

Site Visit Report

Under the European Union (Drinking Water) Regulations 2014 as amended, the Environmental Protection Agency is the supervisory authority in relation to Irish Water and its role in the provision of public water supplies. This Audit was carried out to assess the performance of Irish Water in providing clean and wholesome water to the visited public supply.

The audit process is a sample on a given date of the facility's operation. Where a finding against a particular issue has been reported this should not be construed to mean that this issue is fully addressed.

Water Supply Zone	
Name of Installation	Bundoran Urban
Organisation	Uisce Éireann
Scheme Code	0600PUB1108
County	Donegal
Site Visit Reference No.	SV26209

Report Detail	
Issue Date	10/01/2023
Prepared By	Ruth Barrington

Site Visit Detail			
Date Of Inspection	07/12/2022	Announced	Yes
Time In	14:00	Time Out	14:45
EPA Inspector(s)	Patricia Mallen		
Additional Visitors			
Company Personnel	Irish Water: Fionnuala Bonner Donegal County Council (operating under service level agreement to Irish Water): Paul Lyons, Chris McSherry, Gerry Gallagher, Eddie McGrane.		

> Summary of Key Findings

- (1) Disinfection consists of chlorination. The audit found that the disinfection system was operating satisfactorily during the inspection.
- (2) The frequency of residual chlorine monitoring in the network should be increased.

> Introduction

The Bundoran Urban (Lough Melvin) Water Treatment Plant (WTP) produces approximately 2185 m³/d of water serving a population of 3,506 (EDEN figures). The audit focused on the disinfection system at the Bundoran Urban WTP. The site has been assessed under Irish Water's Disinfection Programme and reported to the EPA as having been fully commissioned and available on telemetry on 04/10/2018.

> Supply Zones Areas Inspected

This audit assessed the chlorination disinfection system at the Bundoran Urban (Lough Melvin) WTP.



1. Disinfection Programme Audits 2022

		Answer
1.1	Is chlorination used for primary disinfection?	Yes
		Answer
1.2	Did Irish Water confirm the type of chlorine disinfectant in use?	Yes
		Answer
1.3	Are there duty and standby chlorine dosing pumps in place?	Yes
		Answer
1.4	Is there automatic switchover in the event of failure of one of the chlorine dosing pumps?	Yes
		Answer
1.5	Is the chlorine dosing rate flow proportional?	Yes
		Answer
1.6	Can IW / LA confirm the target residual chlorine level for the final water leaving the plant?	Yes
		Answer
1.7	Is there a continuous residual chlorine monitor on the final water?	Yes
		Answer
1.8	Can data trends from the online residual monitor be viewed on site?	Yes
		Answer
1.9	Are there low and high chlorine alarm settings?	Yes
		Answer
1.10	Is there an alarm response procedure available on site for responding to chlorine alarms?	Yes

		Answer
1.11	Is there automatic shutdown of the supply in the event of the chlorine level dropping below the low chlorine alarm setting or rising above the high chlorine alarm setting?	Yes
		Answer
1.12	Are service due / monitoring instrument calibration dates for the chlorine monitors within date?	Yes
		Answer
1.13	Is the site specific contact time being achieved?	Yes
		Answer
1.14	Is the minimum effective contact time of 15 mg. min/l being achieved?	Yes
		Answer
1.15	Is the residual chlorine level ≥ 0.1 mg/l at the extremity of the distribution network?	Yes
		Answer
1.16	Have all relevant staff received training on the disinfection upgrades?	Yes

Recommendations

Subject	Bundoran Urban (Lough Melvin) WTP	Due Date	10/02/2023
Action Text	<p>Recommendation</p> <p>Irish Water is responsible for ensuring a safe and secure supply of drinking water. To address these issues, Irish Water should implement the following recommendation without delay.</p> <ol style="list-style-type: none">1. Irish Water should ensure monitoring of residual chlorine is undertaken several times a week at different points of the network to include the network extremities. <p>Follow-Up Actions required by Irish Water</p> <p>During the audit, Irish Water representatives were advised of the audit findings and that action must be taken as a priority by Irish Water to address the issues raised.</p> <p>This report has been reviewed and approved by Ruth Barrington, Drinking Water Team Leader.</p> <p>Irish Water should submit a report to the Agency on or before 10/02/2023 detailing how it has dealt with the issues of concern identified during this audit.</p> <p>The report should include details on the action taken and planned to address the various recommendations, including time frame for commencement and completion of any planned work.</p> <p>The EPA also advises that the findings and recommendations from this audit report should, where relevant, be addressed at all other treatment plants operated and managed by Irish Water.</p>		