



## **PRIVATE WATER SUPPLIES – CASE STUDY 2019/04**

### **Regulation 9 Supply Undertaking Maintenance**

This case study involves a Regulation 9 supply in the south of England which feeds a large city department store. The store comprises several restaurants and multiple points where customers and staff can consume the water. The supply consists of three abstraction boreholes and the water is treated by a sand filtration system, reverse osmosis filtration and disinfection using sodium hypochlorite.

The local authority contacted the Inspectorate to seek technical advice as the supply operator was proposing to take the reverse osmosis (RO) off line for a period to undertake maintenance. Once this work had been completed, they intended to replace the disinfection stage with a new chlorine dioxide dosing system. In May 2019, the Inspectorate met and undertook a site visit with the local authority to observe and provide technical and regulatory advice in relation to the supply and its operation. A meeting was held onsite to discuss the proposed planned work with the supply operator and their contractor.

The visit established that the supply had a history of fluoride exceedances in the raw water, thought to be the reason why the RO system was originally installed, and the removal of which would constitute a risk to the supply of wholesome water. The risk and impact of this and any subsequent interruption would be a breach of the regulations, unacceptable to consumers have an impact on the store's brand.

The local authority was advised to ensure a full risk assessment was carried out to identify risks during the work together with an operational monitoring strategy and a comprehensive contingency plan. The contingency plan should include arrangements for the issuing of any restriction of use advice and suitable arrangements for the provision of an alternative supply in a timely manner as the site is solely reliant on the in-situ water source, without any backup arrangements. Equally, any components of the new treatment system and the new type of disinfection chemicals met the requirements of Regulation 5 and BS EN 12671:2016, as well as the national conditions of use, prior to their use.

A local authority may place all reliance on the supply operator's contractor to collect and analyse samples to the Regulatory requirements. In this case, although the local authority had a good historic set of water quality data the monitoring it did not consist of all of the parameters as required by the Regulations. Any consideration on the monitoring parameters including any reduction or cessation of monitoring should only be considered if a risk assessment indicates that

that there were no factors likely to cause a contaminant to be present in the supply or to cause a deterioration of the quality of the water.

Taking with all matters together, the completion of the maintenance works, installation of the new disinfection system and a limited contingency plan, this would represent a significant change in the supply system. The local authority was advised to carry out a new risk assessment on the completion of the work.

Private water supplies serving large public amenities or establishments like department stores or public events are commonly run and maintained by contracted services that have been employed for many years. Whilst this is reassuring in some respects, unfortunately historic local custom and practice does not always align with regulatory requirements or make for suitable water safety plans. The Inspectorate has found that in these cases it is not unusual for local authorities to place over reliance and unfounded confidence in the actions of such contractors. Local Authorities are therefore reminded that assumptions should not be made in this respect and that as regulators they, not contractors, are responsible for, and are duty bound by the obligations of the Regulations to protect consumers.