



DRINKING WATER INSPECTORATE

Area 5B, Nobel House
17 Smith Square
London SW1P 3JR

Enquiries: 030 0068 6400

DWI Website: www.dwi.gov.uk

22 April 2020

DWI Advice Letter – 01/2020

To Board Level and Day to Day contacts of Water and Sewerage Companies and Water Companies in England

Dear Sir/ Madam

Water suppliers' responsibilities under Section 75(2) of the Water Industry Act 1991, the Water Supply (Water Fittings) Regulations 1999 and the Water Supply (Water Quality) Regulations 2016 (as amended) or the Water Supply (Water Quality) Regulations 2018 (Wales).

The Inspectorate wrote to all water suppliers in England and Wales on 9 April to remind them of their powers and duties in light of the opening of a number of 'Nightingale Hospitals' and other CoViD-19 related establishments.

The national response to the crisis presented by CoViD-19 has represented a number of challenges, including the repurposing of buildings to hospitals or other facilities to provide necessary capacity. When considering the water supply to such buildings it is often easy to overlook the risk a building supply system may pose when the main objective is to simply obtain a supply.

Historical data available to the Inspectorate puts compliance failures caused by systems after leaving the water company supply as a significant percentage of total failures. The change of use at such sites could represent a significant risk as the system may not be appropriately sized, or have the necessary mitigations in place to protect staff and patients from contamination. In a hospital setting where there is severe illness, patients may be susceptible to infection other than CoViD-19 particularly where ventilation assistance is practised and the hand wash basins are in proximity to patients. Hospital water systems may become colonised by *Legionella* and *Pseudomonas aeruginosa* and this creates an additional risk of iatrogenic disease.

The Inspectorate sought to understand the response by water companies to the development of repurposed buildings as protecting public health by ensuring water fittings met the minimum requirements of the regulations.

In this letter, I want to update you of the findings from the information companies have supplied on this matter.

Firstly, I would like to thank all companies for the timely responses, which has allowed us to put together an informed picture of the situation across England and Wales in a relatively short timescale. We are pleased to see that water companies are clear about good regulatory practices and the Inspectorate's advice to carry out water fittings inspections, where these are appropriate.

Water companies are showing a good level of understanding and support for the development of these new facilities in the face of the unprecedented challenges the CoViD-19 pandemic brings. In general, there is a good level of engagement with Local Resilience Forums across England and Wales, particularly with the response to the Nightingale Hospitals. The Inspectorate would encourage continued involvement and regular communication with these bodies going forward. In a few instances companies are in the planning and prepare stage for inspections at sites such as mortuaries in fitting with a prioritisation strategy.

Whilst most companies have been able to form good working relationships with contractors who have or are developing new hospital facilities, this has been with varying success. The priorities of those involved with the development of sites and the understanding of risk associated with water supply will inevitably be different. As such there has been some limited resistance to regulatory inspections shown at a small number of locations. I am pleased to report companies have largely overcome these initial barriers. We welcome the opportunity for all to work together in achieving the best outcome for patients. Companies are encouraged to maintain good working relationships but, where this is not the case, companies will need to persevere in taking all appropriate steps to ensure the regulations are met and public health protected.

There have been some specific challenges to overcome at some sites, in particular protecting backflow within sites. The wide range of facilities in hospitals present specific challenges when protecting the water supply and those who use it. For instance, it is clear that medical laboratories work with concentrated hazards, as do mortuaries, but equally there are some facilities that need special protection such as those for renal dialysis. Whilst medical laboratories and mortuaries work to the highest protective standards, fluid in these areas may represent a serious health hazard because of the concentration of pathogenic organisms, radioactive or very toxic substances, including any fluid which may contain faecal material or other human waste. This is specified in the water supply fittings regulations as fluid category 5 which is the highest risk. Fluid from these areas therefore requires the highest level of backflow prevention with an air gap. An explanation of the appropriate devices may be found on the Water Regulations Advisory Scheme (WRAS) website.

As part of the request for information companies provided examples of all three areas mentioned in the previous paragraph in repurposed hospitals,

where appropriate backflow wasn't considered as part of the initial design or where potential future risks existed. These observations, which may not seem important at the time of building or re-purposing, represent an unmitigated risk to staff and patients and could lead to an unplanned adverse outcome when least desired to a vulnerable population.

The purpose of a water fitting inspection is to aid the smooth operation of the national response and companies will approach these on a risk basis, and in some cases prioritisation of sites is necessary. A number of mortuaries will be pre-existing and the majority of temporary mortuaries do not have new or repurposed water supplies and are therefore deemed to be low risk. A number of inspections for these sites remain as companies have not prioritised them to the same level of urgency. However, vigilance is still required to confirm that all such sites are low risk or are compliant.

The situation remains fast moving and several companies reported planned inspections to be carried out on further facilities as they are developed. The Inspectorate would appreciate an update to the information currently provided, in light of developments from further inspections and assessments.

All further information and any enquiries regarding this letter should be made to Martin Bird by email to martin.bird@defra.gov.uk.

Copies of this letter are being sent to Christine McGourty, Chief Executive, Water UK; Jan Dixon and Kirstin Green, Deputy Directors Water Quality, Department for Environment, Food and Rural Affairs; Eifiona Williams, Water Management Team, Welsh Government; Sue Petch, Drinking Water Quality Regulator for Scotland; Catriona Davis, Drinking Water Inspectorate for Northern Ireland; Tony Smith and Chairs of the Regional Consumer Council for Water; Alison Cullen, Ofwat; Simon Moody, Environment Agency; Benedict Duncan, Food Standards Agency; and Stephen Robjohns at Public Health England.

Yours sincerely



Marcus Rink
Chief Inspector of Drinking Water