

# 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.	SV32048

Report Detail	
Issue Date	27/06/2025
Prepared By	Sean O'Leary

Site Visit Detail			
Date Of Inspection	27/05/2025	Announced	Yes
Time In	10:30	Time Out	13:00
EPA Inspector(s)	Sean O'Leary Paul Buckley		
Additional Visitors			
Company Personnel	Uisce Éireann: Melissa Devane, Tommy Power, Pat Duggan, Abith Kalpndickal Baby and Maura Phelan.		

## > Summary of Key Findings

- 1) The audit found that Adamstown Water Treatment Plant (WTP) was operating satisfactorily on the day of the audit.
- 2) There are upgrade works ongoing at the treatment plant. These works include: filter upgrades and the installation of an upgraded backwash settlement tank.

## > Introduction

The East Waterford Water Supply Scheme (WWS) supplies an average of 30,505 m<sup>3</sup>/day of water, serving a population of 63,644 (EDEN).

The sources of the supply are the Ballyshunnock impoundment, River Clodiagh and River Mahon with relative proportions of each source varying throughout the year.

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

The audit was carried out as part of the EPA's routine assessment of large scale public water supplies and to assess progress with the recommendations from the previous audit undertaken by the EPA on 12/07/2023.

## > Supply Zones Areas Inspected

The alum dosing system, pH adjustment system, flocculation system, clarification tanks, rapid gravity filters, and chlorination dosing system were inspected at the water treatment plant.



## 1. Coagulation Flocculation and Clarification (CFC) Stage

1.1

Were the CFC tanks, channels and weirs observed to be clean, level and well maintained during the audit?

**Answer**

No

**Comment**

1. There was build up of algal growth and rust present on some clarifier weirs.



## 2. Treatment Process Chemicals

2.1

Are treatment process chemicals appropriately managed and stored?

**Answer**

No

**Comment**

1. There is no automatic shutoff valve on the outflow pipe leaving the aluminium sulphate bulk storage tank, triggered by low aluminium sulphate level.

2. A low level alarm warning alarm has been installed to alert operators to reducing chemical levels.



### 3. Management and Control

3.1

		Answer
	Have the recommendations from the previous EPA audit been satisfactorily addressed?	No
<b>Comment</b>		
<p>A number of recommendations from the previous EPA audit undertaken on 12/07/23 have not been completed to date. The outstanding recommendations are as follows:</p>		
<p><i>No. 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”.</i></p>		
<p>Update: Uisce Éireann are exploring the feasibility of these works with no confirmed proposed date of completion (PDOC) available.</p>		
<p><i>No. 7: Ensure backwash water undergoes appropriate settlement and that the discharge of backwash water does not have a deleterious impact on the receiving waters.</i></p>		
<p>Update: Uisce Éireann confirmed that works to upgrade backwash settlement tanks have commenced with a PDOC Q2 2026.</p>		
<p><i>No. 8: Confirm the log treatment requirement for the plant and address how any treatment log deficit will be addressed.</i></p>		
<p>Update: Uisce Éireann confirmed that the source and sanitary survey has been completed but were unable to confirm protozoal log treatment requirement for the plant on the day of the audit.</p>		
<p><i>No. 9: b) 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; c) Confirm when Filters 1 and 2 are back in operation; d) Continue to monitor for Cryptosporidium as per Uisce Éireann’s Rationale for Determining the Frequency of Cryptosporidium monitoring in Public Water Supplies; e) Ensure that filter media depth is 1000mm in accordance with the EPA Water Treatment Manual: Filtration.</i></p>		
<p>Update: Uisce Éireann confirmed that works to upgrade rapid gravity filters are ongoing and that the completion date for works on filters 1 to 4 is Q2 2026.</p>		

Subject	Audit recommendations	Due Date	27/07/2025
<b>Action Text</b>	<p><b>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendations without delay.</b></p> <ol style="list-style-type: none"> <li>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”.</li> <li>2. Ensure backwash water undergoes appropriate settlement and that the discharge of backwash water does not have a deleterious impact on the receiving waters.</li> <li>3. Confirm the log treatment requirement for the plant and address how any treatment log deficit will be addressed.</li> <li>4. (i) Ensure that the turbidity monitors on all rapid gravity filters are operational with appropriate alarms and inhibits in place in accordance with the EPA Water Treatment Manual: Filtration; (ii) Confirm when Filters 1 and 2 are back in operation; (iii) Continue to monitor for <i>Cryptosporidium</i> as per Uisce Éireann’s Rationale for Determining the Frequency of <i>Cryptosporidium</i> monitoring in Public Water Supplies; (iv) Ensure that filter media depth is 1000mm in accordance with the EPA Water Treatment Manual: Filtration.</li> <li>5. Investigate the feasibility of installing an auto shutoff / shutdown on the aluminium sulphate bulk storage tank.</li> <li>6. Ensure the channels on settlement tanks are regularly cleaned to prevent build up of material.</li> </ol> <p><b>Actions required by Uisce Éireann</b></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 27/07/2025 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>		