

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	Fingal Zone 1
Organisation	Uisce Éireann
Scheme Code	0900PUB1001
County	Dublin
Site Visit Reference No.	SV34854

Report Detail	
Issue Date	20/04/2026
Prepared By	Lema System

Site Visit Detail			
Date Of Inspection	13/03/2026	Announced	Yes
Time In	10:30	Time Out	12:15
EPA Inspector(s)	Michelle Roche Pauline Gillard		
Additional Visitors	Noel Cosgrove Patrick Kenny		
Company Personnel	Uisce Éireann: Edward Haythornthwaite, Linda Doran, Tselo Tlou, Derek Ward, Eamon Connolly, Nicholas Connaughton and Conor Flanagan.		

> Summary of Key Findings

1. Leixlip Water Treatment Plant, Old Plant was operating satisfactorily at the time of the audit.
2. Uisce Éireann should ensure that the clean and wholesome supply of drinking water is maintained and Leixlip Water Treatment Plant continues to be suitably managed and operated at all times.
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.

> Introduction

Leixlip Water Treatment Plant is the second largest water treatment plant in the country, which supplies water to approximately 650,000 people in the Greater Dublin Area. Raw water is abstracted from the River Liffey impoundment adjacent to the plant and is distributed to three separate water treatment buildings; Mahon and McPhillips and Paterson Candy International, which constitute the Old Plant and Aecom, known as the New Plant. Treatment is the same across the all three plants and consists of screening, pH adjustment, coagulation, flocculation, clarification, rapid gravity filtration, chlorination, final water pH correction and fluoridation. Ultraviolet disinfection also takes place at the old plant prior to chlorination.

The audit was conducted as a full audit of Leixlip Water Treatment Plant, Old Plant, with a focus on the alarms, inhibits and management oversight in place.

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 interviews with Uisce Éireann staff, a review of water quality trends and a review of standard operating procedures for water quality incident response.

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.



1. DI Bulk Flow Metering (Leakage)

	Answer
1.1	Confirm that the treatment plant supplies above 1000MCD
	Yes
Comment	
Treatment Plant supplies approximately 209 million litres per day to the Greater Dublin Area Water Resource Zone.	

	Answer
1.2	Is there site-bulk metering for measuring drinking water volumes entering the supply network?
	Yes
Comment	
Treatment plant has 4 bulk-meters, with 3 currently operational. The following operating bulk-meters were visually inspected in their locations (with the fourth - 700mm to Kildare - not accessible): 1. 1000mm to Ballycoolin 2. 700mm to Ballycoolin 3. 600mm to Peamount-Lucan.	

	Answer
1.3	Is ALL treated water entering the supply system from the treatment plant currently metered?
	Yes
Comment	
Confirmed, with additional meter present at reservoirs and on the mains distribution network. The combined daily flows from both Leixlip Old and New Treatment plants is measured and reported.	

	Answer
1.4	Is there a scheduled verification of bulk meter(s) to ensure the accuracy of the meter reading?
	No
Comment	
No formal verification procedure in place. UÉ carrying out internal audits relating to existing meter assets and their accuracy as part of the Uisce Éireann Transformation Programme. (UETP). All 3 working bulk-meters verified in March 2026.	

		Answer
1.5	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	
	Unable to confirm at time of visit.	

		Answer
1.6	What is the frequency of the bulk meter(s) readings taken (hourly, daily)?	Not Applicable
	Comment	
	Readings taken every 15 minutes, confirmed by inspection of trends in control room.	

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

		Answer
1.8	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	
	Unable to confirm at time of visit.	

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

		Answer
1.10	Are bulk-meter flow trends available on-site?	Yes
Comment		
Confirmed by inspection of telemetry central control room, and remotely. Trends include both real-time flows and reported total daily flows.		

		Answer
1.11	Are there any plans to add or upgrade existing meters within the next 12 months?	Yes
Comment		
1. Kildare Line bulk-meter to be replaced Q3 2026. 2. Temporary strap-on meter for 1000mm to Ballycoolin Line to be replaced by individual meters on each of the 6 riser pipes that are linked to a common header: with no confirmed date for commencement of works.		

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.