

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 Leitrim County Council in carrying out its 2023 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	
Date of Audit	12/07/2024
Local Authority	Leitrim County Council
Representing the Local Authority	Maeve Coultry, Sinéad Frazer; Martina Casey.
EPA Inspectors	Derval Devaney, Lisa Noone.

Report Detail	
Audit Specification	2023 Regulated Private Drinking Water Supply Compliance Monitoring Programme and Regulated Private Drinking Water Supply Register
Issue Date	06/12/2024
Prepared By	Derval Devaney, Inspector, EPA

> Report Main Findings and Recommendations

The audit of Leitrim County Council's 2023 Compliance Monitoring Programme found several shortcomings in relation to its assessment of the water quality of Private Water Supplies.

1. *E. coli* was found in a water supply sample taken on 14/02/2023. Leitrim County Council had shortcomings in its escalation and management of the issue. Additionally, the HSE was not consulted in accordance with the requirements of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
2. The Private Supply Register is not being reviewed regularly. It did not contain up-to-date and accurate data regarding water supply treatment, volume/population, and source, and did not include details of scheme code for any supply.
3. There was a lack of pre-determined sampling locations selected by Leitrim County Council, to ensure samples are spatially and temporally distributed and representative of the water supply zone throughout the year.
4. Leitrim County Council did not monitor all private water supplies for Group B (chemical) parameters, as required. Sampling for Group B parameters was not undertaken for 78% of private water supplies, nor was compliance monitoring for nitrite undertaken at water treatment plants.

> Introduction

Each Local Authority is required under Regulation 13 of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)* 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.

This audit was carried out in accordance with Regulation 30(3) of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*, to assess the performance by Leitrim 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 2023 compliance monitoring returns, submitted to the EPA by Leitrim 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, Leitrim County Council staff were interviewed to ascertain the principles and methodology for establishing its Private Supply Register and Compliance Monitoring Programme.



Register of Private Drinking Water Supplies

1.1

	Answer
Does the Private Supply Register contain all that is required by Regulation 14(5) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)?	No
Observation	
<ol style="list-style-type: none"> 1. Leitrim County Council's Private Water Supply Register contains 36 regulated private water supplies, made up of 28 public group water schemes (PUGs), 5 private group water schemes (PRGs), and 3 small private supplies (SPS; supplies serving a commercial or public activity such as hotels, crèches, schools, and restaurants, etc.). 2. The Register did not contain: <ol style="list-style-type: none"> a) the scheme code for each regulated supply; b) the source of each PUG; c) the source, treatment type and volume/population for each SPS; d) the type of treatment for one PUG and four of the five PRGs. 	

1.2

	Answer
Is the Private Supply Register maintained and kept up to date as required by Regulation 14(7) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)?	No
Observation	
<ol style="list-style-type: none"> 1. The Register is not being reviewed regularly and kept up to date. 2. The population/volume for each supply has not been reviewed to ensure accuracy. The frequency of monitoring is based on the supply's population/volume and as such it is important that this information is accurate. 3. The treatment type for each supply has not been reviewed to ensure accuracy. Chlorine gas was listed as a treatment type for 26 supplies on the Register and Leitrim County Council stated this treatment was no longer in use. 4. The water source for each supply was not documented or reviewed to ensure accuracy. Drumeela National School's source is listed as a spring in the Register and Leitrim County Council thought it may be served by a borehole. 5. Leitrim County Council could not demonstrate evidence of efforts made to identify SPSs required to be regulated and included in the Register. 	



2.1

	Answer
Have sampling locations been pre-determined for each water supply zone as required by Regulation 13(6) of the <i>European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)</i> ?	No
Observation	
<ol style="list-style-type: none"> Roscommon County Council undertakes the sampling of private supplies on behalf of Leitrim County Council for parameters for which it has accreditation (mainly Group A parameters). Other parameters, including Group B parameters, are contracted out to an accredited laboratory for accredited analysis, which is a satisfactory arrangement. The locations for sampling during 2023 were not randomly selected and pre-determined by Leitrim County Council at the start of the year and were not entered into the 2023 Compliance Monitoring Programme. Sampling is carried by Leitrim County Council, and sampling locations are selected based on the sampler's knowledge of the water supply zone. 	

