

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	Hollywood Donard Public Supply
Organisation	Uisce Éireann
Scheme Code	3400PUB1022
County	Wicklow
Site Visit Reference No.	SV32065

Report Detail	
Issue Date	11/11/2025
Prepared By	Derval Devaney

Site Visit Detail			
Date Of Inspection	20/10/2025	Announced	Yes
Time In	10:50	Time Out	11:40
EPA Inspector(s)	Derval Devaney		
Additional Visitors			
Company Personnel	Uisce Éireann (UÉ): Linda Doran. EPS Group: David Logue.		

> Summary of Key Findings

1. A chlorine monitor was not in place at the outlet of the reservoir to verify adequate disinfection was being achieved.
2. There is no alarm or automatic plant shutdown mechanism in the event that adequate disinfection is not achieved in the reservoir.
3. Turbidity results were not available during or after the audit to determine if a continuous turbidity monitor is required at the plant.

> Introduction

Hollywood Donard Public Water Supply (PWS) produces approximately 25 m³/hour serving a population of 963. The raw water is sourced from two boreholes; the Slievecorragh Old Reservoir borehole on-site and the Windeye borehole located off-site above the village of Hollywood. Treatment provided includes disinfection using sodium hypochlorite and aeration for radon removal and is managed by a contractor under a design, build and operate (DBO) contract.

The audit was undertaken to assess Uisce Éireann's performance in producing clean and wholesome water with a focus on the alarms and inhibits in place at the water treatment plant (WTP) and the procedures in place to ensure appropriate oversight of treatment processes.

> Supply Zones Areas Inspected

The treatment processes at the water treatment plant were inspected in addition to the chlorine contact tank and reservoir located at the water treatment plant. The borehole off-site was not inspected.



1. Alarms, Inhibits & Oversight Audits 2025

1.1

Is there a chlorine residual monitor located after contact time for verification of primary disinfection?

Answer

No

Comment

1. The calculation sheet indicates sufficient chlorine contact time at the water treatment plant—considering the contact tank and on-site reservoir.
2. However there is no continuous chlorine residual monitor at the outlet of the reservoir to confirm the effectiveness of the disinfection process.
3. A chlorine residual sample is taken once per week at the outlet of the reservoir.

1.2

Is there a documented site specific incident response and incident escalation process?

Answer

Yes

Comment

1. UÉ's Water Incident Communication Response Guidance Form is displayed at the plant; however, it needs to be updated to reflect the minimum chlorine concentration required for the site, as outlined in the Ct calculation.
2. The Ct calculation specifies that a minimum free chlorine concentration of 0.3 mg/l is required at the Ct validation point (i.e., the outlet of the on-site reservoir). In contrast, the current Guidance Form states a minimum of 0.25 mg/l, which does not meet the Ct calculation specification.

1.3

Is suitable continuous monitoring in place to verify treatment performance?

Answer

Yes

Comment

1. A continuous chlorine residual monitor is in place at the water treatment plant to verify the chlorine concentrations within the contact tank. It is the only continuous monitor at the plant and is configured to alarm at 0.45 mg/l (high) and 0.3 mg/l (low), with a time delay of 300 seconds.
2. Monthly final water samples are being taken and analysed by an accredited lab. The results were not available to review during or after the audit.
3. It was not possible to determine if a continuous turbidity monitor is also needed to verify the adequacy of the disinfection process, as turbidity results were unavailable for review. Such results would assist in determining if there is a surface water influence on the source, and therefore, if a continuous turbidity monitor is required at the water treatment plant (WTP).

1.4

Are suitable alarm settings in place to alert operators to deteriorating water quality or the failure of a critical treatment process?

Answer

No

Comment

1. There is no chlorine monitor with an alarm and automatic plant shutdown located on the outlet of the reservoir on-site (when contact time has elapsed) to alert operators and prevent inadequately disinfected water entering the network.

1.5

Are suitable plant shutdowns/inhibits in place to prevent inadequately treated water entering the distribution network?

Answer

No

Comment

1. There are no plant shutdown/inhibits in place at this plant.
2. See Q. 1.4 relating to the lack of a plant shutdown mechanism post disinfection contact time.

Recommendations

Subject	Hollywood Donard 2025 Audit Recommendations	Due Date	11/12/2025
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. Install a continuous chlorine monitor post contact time with appropriate alarms and plant inhibits to validate adequate disinfection has been achieved and to protect water quality targets.2. Carry out and document daily chlorine monitoring at the reservoir's outlet until continuous chlorine monitoring is in place at this location.3. Update the UÉ Incident Communications Response Guidance Form at the plant to include the site-specific target value for chlorine.4. Clarify whether the groundwater source is influenced by surface water and submit monitoring results to verify the response. If the groundwater source is influenced by surface water, UÉ should install a continuous turbidity monitor, in accordance with EPA Advice Note No. 5, to verify the performance of the treatment barrier. <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 the above due date 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>		