

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 Roscommon 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	11/07/2024
Local Authority	Roscommon County Council
Representing the Local Authority	Conor Fallon, Marie Finneran, Finbar Quinn, Sabrina Lawless
EPA Inspectors	Lisa Noone, Derval Devaney.

Report Detail	
Audit Specification	2023 Regulated Private Drinking Water Supply Compliance Monitoring Programme and Regulated Private Drinking Water Supply Register
Issue Date	05/09/2024
Prepared By	Lisa Noone, Inspector, EPA

> Report Main Findings and Recommendations

The audit of Roscommon County Council's Compliance Monitoring Programme found a number of shortcomings in relation to the assessment of the quality of Private Water Supplies during 2023.

1. Instances of *E-coli* detection in private Group Water Schemes were not escalated and managed appropriately by Roscommon County Council, nor were the HSE consulted in accordance with the requirements of the *European Union (Drinking Water) Regulations 2023 (S.I. 99 of 2023)*.
2. The Private Supply Register for 2023 did not contain up-to-date and accurate data regarding treatment, volume and source, and did not include public Group Water Schemes required to be monitored for compliance.
3. There was a lack of pre-determined sampling locations by Roscommon County Council to ensure samples are spatially and temporally distributed and, where appropriate, representative of the water supply zone year.
4. Roscommon County Council did not monitor all Private Water Supplies for all Group A or Group B parameters as required. Sampling for Group B parameters was not undertaken for 77% 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 Roscommon 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 monitoring returns submitted to the EPA by Roscommon County Council to identify whether there were 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, Roscommon 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. Roscommon County Council's Private Water Supply Register contains 21 regulated Private Water Supplies, 9 Private Group Water Schemes (PRGs) and 12 Small Private Supplies (SPSs - supplies serving a commercial or public activity such as hotels, schools and restaurants, etc.).2. The Register did not contain the 18 Public Group Water Schemes (PUGs) for which Roscommon County Council is the supervisory authority.3. The Register did not accurately reflect:<ol style="list-style-type: none">a) the source of each Private Water Supply.b) the treatment type and of each Private Water Supply.c) the volume/population for each Private Water Supply.d) the address of the PRG's water treatment plant.	

1.2

	Answer
Is the Private Supply Register maintained and kept up to date as required by Regulation 14(7), and does it 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. The Register is not being reviewed regularly and is not being 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. It could not be determined by Roscommon County Council if some supplies (e.g., Castlestrange PRG) contained within the Register were required to be regulated or exempt in accordance with the Regulations.4. Roscommon County Council could not demonstrate evidence of efforts made to identify SPSs required to be regulated and included in the Register.	



		Answer
2.1	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"> 1. The locations for sampling during 2023 were not randomly selected and pre-determined by Roscommon County Council at the start of the year and were not entered into the 2023 Compliance Monitoring Programme. 2. Roscommon County Council undertakes the sampling of the Private Water Supplies in its functional area 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 analysis which is a satisfactory arrangement. 3. Roscommon County Council do not undertake sampling for Athlone Springs Hotel and Kilronan Castle Estate. Group A monitoring is currently privately outsourced for these supplies which is a satisfactory arrangement. 		

		Answer
2.2	Are sampling locations evenly distributed for each water supply zone 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"> 1. GIS is currently utilised by Roscommon County Council for the mapping of SPSs and PRGs; however, network supply zones are not currently mapped for PUGs. 2. The monitoring returns provided to the EPA illustrate sampling of PRGs and PUGs was regularly carried out at the same location throughout 2023. For example, one private residence was used as the sampling location for two Group A compliance samples taken on the Mid Roscommon Co-Op Ogulla Source PRG during 2023. 3. The pre-determined compliance plan did not contain dates that sampling is to take place, to ensure sampling events are evenly spread throughout the year. 4. Maps of PRGs are provided to samplers, and locations of sampling points are recorded once complete. These sampling locations are then mapped via GIS, however, a review of compliance sampling locations is not carried out annually to ensure sampling is representative of the entire water supply zone. 		

