



## PRIVATE WATER SUPPLIES – CASE STUDY 2013/12

### Deciding whether a situation comprises a public or a private water supply

This case study concerns a large estate with a land area of around 35sq/km comprising farms, schools, industrial sites and houses. The estate is managed by a trust, the responsibilities of which include the operation, maintenance and management of the water supply. The trust has been abstracting water to supply the estate since the mid-1920s and over the years, a total of five wells have been developed and used. Only two wells of the five remain in current use; the *old well* (commissioned in the 1960s) and the *new well* (commissioned in 1995). Water from each well is piped to its own raw water storage tank. Stored water from each raw water reservoir is then filtered and chlorinated via a single treatment plant before being pumped to two treated water tanks from where it is distributed by gravity to serve all the premises on the estate.

The way that the water industry has been restructured over time provides important context for this case study. Before the mid-1970s, many relatively small water boards provided all the public water supplies in England and Wales. In 1975, ten water authorities were formed, each based on a river catchment, and these water authorities took over and consolidated the water supply functions of the water boards. A few of the water boards remained as separate entities where these were constituted as private companies. In 1989, the water authorities were privatised and became water companies. Since that time all public water supplies have been provided by water companies and, more recently, by licenced water suppliers.

A river runs through the estate and in the 1960s the then local *water board* sank a well on the opposite side of the river bank to the estate's *old well*. The *water board well* was of a specific shallow horizontal type known as a radial collector (Ranney), designed for installation in shallow sub-surfaces to collect water as it infiltrates from a riverbed. At the time of its construction, it was alleged that the Ranney would compromise the yield from the *old well* on the opposite bank, due to its depth and close proximity. In response, the water board made a verbal agreement with the trust to augment the *old well* supply at no cost to the trust and constructed a raw water main to enable a transfer of water directly from the Ranney to the *old well*.

When, after 2010, the local authority came to implement the new private water supply regulations, believing from historic records that the estate was a private water supply, the local authority planned to carry out a risk assessment. An important first step in the process of risk assessment requires the water supply layout and assets to be understood and documented from source to tap.

**Figure 18: Old Well Headworks in foreground and pump house in background.**



**Figure 19: Old Well interior showing iron-ductile pipework rising main, incoming raw water supply from South West Water**



As a consequence of this activity it came to light that a water company was operating one of the sources of water to the estate. The Inspectorate became involved at this stage because water provided free of charge by a water company normally constitutes a *concessionary supply* – a type of supply that is regulated by the Inspectorate as a public water supply. It was necessary, therefore, for the current *water company* to work with the local authority and the trust to clarify the source water arrangements on which the estate's water supply relied.

This joint investigation revealed that the original verbal agreement between the water board and the trust was subsequently formalised in a written legal agreement in 1976, not long after responsibility for the Ranney was transferred from the water board to the water authority. This written agreement stated that for as long as the *water authority's* well was in use, the water authority would continue to augment the estate's *old well* source free of charge. At face value this agreement implied that the arrangement was a *concessionary supply*. However, a concessionary supply comprises a supply of water for domestic purposes to premises and, on closer scrutiny, it was determined that the written agreement was concerned wholly with the transfer of raw water from one source to another (to manage the yield from the *old well*). Crucially the water company assets (Ranney and raw water transfer main) did not supply water for domestic purposes directly and the trust alone exercised control from source to tap of the domestic water supply on the estate. This clarification of the source water arrangements, combined with the fact that the recorded volume of water used by the estate was  $605\text{m}^3/\text{d}$  ( $>10\text{m}^3/\text{d}$ ), meant that the local authority could be confident that the estate's supply should be recorded and regulated by them as a Regulation 9 private water supply.

This case study illustrates why the Inspectorate's risk assessment tool emphasises the importance of local authorities obtaining an up-to-date and accurate schematic of the water supply from source to tap that is underpinned by formal documentation of the roles of responsibilities of all the relevant persons. It shows how there can be long-standing arrangements between various parties



that have become clouded with time, illustrating the importance of ensuring that critical management and control arrangements are documented, and correctly interpreted in the context of the Water Industry Act 1991. The absence of clarity about any aspect of the ownership or operation of part of a private supply should be regarded as a potential risk to its safety and sufficiency, and local authorities should require action to be taken, because if matters are left unclear, this can lead to damaging disputes and consequentially inappropriate behaviour regarding the maintenance of the water supply.

*The Inspectorate is pleased to commend this case study as an exemplary example of the close collaboration between a local authority and a water company that is promoted by the Inspectorate as a crucially important factor in safeguarding water supplies. In this instance, there were both public and private water sources in close proximity, therefore, the water company held water quality information that was directly relevant to the operation of the private supply. Likewise, details of the private supply arrangements were something that needed to be fully documented by the water company as part of the risk assessment and risk management of the public supply.*

