

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	Clare Island PWS
Organisation	Uisce Éireann
Scheme Code	2200PUB1030
County	Mayo
Site Visit Reference No.	SV34749

Report Detail	
Issue Date	24/02/2026
Prepared By	Veronica Boland

Site Visit Detail			
Date Of Inspection	29/01/2026	Announced	Yes
Time In	11:10	Time Out	12:45
EPA Inspector(s)	Veronica Boland Mary Grimes		
Additional Visitors	Donal Howley		
Company Personnel	Uisce Éireann: Michael Oliver Moran, Ann Browne, Tom Doherty, Joe McGuire, Patrick Navin, Pearse Scanlon. Coffeys (operating under DBO contract to Uisce Éireann): Daniel Brady, Stephen Maguire, Jason Keehan.		

> Summary of Key Findings

1. The Clare Island Public Water Supply was placed on the EPA's Remedial Action List (RAL) in Q1 2024 due to elevated levels of trihalomethanes above the standard set in the Drinking Water Regulations.
2. Uisce Éireann undertook raw water source works, replaced Granulated Activated Carbon (GAC) filter media in the two slow sand filters, installed and commissioned a GAC filtration system with UVT monitors after the slow sand filters to minimise the risk of Trihalomethanes (THM) formation in the Clare Island drinking water supply.
3. Satisfactory THM monitoring results were submitted along with UVT trends to verify the effectiveness of the works. The Clare Island PWS was removed from the EPA RAL in Q1 2026.

There are no specific recommendations in this audit report for Uisce Éireann to revert to the EPA on.

> Introduction

The Clare Island public water supply produces 76 m³/day of treated water and serves approximately 150 people. Water is abstracted from the Knockmore stream. Treatment at the Clare Island water treatment plant consists of slow sand filtration (dual media), GAC filtration, disinfection via ultraviolet radiation and chlorination.

The supply was on the EPA Remedial Action List (RAL) due to elevated levels of Trihalomethanes (THMs) above the standard in the Drinking Water Regulations. The purpose of the audit was to assess the upgrade works that have been implemented under the RAL action programme and to verify if the Clare island PWS could be removed from the RAL.

> Supply Zones Areas Inspected

The audit comprised of an inspection of the new GAC filtration and UV disinfection systems at Clare island water treatment plant.



1. Supply on the Remedial Action List

1.1

	Answer
Do the audit findings support progress made with the Remedial Action List upgrades?	Yes
Comment	
<p>Uisce Éireann has completed a series of upgrade works at the Clare Island Water Treatment Plant (WTP) to reduce the potential for trihalomethane (THM) formation within the supply network. The following improvements were implemented:</p> <ul style="list-style-type: none"> • Replacement of GAC Media in Slow Sand Filters: There are two dual media circular slow sand filters at the WTP. Granular activated carbon (GAC) media was replaced in the two slow sand filters (SSFs) in March 2024. • Relocation of Abstraction Point: The abstraction pipe was moved 150 metres upstream in July 2024, resulting in a significant improvement in raw water quality. Operational staff at the WTP advised that prior to relocation of the abstraction pipe, raw water UVT averaged at approximately 40% and following the relocation raw water UVT now averages 90%. At the audit, the raw water UVT was 91%. • Installation and Commissioning of 4 no. GAC Pressure Vessels: 4 no. GAC filters with Aquasorb 5,000 media were installed at the WTP and commissioned in October 2025. The 4 no. GAC filters are configured as 2 no. <i>duty</i> GAC filters operating in parallel and 2 no. <i>standby</i> GAC filters. A UVT monitor is installed on the combined filtered water from the duty GAC filters with a warning alarm triggered at 85% UVT, and a shutdown alarm triggered at 80% (3 minute delay). When the duty GAC vessels shut down, the plant operator must manually intervene to switch over to the standby GAC filters. As there is no backwashing of the GAC filters, once the GAC media is spent in the 2 no. duty GAC filters they are sent off site for media replacement. On the day of the audit the UVT reading on the combined monitor was 96.5%. <p>Operational staff advised that they have been trained in the procedures for switching to the standby GAC vessels and resolving airlock issues.</p> <p>The reduction in organic load due to the WTP upgrades resulted in significantly higher chlorine residuals at network extremities—achieved without increasing chlorine dosing. Consequently, the minimum chlorine residual in the treated water has been reduced from 1.35mg/l to 0.7 mg/l.</p> <p>THM formation potential and TOC removal results from the process proving stage were submitted to the EPA indicating that the upgraded WTP is achieving an average TOC removal efficiency of 70%.</p> <p>THM verification monitoring carried out across the network from September 2024 to January 2026 was submitted and demonstrates compliance with the THM drinking water standard. Regulatory THM monitoring will continue to be undertaken in the Clare Island PWS.</p> <p>Based on the improvements and verified monitoring results, the Clare Island supply was removed from the EPA Remedial Action List in Quarter 1, 2026.</p>	

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.