

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.	SV28434

Report Detail	
Issue Date	14/12/2023
Prepared By	Michelle Roche

Site Visit Detail			
Date Of Inspection	28/11/2023	Announced	Yes
Time In	10:30	Time Out	12:45
EPA Inspector(s)	Michelle Roche		
Additional Visitors			
Company Personnel	Uisce Éireann: Daniel Behan, Joseph Moran and Tselo Tlou Fingal County Council (operating in partnership with Uisce Éireann): Thomas Brennan and Brian Reynolds.		

> Summary of Key Findings

1. Leixlip Water Treatment Plant (WTP) was operating satisfactorily on the day of the audit in providing clean and wholesome drinking water to the public.
2. Uisce Éireann should ensure the Leixlip WTP continues to be suitably managed and operated at all times.

> 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 three plants and consists of screening, coagulation, flocculation, clarification, rapid gravity filtration, chlorination and fluoridation. There is the addition of ultraviolet disinfection at the old plant prior to chlorination.

The audit was conducted as a full audit of the water treatment plant with a focus on the alarms, inhibits and management oversight at the plant.

> Supply Zones Areas Inspected

The audit inspected all aspects of the treatment process at the New Plant. Alarm and inhibit set-points and continuous online turbidity trends, UV trends and chlorine residual trends were examined for both the old and new treatment plants.



1. Management and Control

	Answer
1.1	Is the plant suitably managed and controlled to maintain the designed log credit on each treatment stage?
	Yes
Comment	
<p>1. Leixlip Water Treatment Plant was operating satisfactorily on the day of the audit in providing clean and wholesome drinking water to the public.</p> <p>2. Each treatment stage had suitable alarms and inhibits in place and water quality validation trends showed each treatment stage was operating effectively on the day of the audit.</p>	

Recommendations

Subject	Leixlip Water Treatment Plant Audit Recommendations	Due Date	11/01/2024
Action Text	<p>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendation without delay.</p> <ol style="list-style-type: none">1. Maintain the clean and wholesome supply of drinking water and ensure that Leixlip Water Treatment Plant continues to be suitably managed and operated at all times. <p>Actions required by Uisce Éireann</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>The EPA advises that the findings and recommendations from this audit report should, where relevant, be addressed at other public water supplies.</p>		