

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 Louth 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 | |
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| Date of Audit | 21/06/2023 |
| Local Authority | Louth County Council |
| Representing the Local Authority | Bernadette Woods, Martina Sheeran, John McCooey, Patrick Callan, Andrew White |
| EPA Inspectors | Lisa Noone, Derval Devaney. |

| Report Detail | |
|----------------------------|---|
| Audit Specification | 2022 Regulated Private Drinking Water Supply Compliance Monitoring Programme and Regulated Private Drinking Water Supply Register |
| Issue Date | 12/07/2023 |
| Prepared By | Lisa Noone, Inspector, EPA |

> Report Main Findings and Recommendations

The audit of Louth County Council's Compliance Monitoring Programme found a number of shortcomings in relation to the assessment of the quality of Private Water Supplies during 2022.

1. The Private Supply Register for 2022 did not contain up-to-date and accurate data including all relevant private supplies required to be monitored for compliance, and supply population.
2. There was a lack of pre-determined sampling locations by Louth County Council to ensure samples are evenly spread and, where appropriate, representative of the water supply zone.
3. Louth County Council did not monitor all Group Water Schemes for Group B parameters as is required and did not carry out compliance monitoring for turbidity or nitrite at water treatment plants.

> 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 Louth 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 Louth 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, Louth County Council staff were interviewed to ascertain the principles and methodology for establishing its Private Supply Register and Compliance Monitoring Programme. An INAB accredited laboratory undertakes the compliance analysis of the regulated Private Water Supplies on behalf of Louth 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 |
| Observation | |
| <ol style="list-style-type: none"> Louth County Council's Private Water Supply Register contains 13 regulated Private Water Supplies; 6 Private Group Water Schemes and 7 Small Private Supplies (i.e., supplies serving a commercial or public activity such as hotels, schools and restaurants, etc.). The Register was not available for inspection on the day of the audit but has since been provided to the EPA. The Register is updated on a continual basis to account for new and closed supplies. Population of the supply is not recorded in the register for Private Group Water Schemes or Small Private Supplies. | |



Exceedances of Parametric Values

2.1

| | Answer |
|---|--------|
| Have drinking water samples containing <i>E. coli</i> been appropriately escalated to the Health Service Executive (HSE) as required by Regulation 9(1) of the European Union (Drinking Water) Regulations 2014 (S.I. 122 of 2014)? | No |
| Observation | |
| <ol style="list-style-type: none"> Louth County Council were notified by their contracted laboratory via email in June 2022 of an <i>E. coli</i> exceedance at a Private Water Supply, St. Colmcille's National School. The sample containing <i>E. coli</i> was taken by the contracted laboratory in May 2022. Louth County Council notified the school of the exceedance when they became aware of it, but the Health Service Executive (HSE) were not consulted with to determine whether the private water supply constituted a potential danger to human health. Resampling of the school's water supply was carried out and the well was upgraded in August 2022 with UV and chlorination treatment installed. Subsequent follow-up samples were compliant. | |



3.1

| | Answer |
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| Have sampling locations been pre-determined for each water supply zone? | No |
| Observation | |
| <ol style="list-style-type: none"> 1. Fitz Scientific undertake the sampling of Small Private Supplies and Group Water Schemes on behalf of Louth County Council. The locations for sampling for Group Water Schemes during 2022 were not pre-determined by Louth County Council at the start of the year and were not entered into the Compliance Monitoring Programme. 2. A sampling schedule is completed by Louth County Council, and sampling locations are selected by Fitz Scientific based on their experience of the water supply. 3. Louth County Council do not have any oversight of the sampling locations until after sampling has been completed and results are provided. | |

3.2

| | Answer |
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| Are sampling locations evenly distributed for each water supply zone? | No |
| Observation | |
| <ol style="list-style-type: none"> 1. It could not be determined during the audit whether sampling locations chosen by the contracted laboratory are randomly selected or evenly distributed for each water supply zone. 2. 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, e.g., one business premises in Grangebellew was used as the sampling location for both Group A sampling campaigns in March and September 2022. 3. Whilst grid references/GPS locations are recorded for all sampling locations once sampling is complete, these are not mapped at present to ensure even distribution within the water supply zone. 4. Louth County Council confirmed that plans are currently in place to electronically map each Group Water Scheme's water supply zone and sampling locations under the Compliance Monitoring Programme will be recorded to ensure even distribution once complete. | |

3.3

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

3.4

| | Answer |
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| Was 2022 data for Private Water Supplies reported accurately to the EPA (on EDEN)? | No |
| Observation | |
| <ol style="list-style-type: none"> 1. Information provided by Louth County Council to the EPA via the EDEN portal does not reflect what is recorded in the Private Supply Register: <ol style="list-style-type: none"> i. The volume of water supplied differs between the two datasets e.g., EDEN data suggests that Carrickdale Hotel's volume supplied was 75 m³/day, however Louth County Council's Risk Assessment stated a daily volume of 8 m³/day. Similar inconsistencies were recorded for most Private Water Supplies. ii. Population is recorded for all Private Water Supplies in data submitted to EDEN, however the populations provided were incorrect as far as could be determined by Louth County Council. iii. Treatment listed in the EDEN data is different to what is recorded in the register e.g., EDEN data suggests Dulargy National School treatment includes UV only, whereas information provided by Louth County Council states treatment includes filtration, UV and disinfection. 2. Some parameters' monitoring categories (Group A or Group B) were incorrectly categorised on the 2022 compliance monitoring returns submitted to the EPA. For example, iron was categorised as both a Group A and Group B parameter when it is only required to be categorised as a Group B parameter where it is not used as flocculant. | |

3.5

| | Answer |
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| Was the required compliance monitoring for regulated private supplies undertaken during 2022? | No |
| Observation | |
| <ol style="list-style-type: none"> 1. Based on the data submitted by Louth County Council to the EPA via EDEN for the Grangebellew Group Water Scheme, two Group A and one Group B compliance monitoring samples were required to be taken in 2022 based on the volume of water supplied by the scheme. No Group B sample was taken for this supply in 2022. 2. No monitoring was carried out for Darver Castle, a Small Private Supply, in 2022. Louth County Council stated that they only became aware that Darver Castle had recently reopened and as such had not been included in the 2022 Compliance Monitoring Programme. Darver Castle has since been added to the Compliance Monitoring Programme for 2023. 3. Nitrite was not being monitored at the water treatment plants of Group Water Schemes. 4. Whilst the relevant Group Water Scheme that has surface water influence has an online turbidity monitor in place at the plant, turbidity results at the water treatment plant were not uploaded to EDEN as required. | |



2022 Monitoring Programme Audit Recommendations

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

1. 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.
2. Ensure that the HSE are consulted with 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)*.
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 Louth 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 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)*.
6. Ensure that all regulated private 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.
7. Ensure data on regulated private water supplies entered into the EPA's database, EDEN, is accurate 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.