

# Site Visit Report



Under the *European Union (Drinking Water) Regulations 2014* as amended, 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>	Newtowncashel
<b>Organisation</b>	Uisce Éireann
<b>Scheme Code</b>	2000PUB1013
<b>County</b>	Longford
<b>Site Visit Reference No.</b>	SV27599

## Report Detail

<b>Issue Date</b>	14/03/2023
<b>Prepared By</b>	Michelle Roche

## Site Visit Detail

<b>Date Of Inspection</b>	01/03/2023	<b>Announced</b>	Yes
<b>Time In</b>	11:05	<b>Time Out</b>	12:20
<b>EPA Inspector(s)</b>	Michelle Roche		
<b>Additional Visitors</b>			
<b>Company Personnel</b>	Uisce Éireann: Joseph Moran, Pat Collins, Karina O'Grady, John Keogh  Longford County Council, working in partnership with Uisce Éireann: Sylvester Healy, David Gibbons, Liam Donlon		

## > Summary of Key Findings

1. The protozoal log treatment requirement of the spring source at the water treatment plant has not been assessed. The audit found the UV treatment was operating adequately on the day of the audit and providing a 3 log removal for parasites such as *Cryptosporidium*.
2. Longford County Council operational staff had received the Uisce Éireann incident response training, however no site specific incident response procedure was displayed at the water treatment plant.
3. A technical issue with the filter backwash programme meant that filter backwashes had not been occurring for two weeks prior to the audit. An engineer was scheduled to fix the issue the same week as the audit was carried out.

## > Introduction

Newtowncashel Public Water Supply serves a population of 364 (EDEN figure) from two spring sources. The main Ballagha Spring contributes approximately 85% of the supply while the spring at the water treatment plant provides the remaining 15%. Both sources receive filtration across five pressure filters and UV disinfection from duty standby UV units. Ballagha Spring also goes through three clarifier units before filtration. Secondary disinfection is provided by sodium hypochlorite.

The main focus of the audit was to assess the operation and management of protozoal barriers at the plant.

## > Supply Zones Areas Inspected

The audit inspected all treatment processes at the water treatment plant. Continuous online turbidity and UV monitoring trends were submitted and assessed prior to the site visit. The sources were not inspected during the audit.



## 1. Protozoal Barriers Audits 2023

1.1

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

Answer

No

**Comment**

1. Longford County Council operational staff have received the Uisce Éireann incident response training.
2. No site specific Incident Response Procedure or contact details were displayed onsite on the day of the audit, however Longford County Council are in the process of updating all their site specific contacts and making the Incident Response Procedure available on all sites across the county.

1.2

Has UÉ identified the protozoal compliance log treatment requirement for the water treatment plant?

Answer

No

**Comment**

1. The protozoal log treatment requirement for the Ballagha Spring has been calculated as 1.44. The protozoal log treatment requirement for the spring at the water treatment plant has not been calculated.
2. A default log requirement of 3 is being applied to the supply in lieu of a site and sanitary survey of the sources.

1.3

Did UÉ confirm whether *Cryptosporidium* monitoring under the Rationale for Determining the Frequency of *Cryptosporidium* in Public Water Supplies is being carried out?

Answer

No

**Comment**

1. UV treatment is in place on the supply to inactivate *Cryptosporidium*, therefore routine *Cryptosporidium* monitoring is not required on the final water.
2. The UV treatment was found to be operating adequately on the day of the audit and providing a 3 log removal for parasites such as *Cryptosporidium*.

1.4

Are the filters designed and managed in accordance with EPA guidance?

Answer

No

**Comment**

1. The filter backwash facility had been disabled at the water treatment plant for two weeks prior to the audit. There was an issue with the backwash programme whereby the backwash was getting stuck in the rinse cycle and preventing the filter from coming back into service.
2. A service technician had visited the site but was not able to correct the problem that day as there was not enough water storage in the reservoir. The technician was due to return to site the same week the audit was carried out.
3. Continuous online filter water turbidity trends from 13/02/23 to 20/02/23 were assessed prior to the site visit. The trends showed good filter performance and no negative impact on final water from the backwash facility being disabled. Final water turbidity on the day of the audit was 0.072 NTU.

## Recommendations

Subject	Newtowncashel Audit Recommendations	Due Date	14/04/2023
Action Text	<p><b>Uisce Éireann is responsible for ensuring a clean and wholesome supply of drinking water and should implement the following recommendation(s) without delay.</b></p> <ol style="list-style-type: none"><li>1. Confirm the log treatment requirement for the supply following assessment of the spring source at the water treatment plant and completion of the site sanitary survey. Submit a programme of works to address any log deficit at the supply.</li><li>2. Update and display the Uisce Éireann Incident Communications Response Guidance Form with site specific information including contacts for escalation and relevant trigger levels protecting critical processes at the water treatment plant.</li><li>3. Confirm that the filter backwash programme has been reinstated and filters are operating in accordance with the <i>EPA Water Treatment Manual: Filtration</i></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 14/04/23 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>		