

## Local Authority Monitoring Programme Audit Report

Under the *European Union (Drinking Water) Regulations 2023*, the Environmental Protection Agency (EPA) is the supervisory authority in relation to Local Authority's monitoring functions of regulated private drinking water supplies. This audit was carried out to assess the performance of Wicklow County Council in carrying out its 2022 compliance monitoring programme of regulated private supplies in its functional area.

The audit process is a sample of the performance of a Local Authority in carrying out its monitoring functions of regulated private drinking water supplies.

Audit Detail	
<b>Date of Audit</b>	07/09/2023
<b>Local Authority</b>	Wicklow County Council
<b>Representing the Local Authority</b>	Breege Kilkenny, Michael McNamara, Mark Devereux, Tom Griffin, Jonathan Sexton
<b>EPA Inspectors</b>	Lisa Noone, Derval Devaney.

Report Detail	
<b>Audit Specification</b>	2022 Regulated Private Drinking Water Supply Compliance Monitoring Programme and Regulated Private Drinking Water Supply Register
<b>Issue Date</b>	04/10/2023
<b>Prepared By</b>	Lisa Noone, Inspector, EPA

## > Report Main Findings and Recommendations

1. Wicklow County Council was found to be performing well in the overall management of the Compliance Monitoring Programme and the protection of drinking water and human health via enforcement of Boil Water Notices and Do Not Consume Notices.
2. The Private Supply Register for 2022 did not contain up-to-date information regarding the treatment of all relevant Private Water Supplies required to be monitored for compliance.
3. Wicklow County Council did not monitor Private Group Water Supplies for all Group B parameters on the basis of their own Risk Assessment. However, this Risk Assessment was not carried out in accordance with *Part C of the European Union (Drinking Water) (Amendment) Regulations 2017 (S.I. No. 464 of 2017)*.
4. Wicklow County Council did not pre-determine sampling locations to ensure samples are evenly spread and, where appropriate, representative of the water supply zone.

## > Introduction

During 2022, each Local Authority was required under Regulation 7 of the *European Union (Drinking Water) Regulations 2014 (S.I. 122 of 2014)*, as amended to establish a Compliance Monitoring Programme and monitor all Private Water Supplies in its functional area, other than exempted supplies, to determine whether they comply with the standards and other requirements of the Regulations.

The above Regulations have been replaced and so this audit was carried out in accordance with *Regulation 13(1) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*, to assess the performance by Wicklow County Council of its statutory functions in relation to the monitoring of regulated Private Water Supplies to ensure the provision of clean and wholesome drinking water.

Prior to the audit, the EPA assessed the 2022 monitoring returns submitted to the EPA by Wicklow County Council to identify any areas of discrepancy between the required number of samples to be taken and analysed and that reported to EPA. Using a questionnaire as a guide, Wicklow County Council staff were interviewed to ascertain the principles and methodology for establishing its Private Supply Register and Compliance Monitoring Programme. The HSE undertakes the compliance analysis of the regulated Private Water Supplies on behalf of Wicklow County Council.



## Register of Private Drinking Water Supplies

1.1

	Answer
Does the Private Supply Register contain all that is required by Regulation 8(3) of the European Union (Drinking Water) Regulations 2014 (S.I. 122 of 2014)?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. Wicklow County Council's Private Water Supply Register contains 116 regulated Private Water Supplies; 8 Private Group Water Schemes and 108 Small Private Supplies (i.e., supplies serving a commercial or public activity such as hotels, schools and restaurants).</li> <li>2. The Register is updated on a continual basis to account for new and closed supplies.</li> <li>3. The treatment in place for a small number of supplies is not known by Wicklow County Council and therefore not recorded in the register for those Private Group Water Schemes and Small Private Supplies.</li> </ol>	



## 2022 Compliance Monitoring Programme

2.1

	Answer
Have sampling locations been pre-determined for each water supply zone?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. The HSE undertakes the sampling of Private Group Water Schemes and Small Private Supplies on behalf of Wicklow County Council.</li> <li>2. A Compliance Monitoring Programme outlining monitoring frequencies is completed by Wicklow County Council for the HSE, and sampling dates and locations are selected by the HSE based on their experience of the water supply.</li> <li>3. The timelines for sampling of all Private Water Supplies and the locations for sampling within the network supply zone for Private Group Water Schemes were not pre-determined by Wicklow County Council and entered into the Compliance Monitoring Programme at the start of the year.</li> <li>4. Wicklow County Council do not have any oversight of the sampling dates and locations until after sampling has been completed by the HSE.</li> </ol>	

2.2

	Answer
Are sampling locations evenly distributed for each water supply zone?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. The 2022 monitoring returns provided to the EPA showed that for a number of Group Water Schemes sampling was regularly carried out in the same location throughout 2022 and in previous years, e.g., Blainroe Lodge Nursing Home was used as the sampling location for two Group A sampling campaigns carried out in April and September 2022 and in the previous year in 2021.</li> <li>2. GIS is currently utilised by Wicklow County Council for the mapping of all Private Water Supplies; however, network supply zones are not currently mapped for Private Group Water Schemes.</li> <li>3. Whilst Eircodes are recorded for sampling locations once sampling is complete, these are not mapped under the current GIS system to ensure even distribution within the water supply zone.</li> </ol>	

