosses WTP and then distributed to the Monaghan network.

The audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome water with a focus on operations.

> Supply Zones Areas Inspected

The Crosses WTP treatment processes and treated water reservoir.



1. Filtration

1.1

		Answer
	Are the filters designed and managed in accordance with EPA guidance?	No
Comment		
1. There are 3 rapid gravity filters (RGF) in place at the Crosses WTP. At the audit, filter turbidity readings were: RGF no. 1 = 0.118; RGF no. 2 = 0.066 NTU; RGF no. 3 = 0.036 NTU. 2. While the RGF turbidity readings were good, at the audit a 'film/sheen' was observed on top of two of the RGFs, and there were small fractures in the top of the RGF filter shell. Uisce Éireann staff could not provide information on the possible cause of the film on both RGFs. 3. There was no continuous online turbidity monitor with alarms and inhibits for the combined filtered water at the WTP. 4. Uisce Éireann advised that the filter media replacement occurred more than 7 years ago but could not confirm the current media depths of the 3 no. rapid gravity filters. There are no media gauges installed in the filters to assist with monitoring of the depth of filter media.		
Recommendations:		
1. Install a continuous online turbidity monitor on the combined filtered water with appropriate turbidity alarm settings and inhibits, to ensure the 0.3 NTU <i>cryptosporidium</i> barrier is not compromised and to verify that the plant operates in accordance with the log credit approach as set out in the <i>EPA Water Treatment Manual: Filtration</i>. 2. (a) Undertake an assessment of the depth and condition of the media in each rapid gravity filter; (b) ensure the depth of media in each filter is a minimum of 1 metre as per the <i>EPA Water Treatment Manual: Filtration</i>; and (c) install a media depth gauge in each filter.		



2.1

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

Answer

No

Comment

1. There were no chlorine residual validation (post contact time) shutdown setpoints enabled at the WTP.

Recommendation:

3. Ensure appropriate high and low chlorine shutdowns (post contact time) are enabled at the water treatment plant.

2.2

Are suitable alarm settings in place to alert operators to deteriorating water quality and/or the failure of a critical treatment process?

Answer

No

Comment

1. The chlorine residual 'Low' warning alarm was set at 0.0mg/l. The *EPA Water Treatment Manual: Disinfection* recommends low level chlorine residual alarms at a maximum of 0.1mg/l below the target concentration (with a 5 minute time delay). It is noted that the target chlorine residual for the WTP was 0.29 mg/l.

Recommendation:

4. Review and amend as appropriate the chlorine residual (post contact time) alarm setpoint to ensure that the alarm is set at a suitable level to alert operators to potential issues with the disinfection system to allow for early intervention and corrective action before automatic shutdown is triggered at the WTP.

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.