



## PRIVATE WATER SUPPLIES – CASE STUDY (2010/02)

### Spring supply to a holiday cottage – benefit of risk assessment

The subject of this case study is a small supply serving a domestic dwelling and a holiday cottage. The source is a spring surrounded by pasture land grazed by domestic livestock (cattle and sheep). Water is collected in a chamber and piped to each dwelling where it is treated by UV. A planned annual sample by the local authority contained *E.coli*. The approach taken by the local authority was to advise the owner that a risk assessment would be carried out to enable advice to be given about the nature of the hazards, the effectiveness of the existing arrangements to protect water quality (risk mitigation) and the need for any additional safeguards.

The risk assessment identified that the owner, in response to the detection of *E.coli*, had already carried out some improvement work at the source, replacing the cover on the collection chamber and erecting stock proof fencing. However, the overflow pipe was unprotected, therefore small animals could gain access and contaminate the supply with faeces and pathogens. Additionally and importantly, it was found that the UV treatment system was not working because although there was electricity to the unit, the starter device had not been checked or changed. The risk assessment enabled the local authority to conclude that the supply was a potential danger to human health and serve a Regulation 18(a) Notice restricting the supply (so that all users were made aware of how to safeguard their health by boiling water before use or by using bottled water). The Notice set out the improvements required, including a written procedure for carrying out and recording maintenance, and monitoring of the disinfection unit. The owners co-operated fully and completed all the necessary work within 15 days. There was no appeal to the Notice.

This case study illustrates how the risk assessment approach in the new private water supply regulations can be used effectively to impart essential knowledge to owners about how to keep their private supply safe by carrying out regular checks and maintenance. If the local authority had not visited this supply then it would have remained contaminated throughout the whole of the holiday season without the knowledge of the owners or visitors. Owners need to understand that testing on its own does not make water safe; the carrying out of simple frequent checks and maintenance by owners is far more important than occasional sampling carried out by the local authority.