2.3

	Answer
Is the Risk Assessment carried out by Wicklow County Council as a screening process for derogation of Group B monitoring in Private Water Supplies in accordance with the criteria outlined in <i>Part C of the European Union (Drinking Water) (Amendment) Regulations 2017 (S.I. No. 464 of 2017)</i> ?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. A Risk Assessment is carried out by Wicklow County Council for Private Group Water Schemes and Small Private Supplies as a screening process for derogation of some Group B parameters required to be monitored.</li> <li>2. Wicklow County Council stated that the majority of Group B parameters are not monitored for most Private Water Supplies on the basis of their own Risk Assessment, however, as far as could be determined this Risk Assessment is not carried out in accordance with the requirements set out in Part C of the 2017 Regulations.</li> <li>3. It is permissible under the Regulations to amend the parameters and sampling frequencies required, provided that the Risk Assessment is performed in accordance with <i>Part C of the European Union (Drinking Water) (Amendment) Regulations 2017 (S.I. No. 464 of 2017)</i>.</li> </ol>	

	<b>Answer</b>
2.4 Was 2022 data for Private Water Supplies reported accurately to the EPA (on EDEN)?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. Information provided by Wicklow County Council to the EPA via the EDEN portal conflicts with information recorded in the Private Supply Register:             <ol style="list-style-type: none"> <li>i. The population and volume of water supplied differs between the two datasets e.g., EDEN data suggests that Manor Kilbride Montessori has a population of 10 and a volume of 2m<sup>3</sup> supplied per day, however Wicklow County Council's Private Supply Register stated a population of 30 and a daily volume of 5m<sup>3</sup>/day. Similar inconsistencies were recorded for a number of Private Water Supplies.</li> <li>ii. Treatment listed in the EDEN data is different to what is recorded in the register e.g., EDEN data suggests Powerscourt Hotel, Resort and Spa treatment includes UV, whereas information provided by Wicklow County Council states treatment includes chlorine disinfection only. In addition, there was no treatment type provided in EDEN for Wise Owl Montessori, whereas information provided by Wicklow County Council states treatment includes nitrate removal, UV and chlorine disinfection.</li> </ol> </li> <li>2. Some parameters' monitoring categories (Group A or Group B) were incorrectly categorised in the 2022 compliance monitoring returns submitted to the EPA. For example, iron, manganese, lead, etc. were categorised as Group A parameters when they should be categorised as Group B parameters.</li> </ol>	

	<b>Answer</b>
2.5 Was the required compliance monitoring for regulated Private Water Supplies undertaken during 2022?	No
<b>Observation</b>	
<ol style="list-style-type: none"> <li>1. Taste was not monitored as part of Group A monitoring for any Private Water Supply due to hygiene/safety concerns.</li> <li>2. The majority of Group B parameters were not monitored for Private Group Water Schemes and Small Private supplies on the basis of individual Risk Assessments carried out by Wicklow County Council as outlined in Section 2.3.</li> <li>3. A Risk Assessment was carried out for Powerscourt Hotel, Resort and Spa and it was determined by Wicklow County Council that pesticides and nitrites were to be monitored on the basis of the presence of a golf club on the grounds, however results for Total Pesticides were not provided to the EPA via EDEN.</li> <li>4. No monitoring was carried out for Johnstown/Hollywood GWS, a Private Group Water Scheme, in 2022. Wicklow County Council stated that they have not been able to make contact with members of the GWS and that the HSE have not been able to gain access to properties within the network for the purpose compliance monitoring. A Boil Water Notice is currently in place for Johnstown/Hollywood GWS due to a previous detection of coliforms in the drinking water.</li> <li>5. Nitrite and turbidity (for supplies with a surface water influence) were not being monitored at the water treatment plants of Group Water Schemes.</li> </ol>	



### 2022 Monitoring Programme Audit Recommendations

**Wicklow County Council is responsible for undertaking compliance monitoring of regulated Private Drinking Water Supplies and should implement the following recommendations without delay.**

1. Ensure that all regulated Private Water Supplies are monitored for compliance (a) at their required frequencies in accordance with the requirements of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)* and (b) for turbidity (where there is a surface water source) and nitrite at the water treatment plant (WTP). Regarding nitrite, where there is no chloramination treatment, sampling at the WTP is at the Group B sampling frequency.
2. Ensure that any Risk Assessment used as a basis for derogation/amendment in the compliance monitoring frequency or exclusion of a parameter for any Private Water Supply meets the requirements of Regulation 11 and Part 3 of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
3. Record all relevant information pertaining to each private water supply for the purposes of the register and the compliance monitoring programme as required by *14(5) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*. Ensure that the register is accurate, up-to-date, and appropriately maintained in accordance with the requirements of the Regulations.
4. Include predetermined sampling locations in the Compliance Monitoring Programme and ensure they are representative of the water supply and equally distributed throughout the supply and the sampling year in accordance with *Regulation 13(6) and 13(8) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
5. Review the temporal and spatial distribution of sampling for compliance monitoring for water supply zones such as Group Water Schemes. A formal and structured method of assessment should be developed and implemented by Wicklow County Council to ensure that sampling represents the entire water supply zone as accurately as possible. The spread of sample dates, times and locations within a monitoring programme should be as wide as possible to ensure that compliance samples are representative of water quality consumed throughout the year as required by *Regulation 13(8) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
6. Ensure data on regulated Private Water Supplies entered into the EPA's database, EDEN, is accurate and updated annually.