

# 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	
<b>Name of Installation</b>	Fingal Zone 3
<b>Organisation</b>	Uisce Éireann
<b>Scheme Code</b>	0900PUB1003
<b>County</b>	Dublin
<b>Site Visit Reference No.</b>	SV29696

Report Detail	
<b>Issue Date</b>	16/10/2024
<b>Prepared By</b>	Michelle Roche

Site Visit Detail			
<b>Date Of Inspection</b>	10/10/2024	<b>Announced</b>	Yes
<b>Time In</b>	10:00	<b>Time Out</b>	11:20
<b>EPA Inspector(s)</b>	Michelle Roche		
<b>Additional Visitors</b>			
<b>Company Personnel</b>	Uisce Éireann: Linda Doran and Robert Roche Fingal County Council: Mick Donohoe		

## > Summary of Key Findings

1. A chlorine residual monitor has been installed at the inlet to Jordanstown Reservoir to verify chlorine contact time. The monitor is not yet connected to SCADA and no alarms or inhibits are in place to ensure contact time is achieved and verified at all times.

## > Introduction

The Fingal Zone 3 public water supply serves a population of approximately 27,000 from Jordanstown Reservoir. Treated water from the Bog of the Ring Water Treatment Plant (WTP) and Leixlip Water Treatment Plant mix at Jordanstown Reservoir. Raw water at the Bog of the Ring WTP is obtained primarily from one borehole (BH3) in the vicinity of the WTP. Five boreholes in total were drilled at the Bog of the Ring wellfield in 2002. Treatment consists of pressure filtration, chlorination and fluoridation.

The audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome drinking water at the Bog of the Ring Water Treatment Plant WTP.

## > Supply Zones Areas Inspected

All treatment processes were inspected during the audit and water quality trends at the time of the audit and for the previous 48 hours were viewed.



## 1. Disinfection

		Answer
1.1	Is the disinfection system verified using monitors and alarms?	No
<b>Comment</b>		
<p>1. A chlorine residual monitor has been installed at the inlet to Jordanstown Reservoir to verify chlorine contact time, as per Recommendation 1 of the previous EPA audit report dated 20/07/2023. The monitor is not yet connected to SCADA and is still in the process proving phase.</p> <p>2. As process proving was ongoing on the chlorine residual monitor no alarm and inhibit set-points had been put in place to ensure contact time is achieved and verified at all times. The contact time calculation outlines a minimum free chlorine concentration requirement of 0.4mg/l at the validation point.</p> <p>3. There is a chlorine residual monitor at the water treatment plant to verify that chlorine has been dosed and this monitor has an alarm and inhibit installed.</p>		

## Recommendations

<b>Subject</b>	Bog of the Ring Audit Recommendations 2024	<b>Due Date</b>	17/10/2024
<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 recommendation without delay.</b></p> <ol style="list-style-type: none"><li>1. Complete the process proving of the chlorine contact time verification monitor at the inlet of Jordanstown Reservoir including; connect the chlorine residual monitor to SCADA and ii) put in place appropriate alarms and inhibits to verify the required chlorine residual is achieved as per the site specific contact time calculation.</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 17/11/2024 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>		