

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	Inishowen West
Organisation	Uisce Éireann
Scheme Code	0600PUB1005
County	Donegal
Site Visit Reference No.	SV30675

Report Detail	
Issue Date	10/01/2025
Prepared By	Elaine Greenan

Site Visit Detail			
Date Of Inspection	27/11/2024	Announced	Yes
Time In	11:00	Time Out	12:05
EPA Inspector(s)	Elaine Greenan		
Additional Visitors			
Company Personnel	Uisce Éireann: Yvonne McMonagle, Fionnuala Bonner. Donegal County Council (working in partnership with Uisce Éireann): Michael Barrett		



Summary of Key Findings

1. The audit found that the Inishowen West WTP was operating and performing well in providing clean and wholesome water to the public supply.



Introduction

The Inishowen West WTP produces approximately 2862.0 m³/d of water serving a population of 3,355 (EDEN 2024). The audit focused on the disinfection system at Inishowen West PWS.



Supply Zones Areas Inspected

1. The disinfection system was inspected.



1. Disinfection Audits 2024

		Answer
1.1	Is chlorination used for primary disinfection?	Yes
		Answer
1.2	Did Uisce Éireann confirm the type of chlorine disinfectant in use?	Yes
	Comment	
	10% Hypochlorite	
		Answer
1.3	Are there duty and standby chlorine dosing pumps in place?	Yes
		Answer
1.4	Is there automatic switchover in the event of failure of one of the chlorine dosing pumps?	Yes
		Answer
1.5	Is the chlorine dosing rate flow proportional?	Yes
		Answer
1.6	Is there a continuous residual chlorine monitor, with alarm, to verify chlorine dosing is taking place at the target level?	Yes
		Answer
1.7	Is there a continuous residual chlorine monitor, with alarm, at a suitable sample location after contact time has been completed?	Yes
		Answer
1.8	Can data trends from the online residual monitor be viewed on site?	Yes
		Answer
1.9	Are there low and high chlorine alarm settings on each chlorine monitor?	Yes

		Answer
1.10	Is there a documented alarm response procedure for responding to chlorine alarms?	Yes

		Answer
1.11	Have staff been trained on the chlorine alarm response procedure?	Yes

		Answer
1.12	Are chlorine alarms dialled out via a cascade system to allow a timely response by plant operators?	Yes

		Answer
1.13	Is there automatic shutdown of the supply in the event of the chlorine level dropping below the low level or rising above the high chlorine alarm setting?	Yes

		Answer
1.14	Are service due / monitoring instrument calibration dates for the chlorine monitors within date?	No
Comment		
Certificates for the calibration dates of the chlorine monitors were not available on the day of the audit. No stickers attached to the chlorine monitors to display when the units were last serviced and calibrated, or the date when the units are next due for calibration.		

		Answer
1.15	Is the site specific target contact time being achieved?	Yes

		Answer
1.16	Is the minimum effective contact time of 15 mg. min/l being achieved?	Yes

		Answer
1.17	Is the residual chlorine level ≥ 0.1 mg/l at the extremity of the distribution network?	No
Comment		

A map showing the monitoring locations on the network was not available on the day of audit. No weekly or monthly records of residual chlorine monitoring of the network was available on day of audit.

		Answer
1.18	Is monitoring of network residual chlorine undertaken several times per week?	Yes

Recommendations

Subject	Disinfection Audit 2024	Due Date	10/02/2025
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. Ensure that the chlorine monitors are regularly serviced and calibrated in accordance with the manufacturer's instructions. Certificates and photographic evidence to be forwarded to the EPA to verify that calibrations have been carried out.2. Forward map to the EPA showing the monitoring locations on the Inishowen West network, and evidence of weekly and monthly monitoring records of residual chlorine at the different points of the network. This monitoring should include the network extremities. <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 10/02/2025 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>		