2.2

	Answer
Are sampling locations evenly distributed for each water supply zone and do they represent the quality of water throughout the year as required by Regulation 13(8) of the <i>European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)</i> ?	No
Observation	
<ol style="list-style-type: none"> The sampling locations within a water supply zone were not evenly distributed. The monitoring returns provided to the EPA illustrate sampling at Group Water Schemes was regularly carried out at the same location throughout 2023. For example, one business premises was used as the sampling location for all five compliance samples taken on the "Glenboy/Glenfarne GPU" PUG during 2023. The pre-determined compliance plan did not contain dates that sampling is to take place, to ensure sampling events are spread throughout the year. Grid references/GPS locations of sampling locations are recorded, once sampling is complete, and sample locations are mapped electronically. However, the water supply zones are not mapped to ensure an even distribution of samples within the water supply zone. Leitrim County Council confirmed that plans are currently in place to electronically map water supply zones and sampling locations for each Group Water Scheme to ensure an even distribution of samples. The sampler is not provided with a map of the water supply zone to inform it if a sample is representative of the water supply. A water sample was taken by Leitrim County Council on 14/02/2024. Leitrim County Council thought the consumer was on a Group Water Scheme when in fact it was being served from a public water supply. Details relating to this sample are outlined further in Point 3.1 below. 	

2.3

	Answer
Was the required compliance monitoring for regulated private supplies undertaken during 2023 as required by Regulation 13(5) of the <i>European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)</i> ??	No
Observation	
<ol style="list-style-type: none"> 1. Leitrim County Council's 2023 Compliance Monitoring Plan did not include the water supply's treatment type to inform if parameters are required to be monitored under the Group A or Group B monitoring frequency. 2. Leitrim County Council's 2023 Compliance Monitoring Plan did not contain up to date supply volumes to inform the number of samples required to be taken in the year. 3. Leitrim County Council's 2023 Compliance Monitoring Plan did not set out the correct number of Group A and Group B compliance samples to be taken for regulated private water supplies. 4. Leitrim County Council stated that any PUG with a volume of < 100 m³/d and all PRGs were not assigned a Group B sample, despite the requirement that all private water supplies are to have one Group B sample taken, as a minimum. 5. Leitrim County Council had several shortfalls in their 2023 compliance monitoring; <ol style="list-style-type: none"> e) Monitoring of Group B parameters was only carried out in 8 out of the 36 Private Water Supplies in Leitrim County Council's functional area. This resulted in a shortfall of 28 Group B samples in Private Water Supplies as a whole in 2023. f) Required monitoring of Group B parameters was only carried out in 3 of the 28 PUGs. g) Required monitoring of Group B parameters was not carried out in any of the 3 SPSSs. h) Nitrite compliance monitoring was not carried out at water treatment plants of private group water schemes; i) <i>Enterococci</i> was either not monitored at all, or at the required Group A monitoring frequency during 2023. The requirement to monitor for <i>Enterococci</i> as a Group A parameter is a recent requirement under the 2023 Drinking Water Regulations (S.I. 99 of 2023). Leitrim County Council stated this requirement is in place for compliance monitoring being undertaken in 2024. 	

2.4

	Answer
Was sampling of regulated private supplies for compliance purposes undertaken during 2023 at the point of compliance as required by Regulation 7 of the <i>European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)</i> ?	No
Observation	
<ol style="list-style-type: none"> 1. Compliance sampling for numerous private water supplies was undertaken at church taps which are not used for drinking water purposes. 2. For example, Sliabh an Iarainn PRG was sampled for Group A parameters twice during 2023, in March and August, at a tap in a church toilet. 	



