

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	DLR_ZONE6
Organisation	Uisce Éireann
Scheme Code	1000PUB1006
County	Dublin
Site Visit Reference No.	SV29652

Report Detail	
Issue Date	14/03/2024
Prepared By	Michelle Roche

Site Visit Detail			
Date Of Inspection	21/02/2024	Announced	Yes
Time In	11:05	Time Out	12:00
EPA Inspector(s)	Michelle Roche		
Additional Visitors			
Company Personnel	Uisce Éireann: Jessica Evans, Conor Nolan Dun Laoghaire Rathdown County Council (working in partnership with Uisce Éireann): David Alyward		

> Summary of Key Findings

1. Uisce Éireann confirmed that no infrastructural upgrade works are planned at present at Rathmichael Reservoir and the EPA are satisfied that the existing infrastructure is sufficient to ensure adequate chlorine residuals can be maintained at the extremities of the distribution network.
2. Alarms generated at Rathmichael Reservoir currently dial-out to a number of Dun Laoghaire Rathdown operational staff at the same time, rather than on a cascade system.
3. A site specific Uisce Éireann Incident Communication Response Guidance Form was not displayed at Rathmichael Reservoir.

> Introduction

Rathmichael Reservoir receives treated water from Vartry Drinking Water Treatment Plant in County Wicklow. The treated water receives a booster chlorination dose (disinfection) at the outlet of Rathmichael Reservoir before water is gravity fed to the surrounding areas in DLR Zone 6.

The purpose of the audit was to progress the closure of the EPA drinking water compliance plan, DW20200240 Rathmichael Reservoir - Coliforms by determining if any infrastructural upgrade works are planned or required at Rathmichael Reservoir to ensure adequate chlorine residuals can be maintained at the extremities of the distribution network.

> Supply Zones Areas Inspected

The audit consisted of interviews with Uisce Éireann and Dun Laoghaire Rathdown County Council staff and an inspection of the chlorine dosing room.



1. Disinfection

		Answer
1.1	Is the chlorine dosed appropriately?	Yes
Comment		
<p>1. Treated water from Vartry Drinking Water Treatment Plant (WTP) receives a booster chlorination dose at Rathmichael Reservoir to ensure an adequate chlorine residual can be maintained to the end of the distribution network.</p> <p>2. Prior to the completion of the upgrade programme at Vartry WTP, Uisce Éireann proposed to move the chlorine dosing point from the outlet of Rathmichael Reservoir to the inlet of the reservoir.</p> <p>3. Uisce Éireann stated at the audit that the proposal to change the location of the dosing point is no longer necessary as the water being delivered to Rathmichael Reservoir from Vartry WTP now has a higher and more consistent chlorine residual.</p> <p>4. A continuous online chlorine residual monitor at the inlet of Rathmichael Reservoir records chlorine residuals coming from Vartry WTP. Incoming chlorine residuals are typically around 0.5mg/l.</p>		



2. Management and Control

2.1

	Answer
Is a suitable cascade system in place for alarm dial outs?	No
Comment	
<p>1. Alarms currently dial out to all Dun Laoghaire Rathdown operational staff at the same time. There is no formal system in place to communicate that the alarm is being responded to by an individual operator.</p> <p>2. There was no Uisce Éireann Incident Communications Response Guidance Form displayed on site and no documented procedure for escalating incidents to Uisce Éireann.</p>	

Recommendations

Subject	Rathmichael Reservoir Audit Recommendations	Due Date	14/04/2024
Action Text	<p>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendations without delay.</p> <ol style="list-style-type: none">1. Put in place an appropriate cascade system for responding to alarms generated at the reservoir which allows for verification that an alarm has been responded to.2. Ensure that (i) the Uisce Éireann Incident Communication Response Guidance Form is displayed at Rathmichael Reservoir with site specific information including contacts for escalation of incidents to Uisce Éireann and (ii) training is provided to all relevant staff on the procedure. <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>Uisce Éireann should submit a report to the EPA on or before 14/04/2024 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 and in particular at other booster chlorination stations on the Dun Laoghaire Rathdown distribution network .</p>		