



DRINKING WATER INSPECTORATE

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To: Huw Irranca-Davies

Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs

Dear Minister

DRINKING WATER 2024 ON THE QUALITY OF PRIVATE SUPPLIES IN WALES

The Drinking Water Inspectorate will shortly publish its annual report 'Drinking Water 2024 private supplies in Wales', which summarises the quality of private water supplies. At least 2% of the population, around 67,000 consumers, source their water from a private supply, which are those supplies not provided by water undertakers. The Welsh Government estimates that these registered supplies only represent one quarter of the total number private supplies. Conservatively extrapolating the population of those registered supplies would give a potential population of over 200,000 consumers, which is a significant number of people.

Local authorities are the regulator for private water supplies. The Drinking Water Inspectorate's role is to provide technical support to local authorities, and to inform Welsh Ministers on the quality of private water supplies through this report.

The quality of private supplies in 2024 remains a concern with 8.97% of samples found to contain *E. coli* and 7.39% containing Enterococci, both of which are indicators of faecal contamination. This means that more than one in 15 supplies are unsuitable to be used for drinking water and may be unfit for human consumption. Analysis of the last five years' data shows a general improvement in compliance testing performance, with more tests meeting the standards for wholesomeness in these supplies. However, it must be noted that the testing regime is not uniform such as it is for public water supplies. This year, there has been a slight deterioration in percentage compliance.

Assurance of the quality of supplies is primarily achieved by testing for contaminants. However, 22% of large supplies (those greater than 10 m³ supplied, or more than 50 consumers), commercial supplies, and supplies being used by the public, did not receive a single test for *E. coli* in 2024, leaving a significant and unknown risk for those consumers.

Risk assessment for private supplies is a proven methodology to keep water supply systems safe especially where testing is limited or absent. It is a critical safeguard to protecting health. It is therefore concerning that 55% of private water supplies do not have a current risk assessment. Both the owners and the consumers of these supplies are therefore unaware of the risks, or how to safeguard themselves, and their children, who are most vulnerable.

In addition to faecal pollution, chemical risks also exist. For instance, looking at the percentages of tests which fail to meet the standards, lead (2.8%), and nickel (5.78%) represent risks associated with the plumbing of these systems, and manganese (6.38%), arsenic (1.57%) and nitrate (0.86%), represent risks from the catchment, all of which can have an impact on health, children again being the most vulnerable.

In my report I have referenced several cases studies across England and Wales, which highlight issues affecting those who use, and those who regulate, private water supplies. Examples include:

- The challenges experienced by a private supply that used to be a public water company, when a network failure caused a wide-spread loss of supply;
- A local authority not using its powers correctly to secure a long-term solution for hundreds of consumers on a supply with high arsenic concentrations; and
- The problems and lack of protection faced by consumers, who have a private supply that is a danger to health but is not registered with the local authority as it is not a requirement.

In research commissioned by my team in 2023 into the private water supplies regulatory model, recommendations were made which could help to address these issues that present a public health risk.

The work my team undertake to provide technical assistance to local authorities in the form of material on our website, a data reporting process and responding to nearly 250 enquiries per year, provides support to local authorities to deliver their duties in a highly specialised area. Furthermore, the data system for private water supplies forms a critical pathway for statutory reporting to Welsh Ministers on the state of these supplies. This system is no longer able to manage the increasing complex data requirements asked of it and I welcome the opportunity to work with your officials to formulate a forward plan in seeking a funding mechanism for this critical area and its data systems.

I would be pleased to discuss any element of the report, research or opportunities for funding to clarify the challenges and solutions.

Yours sincerely



Marcus Rink
Chief Inspector of Drinking Water