

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	Bayview
Organisation	Uisce Éireann
Scheme Code	0500PUB2109
County	Cork
Site Visit Reference No.	SV35314

Report Detail	
Issue Date	17/08/2026
Prepared By	Noel Cosgrove

Site Visit Detail			
Date Of Inspection	11/06/2026	Announced	Yes
Time In	11:25	Time Out	11:55
EPA Inspector(s)	Noel Cosgrove Anna Doyle		
Additional Visitors			
Company Personnel	Uisce Éireann: Claire Hurley, Brendan O'Brien. Cork County Council: David Carroll.		

> Summary of Key Findings

1. Disinfection consists of primary UV disinfection and secondary chlorination.
2. Install duty and standby chlorine dosing pumps with automatic switch over in the event of the failure of one of the pumps.
3. Ensure monitoring of residual chlorine is undertaken several times a week at different points of the network to include the network extremities.
4. There are a number of deficiencies in relation to the UV disinfection system including i) lack duty and standby UV units, ii) lack of a suitable shutdown on the existing UV unit, and iii) a lack of a documented alarm response procedure and escalation cascade system for UV alarms.

Uisce Éireann should submit a report to the EPA on or before 12/07/2026 detailing the actions taken and planned, with timescales, to close out the recommendations in this audit report.

> Introduction

The audit assessed both the UV and Chlorination disinfection systems at Bayview Public Water Supply.

> Supply Zones Areas Inspected

Bayview Water Treatment Plant (WTP) produces approximately 6 m³/day of water serving a population of 17. The audit focused on the disinfection system at Bayview WTP.



		Answer
1.1	Is chlorination used for primary disinfection?	No
	Comment	
	1. Primary disinfection is by UV treatment.	
		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?	No
	Comment	
	1. Uisce Éireann confirmed that there was no standby chlorine dosing unit at the treatment plant.	
	Recommendation:	
	1. Install duty and standby chlorine dosing pumps with automatic switch over in the event of the failure of one of the pumps.	
		Answer
1.4	Is the chlorine dosing rate flow proportional?	Yes
		Answer
1.5	Is there a continuous residual chlorine monitor, with alarm, to verify chlorine dosing is taking place at the target level?	Yes
		Answer
1.6	Is there a continuous residual chlorine monitor, with alarm, at a suitable sample location after contact time has been completed?	No
	Comment	

1. Primary disinfection is by UV treatment.

Answer

1.7 Can data trends from the online residual monitor be viewed on site?

Yes

Answer

1.8 Are there low and high chlorine alarm settings on each chlorine monitor?

Yes

Comment

1. Low shutdown alarm set at 0.49 mg/L.
2. High shutdown alarm set at 2.0 mg/L.
3. Delay time 15 minutes.

Answer

1.9 Is there a documented alarm response procedure for responding to chlorine alarms?

Yes

Answer

1.10 Have staff been trained on the chlorine alarm response procedure?

Yes

Answer

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

Yes

Answer

1.12 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

1.13 Are service due / monitoring instrument calibration dates for the chlorine monitors within date?

Yes

Answer

1.14	Is the site specific target contact time being achieved?	Not Applicable
	Comment	
	1. Primary disinfection is by UV treatment.	
		Answer
1.15	Is the minimum effective contact time of 15 mg. min/l being achieved?	Not Applicable
	Comment	
	1. Primary disinfection is by UV treatment.	
		Answer
1.16	Is the residual chlorine level ≥ 0.1 mg/l at the extremity of the distribution network?	Yes
	Answer	
1.17	Is monitoring of network residual chlorine undertaken several times per week?	No
	Comment	
	1. Network residual monitoring undertaken approximately every one to two weeks. Recommendation: 2. Ensure monitoring of residual chlorine is undertaken several times a week at different points of the network to include network extremities.	
		Answer
1.18	Is UV treatment used for primary disinfection?	Yes
	Answer	
1.19	Are there duty and standby UV units in operation?	No
	Comment	

1. Uisce Éireann confirmed there is a duty UV unit place only with no standby UV unit available.

Recommendation:

3. Ensure that there are duty and standby UV disinfection units with automatic changeover or plant shutdown in the event of failure of one of the UV disinfection units.

	Answer
1.20 Is there automatic shut-off of the supply in the event of UV units failing or operating outside of their validated range?	No

Comment

1. Uisce Éireann confirmed that there is no automatic shut-off of the supply triggered in the event the duty UV unit operates outside the validated range.

Recommendation:

4. Ensure there is automatic plant shutdown in the event the UV unit drops outside of the validated range.

	Answer
1.21 Is there continuous monitoring of the UV units to verify operation within validation range at all times?	Yes

	Answer
1.22 Can data trends from the online UV monitor(s) be viewed on-site?	Yes

	Answer
1.23 Is there a documented alarm response procedure for responding to UV alarms?	No

Comment

1. No UV shutdown alarm in place.

Recommendation:

5. Ensure there is a documented alarm response procedure for responding to UV alarms.

	Answer
1.24 Are service due / monitoring instrument calibration dates for the UV units within date?	Yes

		Answer
1.25	Is the UV disinfection system validated to an appropriate international standard ?	Yes

		Answer
1.26	Did UÉ confirm that the UV disinfection system is operating within the validated range?	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.