

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	W.Clare RWS (Old WTP)
Organisation	Uisce Éireann
Scheme Code	0300PUB1022
County	Clare
Site Visit Reference No.	SV32881

Report Detail	
Issue Date	02/09/2025
Prepared By	Orla Harrington

Site Visit Detail			
Date Of Inspection	25/07/2025	Announced	Yes
Time In	12:15	Time Out	12:50
EPA Inspector(s)	Orla Harrington		
Additional Visitors			
Company Personnel	Uisce Éireann: Tommy Roche, Darragh Conneely, Flan Real, Susie McGuinness. Clare County Council (working in partnership with Uisce Éireann):Fergal Cleary.		

> Summary of Key Findings

1. The West Clare regional water supply old water treatment plant is on the EPA's remedial action list under the category 'EPA Audit Observations - Treatment and Management Issues' following an EPA audit on 05/05/2021. A second category 'Elevated levels of Trihalomethanes above the standard in the Drinking Water Regulations' was added in Quarter 2 2022.
2. Uisce Éireann responded to the EPA's Regulation 27(1) Direction, providing an action programme to rationalise West Clare regional water supply old water treatment plant and connect to West Clare regional water supply new water treatment plant as an alternative source of clean and wholesome drinking water. Once the works are complete to bring West Clare regional water supply new water treatment plant into compliance, a project will be initiated to extend the capacity of the plant to allow West Clare regional water supply old water treatment plant to be decommissioned. Uisce Éireann have provided a completion date of 30/06/2032.

> Introduction

The West Clare regional water supply (RWS) old water treatment plant (WTP) serves a population of 3,063 and a volume of approximately 1,200 m³/day. The source is Doolough Lake and treatment consists of coagulation, clarification, rapid gravity filtration, chlorination and pH correction. All treated water then flows to the reservoir where it is blended with 2,400m³/day of treated water from West Clare (new WTP) before distribution.

An EPA audit of West Clare (old WTP) on 05/05/2021 identified serious operational issues with the plant, and as a result, the scheme was placed on the EPA's remedial action list in Quarter 2 2021 under the category EPA Audit Observations - Management and Treatment issues. The supply is also on the EPA's remedial action list due to persistent exceedances of the trihalomethane parametric value specified in the European Union (Drinking Water) Regulations 2023.

The audit was carried out to assess Uisce Éireann's progress under the EPA's remedial action list and its response to a Direction under Regulation 27(1) issued by the EPA on 19/11/2024, requiring an Action Programme with timelines for achieving trihalomethane compliance. Uisce Éireann plans to rationalise West Clare (old WTP) and connect to West Clare (new WTP) as an alternative source of clean and wholesome drinking water. Uisce Éireann have provided a completion date of Quarter 2 2032 for the rationalisation of West Clare (old WTP). The audit was also undertaken to assess progress with the recommendations from the previous audit undertaken by the EPA on 05/05/2021.

> Supply Zones Areas Inspected

The audit included an inspection of alarm settings and inhibits.



1. Management and Control

1.1

Is the water treatment plant resilient enough to cope with significant variations in raw water quality or demand?

Answer

No

Comment

1. Current treatment at the West Clare (old WTP) does not remove manganese, naturally present in the raw water.
2. Uisce Éireann's monitoring of the West Clare (old WTP) distribution network on 04/07/2025 showed a failure (142 ug/l) to comply with the manganese parametric value set out in the European Union (Drinking Water) Regulations 2023, which is 50 ug/l. Monitoring on 04/07/2025 and 25/07/2025 showed failures of 373 ug/l and 182 ug/l respectively in the final water.
3. Elevated manganese levels in the lake source have resulted in repeat failures in the final water. The exceedance in the network was investigated by Uisce Éireann which revealed that flushing of the lines close to the time the samples were taken may have contributed to the elevated manganese levels. Uisce Éireann's programme of flushing the network, along with weekly sampling at three locations, including the final water will continue.

1.2

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

Answer

No

Comment

1. There are no high or low residual chlorine shutdowns in place at the water treatment plant.

1.3

Have the recommendations from the previous EPA audit been satisfactorily addressed?

Answer

No

Comment

1. The following recommendations from the previous audit on 05/05/2021 have not been fully completed to date. These being:

No. 2. Uisce Éireann should carry out the following work to ensure the protection of the Annageeragh River until the West Clare RWS (old WTP) is decommissioned: ensure that alarms are in place and operating effectively, in order to alert plant operators to any malfunction or discharge of sludge from the sludge holding tank at West Clare RWS (old WTP).

No. 5 Uisce Éireann should ensure that the clarifier channels are examined and any broken channels are replaced as part of routine site maintenance.

No 7 (ii) examine and implement alternative options to the addition of lime pre-filtration, to ensure the filters meet the EPA turbidity performance criteria for filtered water of <0.3 NTU (using the log credit approach); (iii) implement turbidity alarms and shutdowns on each filter and in the final water; (iv) continue to monitor the supply in accordance with the Uisce Éireann Rationale for Determining the Frequency of Cryptosporidium in Public Water Supplies.

The above outstanding recommendations have been included in this audit report.

2. There is no verified treatment barrier to *Cryptosporidium* entering the water supply from Doolough Lake. Uisce Éireann are carrying out weekly monitoring for *Cryptosporidium* in line with *Uisce Éireann's Rationale for Determining the Frequency of Cryptosporidium in Public Water Supplies*. There have been no detections notified to the EPA.



2. Supply on the Remedial Action List

2.1

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

Answer

No

Comment

1. Since the previous EPA audit on 05/05/2021, the West Clare (old WTP) was added to the RAL under two categories, 'Elevated levels of trihalomethanes above the standard in the Drinking Water Regulations' and 'EPA audit observation - treatment and management issues'.

2. There have been three THM exceedances notified to the EPA in 2025 with results ranging between 110 ug/l and 167 ug/l. All have been notified to the HSE.

3. There has been no progress with some audit recommendations as Uisce Éireann plan to rationalise West Clare (old WTP) and connect to West Clare (new WTP) as an alternative source of clean and wholesome drinking water. Once the works are complete to bring West Clare (new WTP) into compliance, a project will be initiated to extend the capacity of the plant to allow West Clare (old WTP) to be decommissioned. Uisce Éireann have provided a completion date of 30/06/2032.

Recommendations

Subject	West Clare (old WTP) - Audit Report	Due Date	01/10/2025
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. Provide six-monthly updates on progress to rationalise West Clare (old WTP) and connect to West Clare (new WTP) as an alternative source of clean and wholesome drinking water. 2. Continue to (i) undertake weekly manganese monitoring of the final water and in the network and (ii) notify the HSE and EPA of all exceedances. 3. Install automatic shutdown to prevent inadequately treated water entering the supply network. 4. Ensure that alarms are in place and operating effectively, in order to alert plant operators to any malfunction or discharge of sludge from the sludge holding tank at West Clare (old WTP). 5. Ensure that the clarifier channels are examined and any broken channels replaced as part of routine site maintenance. 6. (i) Examine and implement alternative options to the addition of lime pre-filtration, to ensure the filters meet the EPA turbidity performance criteria for filtered water of <0.3 NTU (using the log credit approach); (ii) implement turbidity alarms and shutdowns on each filter and in the final water; (iii) Continue to monitor the supply in accordance with the Uisce Éireann Rationale for Determining the Frequency of Cryptosporidium in Public Water Supplies. <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 01/10/2025 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>		