

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	Cork Harbour and City
Organisation	Uisce Éireann
Scheme Code	0500PUB3401
County	Cork
Site Visit Reference No.	SV35558

Report Detail	
Issue Date	30/07/2026
Prepared By	Patrick Chan

Site Visit Detail			
Date Of Inspection	24/07/2026	Announced	No
Time In	14:00	Time Out	14:45
EPA Inspector(s)	Patrick Chan		
Additional Visitors			
Company Personnel	Uisce Éireann: James Goulding and Claire Kelly.		

> Summary of Key Findings

1. An aluminium sulphate spill occurred at the Cork Harbour and City Water Treatment Plant (WTP) on 22/07/2026 during the transfer of alum from the main storage tanks to the day tanks. The day tanks are fitted with sonic probes designed to stop the filling process when the required level is reached. The probes did not operate as intended, resulting in an estimated 3,400 litres of aluminium sulphate overflowing into the site drainage system, which ultimately discharges to the River Lee.
2. The root cause of the probe malfunction had not been established at the time of the site visit. However, investigations identified that the sonic probes were out of calibration.
3. The operation of the Cork Harbour and City WTP and the quality of the treated drinking water were not adversely affected by the chemical spill.
4. Uisce Éireann notified the EPA and Inland Fisheries Ireland of the incident on 23/07/2026.

Uisce Éireann should submit a report to the EPA on or before the 28/08/2026 detailing the actions taken and planned, with timescales, to close out the 3 recommendations in this audit report.

> Introduction

The Cork Harbour and City Public Water Supply (PWS) serves a population of 143,555 with an average output of 64,135 m³/day (EPA EDEN figures 2025). Raw water is abstracted from the River Lee at the Inniscarra Lake. Treatment at the Inniscarra Water Treatment Plant (WTP) includes coagulation, flocculation, clarification, filtration, disinfection, final pH correction, fluoridation and sludge treatment.

This audit was carried out in response to Uisce Éireann's notification to the EPA of a chemical spill at the plant which was notified to the EPA on 23/07/2026.

> Supply Zones Areas Inspected

The focus of the on site inspection was on the chemical storage facilities at the drinking water treatment plant and the associated drainage system. The discharge point into the River Lee was also inspected.



1. Incident Management

1.1

Was the incident suitably alerted to the plant operators, escalated and managed in order to maintain water quality and protect public health?

Answer

Yes



2.1

	Answer
Are treatment process chemicals appropriately managed and stored?	No
Comment	
On the day of the site visit the management of alum was not considered satisfactory: 1. Incident Description Uisce Éireann notified the EPA and Inland Fisheries Ireland (IFI) on 23/07/2026 of an aluminium sulphate spill that occurred at the Cork Harbour and City WTP on 22/07/2026. Approximately 3,400 litres of alum overflowed from a day tank and entered the site drainage system, which discharges to the River Lee approximately 250 metres downstream of the Inniscarra Dam. Raw water is abstracted approximately 1.5 km upstream of the discharge point. The audit confirmed that the incident did not adversely affect drinking water quality. 2. Cause of the Incident Alum is transferred from bulk storage tanks to day tanks using pumps that are manually started by operators and designed to stop automatically when a set level is reached. During the filling of Day Tank No. 4, the sonic probe failed to initiate the automatic pump shut-off, resulting in the tank overflowing. The overflow was identified by an operator, and the pumps were manually stopped at 21:12 hours. The overflow lasted approximately 12 minutes and resulted in the loss of an estimated 3,400 litres of alum. At the time of the site visit, the root cause of the probe malfunction had not been established. However, Uisce Éireann has identified that the sonic probes were out of calibration. 3. Actions Taken and Observations Plant operators manually shut down the transfer pumps and notified Uisce Éireann management. Uisce Éireann notified the EPA and IFI on 23/07/2026. The discharge point was inspected and no adverse environmental impacts were observed. Live fish were observed at and downstream of the discharge point. Uisce Éireann advised that the length of the drainage network and flow from the Inniscarra Dam would have dispersed and diluted the spill prior to discharge to the River Lee. Recommendations 1. Ensure that all sonic probes are routinely calibrated and maintained. 2. Install an independent secondary control to prevent tank overflows in the event of a probe failure (e.g. a high-level alarm or independent level switch). 3. Investigate the feasibility of diverting chemical spills and overflows to a containment tank rather than discharging to the River Lee.	

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.