

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	East Waterford Water Supply Scheme
Organisation	Uisce Éireann
Scheme Code	3800PUB1110
County	Waterford
Site Visit Reference No.	SV34915

Report Detail	
Issue Date	07/05/2026
Prepared By	Lema System

Site Visit Detail			
Date Of Inspection	17/04/2026	Announced	Yes
Time In	11:00	Time Out	13:50
EPA Inspector(s)	David O'Malley Regina Campbell		
Additional Visitors	Pauline Gillard Noel Cosgrove Sarah O'Connor		
Company Personnel	Uisce Éireann: Siobhan Clifford, Melissa Devane, Maura Phelan and Tommy Power. Health Service Executive: Laurence O'Connor.		

> Summary of Key Findings

1. The Adamstown Water Treatment Plant was operating satisfactorily on the day of the audit.
2. Uisce Éireann have not addressed all of the recommendations from the previous EPA audits undertaken on the 14/06/2023 and 20/08/2025.
3. In relation to the Leakage audit component of this site visit, where Uisce Éireann were unable to provide the relevant bulk-meter information at the time of the audit, any follow-up recommendations will be dealt with centrally.

Uisce Éireann should submit a report to the EPA on or before 09/06/2026 detailing the actions taken and planned, with timescales, to close out the nine recommendations in this audit report.

> Introduction

The East Waterford Water Supply Scheme (WSS) supplies an average of 31,472 m³/day of water, serving a population of 71,622 (EDEN 2025). The sources of the supply are the Ballyshunnock impoundment, River Clodiagh and River Mahon with relative proportions of each source varying throughout the year. On the day of the audit, the sources in use were a blend of River Clodiagh and River Mahon.

Treatment consists of coagulation, flocculation, clarification, rapid gravity filtration, pH correction, chlorination, fluoridation and sludge treatment.

The focus of the audit was on the progress with addressing previous audit report recommendations and assessing operations at the plant.

The leakage audit examined aspects of bulk-flow metering that measure drinking water volumes entering the distribution network (Distribution Input), which is a key component of the accuracy of reliability of reported leakage as per regulatory requirements.

> Supply Zones Areas Inspected

The audit consisted of a review of previous audit recommendations from audits undertaken on 14/06/2023 and 20/08/2025. The coagulation dosing pumps, clarifier tanks, rapid gravity filters, pH correction and the chlorination dosing system at the water treatment plant were inspected.

The leakage audit consisted of interviews with Uisce Éireann staff, the inspection of bulk-meter asset locations where accessible, the associated consoles/telemetry systems, and central control areas.



		Answer
1.1	Is there a documented alarm response procedure?	No
Comment		
<p>1. There is no documented alarm response procedure currently in place at the WTP. Uisce Éireann stated that procedures are currently being developed.</p>		
Recommendation:		
<p>1. Put a documented procedure in place for responding to and escalating all alarms generated at the WTP. The procedure should clearly document the corrective actions and set out delegation of responsibilities for operational and relief staff. Ensure all staff are trained in the procedure.</p>		



2.1

	Answer
Have actions been scheduled to address previous EPA audit recommendations with assigned timescales for completion?	No

Comment

The outstanding recommendations from EPA audits undertaken on 14/06/2023 and 20/08/2025 are as follows:

1. Upgrade the bulk aluminium sulphate storage tanks so that they are stored in a bunded area capable of containing at least 110% of the volume of chemicals stored therein. Fill points for storage tanks inside the bunds should be within the bunded area. Refer to EPA guidance document – “IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities”.

Update: Uisce Éireann confirmed works are in progress with a completion date of Q4 2027.

2. Ensure backwash water undergoes appropriate settlement prior to discharge.

Update: Uisce Éireann confirmed the backwash tanks are under construction with a completion date of Q4 2027.

3. Ensure all turbidity filters are operating in accordance with the EPA Water Treatment Manual: Filtration.

Update: Uisce Éireann confirmed works are in progress with a completion date of Q4 2027.

4. Ensure there is a documented incident response procedure in place at the plant.

Update: Uisce Éireann stated they are currently developing a document for all steps of the treatment process at the WTP. A completion date has not been confirmed.

5. a) If feasible install appropriate shutdowns for (i) high and low pH levels in the final water (ii) high alum coagulant dosing, and b) progress the installation of an integrated flow switch for the Coagsense controller sensor.

Update: Uisce Éireann stated funding has been approved for works. A completion date has not been confirmed.

6. Review the future use of Ballyshunnock impoundment as a source.

Update: Uisce Éireann stated instruments are awaiting installation to assess raw water. A completion date has not been confirmed.

