

# 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	Mitchelstown North
Organisation	Uisce Éireann
Scheme Code	0500PUB1506
County	Cork
Site Visit Reference No.	SV31934

Report Detail	
Issue Date	14/02/2025
Prepared By	Paul Buckley

Site Visit Detail			
Date Of Inspection	23/01/2025	Announced	Yes
Time In	13:25	Time Out	14:55
EPA Inspector(s)	Paul Buckley		
Additional Visitors			
Company Personnel	Uisce Éireann: Tom Ryan, Denis Hayes, Criona Doyle, Claire Hurley, Sharon O'Dwyer. Cork County Council (working in partnership with Uisce Éireann): Pauline McAree, Paudie Quinn.		

## > Summary of Key Findings

1. The Mitchelstown North Public Water Supply was placed on the EPA's Remedial Action List in Q1 2022 due to elevated levels of trihalomethanes above the standard set in the Drinking Water Regulations. Uisce Éireann have installed granular activated carbon (GAC) filtration units and upgraded the pipework at the water treatment plant to reduce the risk of elevated trihalomethanes in the final water.
2. The commissioning phase of the upgrade has been completed and verification monitoring results obtained were compliant.
3. Based on the findings of the audit, the EPA is satisfied to remove the Mitchelstown North PWS from the EPA's Q4 2024 Remedial Action List.

## > Introduction

The Mitchelstown North Public Water Supply (PWS) serves a population of 2,371 with an average output of 1,269 m<sup>3</sup>/day.

Raw water is obtained from Behenagh River. Treatment consists of slow sand filtration, GAC filtration, ultraviolet (UV) disinfection, chlorination and fluoridation.

The Mitchelstown North Public Water Supply was placed on the EPA's Remedial Action List (RAL) in Q1 2022 due to elevated levels of trihalomethanes (THMs) above the standard set in the Drinking Water Regulations. Uisce Éireann's RAL action programme involved the installation of a granular activated carbon (GAC) filtration system and the completion of civil works to upgrade the pipework at the water treatment plant. Construction and commissioning is now complete and the GAC filtration system is in operation.

The audit was undertaken to assess the suitability of the Mitchelstown North PWS for removal from the EPA's RAL.

## > Supply Zones Areas Inspected

The slow sand filtration system, the granular activated carbon (GAC) filtration system, the ultraviolet (UV) disinfection system and the chlorine dosing system were inspected.



## 1. Disinfection

1.1

Is the UV disinfection system operating within its validated range?

**Answer**

No

**Comment**

Uisce Éireann were unable to provide a validation certificate for the UV disinfection units prior to or during the audit, therefore it was not possible to confirm the validated range.



## 2. Management and Control

2.1

Are instrument calibrations within date?

**Answer**

No

**Comment**

The calibration sticker was not visible for the final water UVT probe. Uisce Éireann stated that the probe had been calibrated in the weeks prior to the audit.

2.2

Is continuous monitoring data accessible?

**Answer**

No

**Comment**

The trends for the ultraviolet disinfection system were not available to view on the countywide SCADA system. Real time data was available on the HMI panel at the water treatment plant.



### 3. Supply on the Remedial Action List

3.1

Do the audit findings support progress made with the Remedial Action List upgrades?

**Answer**

Yes

**Comment**

The EPA audit found that Uisce Éireann have completed the following works at the Mitchelstown North water treatment plant: i) the installation of a granular activated carbon (GAC) filtration system and associated monitoring equipment, and ii) the installation of new pipework to incorporate the GAC system. The commissioning and validation phases of the upgrades have been completed and Uisce Éireann submitted 10 months of compliant THM monitoring data for the supply.

Based on the findings of this audit, the EPA is satisfied to remove the Mitchelstown North PWS from the Remedial Action List in the Q4 2024 update.

## Recommendations

Subject	Mitchelstown North Audit 2025 - Recommendations	Due Date	14/03/2025
Action Text	<p><b>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendation(s) without delay.</b></p> <ol style="list-style-type: none"><li>1. Provide a copy of the validation certificate for the duty/standby ultraviolet disinfection units detailing the validated operating range and provide a trend of the UVT and flow data for February 2025 to demonstrate that they are operating within the validated range.</li><li>2. Ensure that all monitors are trending on the countywide SCADA system and that all associated alarms and inhibits are available for review on the system.</li><li>3. Confirm the calibration date for the UVT monitor and ensure that all monitors have a clearly displayed calibration sticker.</li></ol> <p><b>Actions required by Uisce Éireann</b></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 14/03/2025 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>		