

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 | Lough Mask RWSS |
| Organisation | Uisce Éireann |
| Scheme Code | 2200PUB1032 |
| County | Mayo |
| Site Visit Reference No. | SV29680 |

Report Detail

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|--------------------|-----------------|
| Issue Date | 04/12/2024 |
| Prepared By | Veronica Boland |

Site Visit Detail

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|----------------------------|--|------------------|-------|
| Date Of Inspection | 07/11/2024 | Announced | Yes |
| Time In | 10:55 | Time Out | 13:55 |
| EPA Inspector(s) | Veronica Boland Ruth Barrington | | |
| Additional Visitors | | | |
| Company Personnel | Uisce Éireann: Patrick Sheridan, Michael Lally, Siobhán Sheridan, Vinny McGrath. Mayo County Council (working in partnership with Uisce Éireann): Paul Thomas, Mark O'Donnell, Conor O'Toole, Michael Conway. | | |

> Summary of Key Findings

1. The audit found that the Tourmakeady Water Treatment Plant (WTP) is well operated and managed, and performing well in providing clean and wholesome water to the Lough Mask Public Water Supply (PWS) and operational records are well maintained.
2. An upgrade of the Tourmakeady WTP is ongoing, with an upgrade of the clarifier system completed and the filter system upgrade due to commence in Q2 of 2025.

> Introduction

The Lough Mask Public Water Supply (Tourmakeady Water Treatment Plant) produces an average of 40,117 m³/day of treated water and serves a population of 35,879 people. Raw water is abstracted from Lough Mask. Treatment processes include coagulation and clarification, rapid gravity filtration, and disinfection using chlorination. The treated water goes to an on-site reservoir with a capacity of 10,000 m³. A Log 3 treatment requirement is assigned to Tourmakeady WTP.

This audit was undertaken as part of the EPA's routine assessment of the largest 26 public water supplies in Ireland. Uisce Éireann progress against the recommendations of the previous EPA audit on 08/10/2021 was also assessed.

> Supply Zones Areas Inspected

The audit included an inspection of the treatment processes on-site as well as an assessment of WTP process trends. The raw water source was not inspected.



1. Treatment Process Chemicals

1.1

Are treatment process chemicals appropriately managed and stored?

Answer

Yes

Comment

1. Staff advised that approximately one year ago the chlorine bulk tank (capacity of 20,000 litres) was not remaining full following a fill up and following investigation revealed that the problem related to broken pipework. The pipework associated with the chlorine bulk storage tank was replaced, however the new pipework is not banded.



2. Management and Control

2.1

Are online monitors operational?

Answer

No

Comment

1. On the day of the audit, the raw water turbidity monitor calibration sticker showed that the calibration was overdue (due February 2024). Staff advised that the monitor buttons are sticking, and that a new monitor is ordered and due to be installed the week following the audit. Staff advised that handheld turbidity monitoring of the raw water is undertaken daily and recorded.

2. The 'CWT No.1 Turbidity' monitor calibration sticker also showed that the calibration was over due (due February 2024). Staff advised that this monitor was offline as the buttons were sticking, and a new monitor was ordered and due to be installed in coming weeks. Staff advised that this monitor is not linked to any treatment processes.

2.2

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

Answer

No

Comment

1. The previous EPA audit was undertaken on 08/10/2021 and the significant WTP upgrades initiated following that audit are still ongoing. A recommendation relating to both clarifier upgrades and planned filter upgrades remains in place. The clarifier upgrades have been completed. Staff advised that the filter upgrades, including filter media replacement are scheduled to commence in Quarter 2 of 2025.

2. At the audit a review of trend data and visual inspection of the filters indicated that the filters were operating effectively.

Recommendations

| Subject | Lough Mask Audit 2024 Recommendations | Due Date | 06/01/2025 |
|-------------|--|----------|------------|
| 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. Continue to provide good quality drinking water and proceed with filter upgrade. Continue reporting to the EPA on the progress of the filters upgrade (including timescales) against recommendation number 1 from the EPA's previous audit carried out in 2021.2. Provide bunding around the pipework associated with the chlorine bulk storage tank.3. Replace/reinstate the Raw Water Turbidity monitor and the CWT No.1 Turbidity Monitor. <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 06/01/2025 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> | | |