

PRIVATE WATER SUPPLIES - CASE STUDY 2013/07

Further evidence of farms as a category of premises at high risk of causing water to be unsafe as a consequence of unsuitable water supply arrangements

In October, the occupier of a farm premises reported discoloured tap water to the water company shortly after fire fighting activity in the neighbourhood. Samples collected by the water company contained *E.coli* and Clostridia. A fittings inspection carried out at the farm premises identified a cross connection between a raw water source intended for cattle troughs and the mains water supply used for domestic purposes in the dwelling.

The owner of the farm premises had no understanding of the origin of the raw water source on his premises. The water company later established that the raw water came from a connection into a transfer main between a raw water storage reservoir and a canal. When a hydrant on the local mains supply was used by the fire brigade this would have caused a fall in mains pressure that would have been sufficient to draw raw water back through the illegal connection into the mains. Figure 17 shows how the two water supplies were connected (and subsequently disconnected) on the farm premises. Note how originally both supplies were feeding into a cistern and only a manually operated gate valve separated them.

The water company explained the serious infringement and served a fittings regulations Notice under Section 75 of the Water Industry Act 1991. The customer immediately disconnected the cross connection (see Figure 17). Following the removal of the cross connection and disinfection of the pipework to the property, the water supply to the property was found to be of good quality.

Tel: 0300 068 6400

Website: http://www.dwi.gov.uk

Drinking Water Inspectorate, Ergon House, Horseferry Rd, London, SW1P 2AL E-mail: dwi.enquiries@defra.gsi.gov.uk

Figure 17: Supply arrangements

The blue MDPE indicated is the mains supply that has been turned off and disconnected, it was cross connected where the black cap end now is, it is now just hanging down.



This was the cross connection, the mains supply was connected here. The black cap end is where the supply is now capped off.

Hose pipe used for swilling now fed only from the private supply.

This case study is one of a growing number demonstrating how the water supply arrangements on farm premises can often lack essential safeguards. Water used for livestock watering can be derived from all manner of sources and quite often these will be connected up to the domestic water supply (public or private) as a standby arrangement. These connections are often not made by a competent plumber (for example, one registered under the WaterSafe scheme). The Inspectorate advises local authorities to work collaboratively with water companies to raise awareness of risk through providing owners of farm premises in their area with the relevant Water Regulations Advisory Scheme (WRAS) leaflet and by sharing intelligence about non-compliant behaviour associated with a farm premises with the local water company. The leaflet may be found at http://www.wras.co.uk/pdf_files/WRAS Agricultural Premises 2012.pdf

Drinking Water Inspectorate, Ergon House, Horseferry Rd, London, SW1P 2AL E-mail: dwi.enquiries@defra.gsi.gov.uk

Tel: 0300 068 6400 Website: http://www.dwi.gov.uk