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	Carlow North Regional
Organisation	Uisce Éireann
Scheme Code	0100PUB1142
County	Carlow
Site Visit Reference No.	SV34695

Report Detail

Issue Date	16/02/2026
Prepared By	Sean O'Leary

Site Visit Detail

Date Of Inspection	22/01/2026	**Announced**	Yes
Time In	11:00	**Time Out**	12:30
EPA Inspector(s) **Additional Visitors**	Sean O'Leary		
Company Personnel	Uisce Éireann: Áine Butler, Liam Stynes, Daniel Brien, Melissa Devane and Larry Bolger Carlow County Council (working in partnership with Uisce Éireann): Rory Jackman		

Summary of Key Findings

1. The Carlow North Regional PWS was on the EPA Remedial Action List under the Remedial Action List Category 'EPA Audit Observation – Treatment and Management Issues'.

2. Uisce Éireann has completed upgrade works on the main treatment processes at the plant including an upgrade to existing rapid gravity filters and a refurbishment of the sludge treatment system. Uisce Éireann submitted 12 months of compliant regulatory data and 2 months of compliant plant performance trends to verify that the actions undertaken were adequate.

3. The completion of the works and the submission of verification data has allowed the Carlow North Regional to be removed from the EPA's Remedial Action List in the Quarter 4 2025 review.

Uisce Éireann should submit a report to the EPA on or before 16/03/2026 detailing the actions taken and planned, with timescales, to close out any recommendations in this audit report.

Introduction

The Carlow North Regional Public Water Supply (PWS) serves a population of 9,783 and produces 7,345 m3/day. Raw water is abstracted from the Slaney river.

Treatment consists of pH correction, coagulation, flocculation, and clarification (CFC); rapid gravity filtration (RGF), chlorination and sludge treatment.

The Carlow North Regional PWS has been on the EPA's Remedial Action List (RAL) since 30/06/2021 under the RAL Category 'EPA Audit Observation – Treatment and Management Issues'. The purpose of the audit was to assess the suitability of the Carlow North Regional PWS for removal from the EPA's RAL.

Supply Zones Areas Inspected

Treatment processes upgraded under RAL were inspected on-site, along with supporting information on controls and monitoring results.

1. Supply on the Remedial Action List

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

Comment

1. The purpose of the audit was to assess the suitability of the supply for removal from the EPA's remedial action list under the category 'EPA Audit Observation – Treatment and Management Issues'. Uisce Éireann submitted information to the EPA on 18/12/2025 summarising the upgrades completed.

2. The audit confirmed the following upgrade works have been completed at the Carlow North Regional water treatment plant and network. The main work items completed at the new water treatment plant can be summarised as follows:

- CFC optimisation: Upgraded aluminum sulphate storage for raw water coagulation, installation of automated polyelectrolyte make up unit for enhanced flocculation, and addition of 2 stream tapered flocculation tanks to promote floc formation.
- Filter Upgrade work: Upgrades to filters inclusive of filter floor and mono-media replacement, Provision of new duty/standby variable speed backwash pumps, monitored run to waste from existing filters to new wash-water treatment activated by turbidity of 0.3 NTU for 15 mins, headloss and time (72 hours).
- Sludge treatment: Complete refurbishment of existing sludge treatment system, provision of new sludge holding tank, new sludge thickening tank, new sludge dewatering unit and a new dewatered sludge transfer system.
- Treated Water works: Installation of hydrometric flow monitoring on the River Slaney, provision of raw water pH suppression, new orthophosphoric acid storage and dosing system, appropriate alarm and inhibit controls installed and replacement of existing SCADA system

3. The audit confirmed the treatment infrastructure has been commissioned and all elements were operational on the day of the audit. Trend data assessed on the day of the audit and sent in prior to the audit confirmed the plant was compliant and was operating efficiently.

Recommendation:

1. Continue to operate the plant so that adequately treated water enters the supply.

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.