7. Ensure documented roles and responsibilities of the NOMC reviewing trends and escalating incidents.

Update: Uisce Éireann stated that documented procedures need to be established. A completion date has not been confirmed.

Recommendations:

2. Upgrade the bulk aluminium sulphate storage tanks so that they are stored in a bunded area capable of containing at least 110% of the volume of chemicals stored therein. Fill points for storage tanks inside the bunds should be within the bunded area. Refer to EPA guidance document – “IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities”.

3. Ensure backwash water undergoes appropriate settlement and that the discharge of backwash water does not have a deleterious impact on the receiving waters.

4. a) Ensure that the turbidity monitors on the outlets of Filters 3 and 4 are operational with appropriate alarms and inhibits in place in accordance with the EPA Water Treatment Manual: Filtration; b) Confirm when Filters 1 and 2 are back in operation; c) Continue to monitor for *Cryptosporidium* as per Uisce Éireann’s Rationale for Determining the Frequency of *Cryptosporidium* monitoring in Public Water Supplies; d) Ensure that filter media depth is 1000mm in accordance with the EPA Water Treatment Manual: Filtration.

5. Ensure there is a documented incident response procedure in place at the plant, and that plant operators and management are fully trained on responding to incidents, to ensure that incidents affecting drinking water quality are suitably escalated and managed in order to maintain water quality and protect public health.
6. a) If feasible install appropriate shutdowns for (i) high and low pH levels in the final water (ii) high alum coagulant dosing, and b) progress the installation of an integrated flow switch for the Coagsense controller sensor.
7. Review the future use of Ballyshunnock impoundment as a source for the plant taking into account the water quality of the lake at various times during the year.
8. Ensure the roles and responsibilities of the NOMC when reviewing trends and escalating incidents at East Waterford water treatment plant are clearly documented and understood by both NOMC staff and water treatment plant staff.



3. DI Bulk Flow Metering (Leakage)

		Answer
3.1	Confirm that the treatment plant supplies above 1000MCD	Yes
	Comment	
	1. Treatment Plant supplies approximately 33 million litres per day to the East Waterford Supply Scheme Water Resource Zone.	
		Answer
3.2	Is there site-bulk metering for measuring drinking water volumes entering the supply network?	Yes
	Comment	
	1. Treatment plant has 2 bulk-meters, that were not accessible for visual inspection: i. 600mm line to Whitfield ii. 700mm line to Brownsroad.	
		Answer
3.3	Is ALL treated water entering the supply system from the treatment plant currently metered?	Yes
		Answer
3.4	Is there a scheduled verification of bulk meter(s) to ensure the accuracy of the meter reading?	No
	Comment	
	1. No formal verification procedure in place. Uisce Éireann carrying out internal audits relating to existing meter assets and their accuracy as part of the Uisce Éireann Transformation Programme. (UETP).	
		Answer
3.5	Is there a scheduled verification of bulk meter(s) readings to ensure the correct readings are transmitted to data/network management systems (e.g. SCADA)?	Not Applicable
	Comment	
	1. Unable to confirm at time of visit.	

		Answer
3.6	What is the frequency of the bulk meter(s) readings taken (hourly, daily)?	Not Applicable
	Comment	
	1. Readings taken every 3 minutes.	

		Answer
3.7	Is the bulk meter compliant/calibrated to OIML R49 / ISO DIN 4064 Standards?	Not Applicable
	Comment	
	1. Unable to confirm at time of visit.	

		Answer
3.8	For each on-site bulk meter, is the current bulk-meter flow above the recommended operational minimum and maximum flows for the meter?	Not Applicable
	Comment	
	1. Unable to confirm at time of visit.	

		Answer
3.9	Is there a process in place to alert Operators/Maintenance/Systems when the bulk-meter malfunctions or stops working?	Yes
	Comment	
	1. 24/7 monitoring of meter flow telemetry carried out.	

		Answer
3.10	Are bulk-meter flow trends available on-site?	Yes
	Comment	

1. Confirmed by inspection of telemetry central control room, and remotely. Trends include both real-timeflows, reported Total daily and weekly flows.

		Answer
3.11	Are there any plans to add or upgrade existing meters within the next 12 months?	No



4. Site Specific Issues

	Answer
4.1 Did the daily log sheet include the correct parametric units?	No
Comment	
1. The daily log sheet did not have the parameter units listed.	
Recommendation:	
9. Ensure the daily log sheet includes the parametric units for all parameters listed.	

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.