Exceedances of Parametric Values

3.1

	Answer
Did the Local Authority consult with the HSE where drinking water constituted a potential danger to human health as required by Regulation 15(1) of the <i>European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)</i> ?	No
Observation	
<p>1. Based on data submitted by Leitrim County Council to the EPA via EDEN there were microbiological failures (2 No. <i>E. coli</i> and 4 No. Coliform Bacteria) on 14/02/2023 in the Castleroggy PUG Supply. During the audit Leitrim County Council stated it sampled in response to an illness complaint. Post the audit Leitrim County Council clarified the sample was not in response to a complaint but was a planned compliance sample. The EPA identified several failings with Leitrim County Council's communication and follow up of these failed test results:</p> <ol style="list-style-type: none">i. Leitrim County Council did not consult with the Health Service Executive (HSE) upon detection of the failures to determine risk to human health;ii. Leitrim County Council took emergency resamples on the 16/02/2023, but did not resample at the failed property until 06/03/2023;iii. Leitrim County Council misassigned the property as being served by Castleroggy PUG, when it was served by a public water supply: South Leitrim Regional Water Supply Scheme (SLRWSS);iv. Leitrim County Council did not inform Uisce Éireann (UÉ), the Public Water Supplier, of the failures to ensure it fulfilled its obligations under Regulation 13(5)(c), and consequently the EPA was not notified;v. Leitrim County Council incorrectly submitted to the EPA the failed results for 2023 against the Castleroggy PUG, rather than the South Leitrim PWS. <p>Leitrim County Council's failure to communicate this incident to the HSE, its delay in taking a resample, and lack of escalation and reporting to UÉ when it determined the source was a public water supply presented a potential health risk to the consumer(s) at the property.</p>	



4.1

	Answer
Was 2023 data for Private Water Supplies reported accurately to the EPA (on EDEN) as required by Section 58 of <i>The EPA Act 1992 to 2007</i> ?	No
Observation	
<p>1. Information provided by Leitrim County Council to the EPA via the EDEN portal does not reflect what is recorded in the Private Supply Register:</p> <ul style="list-style-type: none">a) The Register contained three SPSs which were not listed on EDEN and 2023 monitoring results for these supplies were not reported to the EPA;b) The Register classified one regulated supply as a PRG (Drumeela National School), but it was reported as a SPS to the EPA on EDEN. Leitrim County Council was unsure of the correct classification for this supply;c) The volume of water supplied differs between the two datasets e.g., EDEN data suggests that Glenboy/Glenfarne GPU supply volume is 92 m³/day, however Leitrim County Council's Register states a daily volume of 454 m³/day. Similar inconsistencies were recorded for many Private Water Supplies;d) Population is recorded for all Private Water Supplies in data submitted to EDEN, however Leitrim County Council stated that the populations on EDEN were not updated since the scheme commenced and was first entered into EDEN;e) There was no treatment listed in EDEN for five private water supplies. <p>2. Some parameters' monitoring categories (Group A or Group B) were incorrectly categorised on the 2023 compliance monitoring returns submitted to the EPA. For example, aluminum was categorised as both a Group A and Group B parameter for the same supply, when it is only required to be categorised as a Group B parameter where it is not used as flocculant. Group A parameters, such as <i>E. coli</i>, were categorised incorrectly on EDEN as a Group B parameter.</p>	



2023 Monitoring Programme Audit Recommendations

Leitrim County Council is responsible for undertaking compliance monitoring of regulated private drinking water supplies and should implement the following recommendations without delay:

1. Consult with the HSE where it is considered that a supply of water intended for human consumption may constitute a potential danger to human health, and with the agreement of the HSE, ensure that the private water supply is prohibited, or the use of such water is restricted in accordance with *Regulation 15(1) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*. In agreement with the HSE, put in place an appropriate procedure for notification of exceedances, by Leitrim County Council to the HSE.
2. 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. Ensure documentation relating the upkeep of the Register is maintained.
3. Include predetermined sampling locations in the Compliance Monitoring Programme in accordance with *Regulation 13(6) of the European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
4. Review the temporal and spatial distribution of sampling for compliance monitoring for Group Water Schemes. A formal and structured method of assessment should be developed and implemented by Leitrim County Council to ensure that sampling represents the entire water supply zone as accurately as possible. The spread of sample days, 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)*.
5. Ensure the water supply zones for all Group Water Schemes are mapped and samplers have access, to ensure sampling locations are in accordance with the pre-determined compliance monitoring plan and represent the water supply being sampled.
6. Ensure that all regulated private supplies are monitored for compliance (a) for the required Group A and B parameters 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 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.
7. Ensure compliance samples are taken at a tap used for human consumption (the “point of compliance”) as required by Regulation 7 of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
8. Ensure data on regulated private water supplies entered into the EPA’s database, EDEN, is accurate, correctly categorised and updated annually. The results of all Group A and Group B compliance samples required to be taken should be uploaded to EDEN to ensure there is no annual shortfall in compliance monitoring.