

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	Bottlehill
Organisation	Uisce Éireann
Scheme Code	0500PUB1302
County	Cork
Site Visit Reference No.	SV35129

Report Detail	
Issue Date	07/05/2026
Prepared By	Noel Cosgrove

Site Visit Detail			
Date Of Inspection	21/04/2026	Announced	Yes
Time In	11:30	Time Out	11:55
EPA Inspector(s)	Noel Cosgrove Anna Doyle		
Additional Visitors			
Company Personnel	Uisce Éireann: Claire Hurley, Billy Taylor, Billy Mulcahy.		

> Summary of Key Findings

1. Disinfection consists of primary Chlorination.
2. Install a chlorine residual monitor, with alarm, at a location after contact time has been achieved to verify adequate contact time is being maintained at all times.
3. Install duty and standby chloring dosing pumps with automatic switch in the event of the failure of one of the pumps.

Uisce Éireann should submit a report to the EPA on or before 07/06/2026 detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

> Introduction

Bottlehill WTP produces approximately 25 m³/day of drinking water serving a population of 110.

> Supply Zones Areas Inspected

The audit assessed the Chlorination disinfection system at Bottlehill PWS.



1. Disinfection Audits 2026

		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	
	1. 10% Sodium Hypochlorite solution.	
		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?	No
	Comment	
	1. There is a programmed automatic switchover of the dosing pumps every 10 minutes. In the event of a dosing pump failure a plant shutdown is triggered.	
	Recommendation:	
	1. Install duty and standby chlorine dosing pumps with automatic switch in the event of the failure of one of the pumps.	
		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?	No

Comment	
1. Uisce Éireann confirmed that the continuous residual chlorine monitor is located in the onsite reservoir and not on the reservoir outlet. <u>Recommendation:</u> 2. Install a residual chlorine monitor, with alarm, at a location after contact time has been achieved to verify adequate contact time is being maintained at all times.	

	Answer
1.8 Can data trends from the online residual monitor be viewed on site?	Yes

Comment	
1. There is no HMI on-site but the Operator and other Uisce Éireann staff can view the trends remotely.	

	Answer
1.9 Are there low and high chlorine alarm settings on each chlorine monitor?	Yes

Comment	
1. Low-low shutdown alarm set at 0.4mg/L. 2. High alarm 1.8mg/l and High-High shutdown 2.0mg/l after 600 seconds.	

	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?	Yes
		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 $\geq$ 0.1 mg/l at the extremity of the distribution network?	Yes
		Answer
1.18	Is monitoring of network residual chlorine undertaken several times per week?	Yes

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.