2.3

	Answer
<p>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>???</p>	No
Observation	
<ol style="list-style-type: none"> 1. Roscommon County Council's 2023 Compliance Monitoring Plan did not include the water supply's treatment type to inform if certain parameters are required to be monitored under the Group A or Group B monitoring frequency. 2. Roscommon 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. Roscommon County Council had several shortfalls in its 2023 compliance monitoring; <ol style="list-style-type: none"> a) Group A monitoring was not carried out at the required frequency for 9 out of the 39 Private Water Supplies. b) Required monitoring of Group B parameters was only carried out in 9 of the 39 Private Water Supplies. This resulted in a shortfall of 30 Group B samples in Private Water Supplies as a whole in 2023. c) Required monitoring of Group B parameters was not carried out in any of the 12 SPSSs in Roscommon County Council's functional area. d) Required monitoring of Group B parameters was only carried out in 3 of the 18 PUGs, and 6 of the 9 PRGs. e) Nitrite compliance monitoring was not carried out at water treatment plants of PRGs. f) <i>Enterococci</i> was either not monitored at all, or not monitored 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). Roscommon County Council stated this requirement is in place for compliance monitoring being undertaken in 2024. 	



Exceedances of Parametric Values

3.1

	Answer
Did the Local Authority consult with the Health Service Executive (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. <u>Brosna PRG</u></p> <p>Roscommon County Council were made aware by their laboratory of <i>E. coli</i> (8 No./100ml) and Coliform bacteria (20 No./100ml) exceedances in a regulatory sample taken at a private property in Brosna PRG on 25/07/2023. The EPA identified several failings with Roscommon County Council's communication and follow up of these failed test results:</p> <ol style="list-style-type: none">i. Roscommon County Council did not consult with the HSE upon detection of the failures to determine whether the exceedances constituted a potential risk to human health.ii. Re-sampling of the property in question did not occur until 15/08/2023. <p>2. <u>Castlestrange PRG</u></p> <p>Roscommon County Council detected <i>E. coli</i> (1 No./100ml) and Coliform bacteria (14 No./100ml) in a regulatory sample taken at a private property in Castlestrange PRG on 31/01/2023. The EPA identified several failings with Roscommon County Council's communication and follow up of these failed test results:</p> <ol style="list-style-type: none">i. Roscommon County Council did not consult with the HSE upon detection of the failures to determine whether the exceedance constituted a potential risk to human health.ii. Following initial investigation, the exceedances were attributed to UV failure, and the UV unit was repaired. Subsequent resampling of the property in question was not carried out following repair to determine if the water was safe to drink.iii. The supply was not resampled in 2023 for further Group A or Group B parameters as required.iv. There have been no samples taken from the Castlestrange PRG in 2024 to date despite the requirement to carry out two Group A and one Group B sample. <p>Roscommon County Council's failure to communicate these incidents to the HSE, its delay in resampling and lack of appropriate escalation presented a potential health risk to the consumer(s) at the property and PRGs in question.</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 Roscommon 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) There was no volume/population or treatment listed in EDEN for all SPSs bar one, Kilronan Castle Estate.b) The Register contained two SPSs (Cuisle Bar and Cuisle Kitchen) which were not listed on EDEN and 2023 monitoring results for these supplies were not reported to the EPA.c) The volume of water supplied differs between the two datasets e.g., EDEN data suggests that Oran Ballintubber PRG's supply volume is 507 m³/day, however Roscommon County Council's Register states a daily volume of 382 m³/day. Similar inconsistencies were recorded for many Private Water Supplies.d) The water treatment recorded on EDEN for many Private Water Supplies does not accurately represent actual treatment in place e.g., EDEN details that Dysart PUG has chlorination only, however this supply is served by Killeglan Public Water Supply which has coagulation, filtration, UV disinfection and chlorination in place. <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 regularly categorised as a Group A parameter when it is only required to be categorised as a Group B parameter where it is not used as flocculant. In addition, some Group A parameters were categorised incorrectly on EDEN as Group B parameters (e.g., Dysart PUG).</p>	



2023 Monitoring Programme Audit Recommendations

Roscommon 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 Roscommon 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 (PRGs and PUGs). A formal and structured method of assessment should be developed and implemented by Roscommon 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 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.