

Public Drinking Water Fountains

Legal requirements

Legal standards in the UK are set in Europe and within national standards to maintain a high quality of water. Under the Water Supply (Water Quality) Regulations 2016, drinking water must be 'wholesome'. This is defined in law by standards for a wide range of substances, organisms and properties of water in regulations, including:

- micro-organisms
- chemicals such as nitrate and pesticides
- metals such as lead and copper
- the way water looks and how it tastes

The standards are set to protect public health and the definition of wholesome reflects the importance of ensuring that water quality is acceptable to consumers.

The Water Supply (Water Fittings) Regulations 1999 protect public water supplies against waste, misuse, excessive consumption and contamination within plumbing installations of domestic and commercial properties. Every water fitting, plumbing system and appliance which receives water from the public supply comes under the scope of these Regulations, including public drinking water fountains. Every fitting must be of an appropriate quality and standard and be suitable for the circumstances in which it is used. To aid compliance, only Water Regulations Advisory Scheme (WRAS) approved products/components should be used.

Where contraventions of the Water Fittings Regulations are found, the water supplier (water companies) will require them to be remedied as soon as practicable. Where breaches pose a risk to health or there is a significant waste of water, the water supply to the premises may be disconnected immediately to protect public health and prevent waste or damage to premises. It is a criminal offence to contravene the regulations.

In addition, there are obligations under the Health and Safety at Work etc. Act 1974 and associated Regulations, to secure the health, safety and welfare of persons at work and for protecting others against risks to health or safety in connection with the activities of persons at work, which includes systems installed at a premises, such as public water fountains.

Risks of public drinking water dispensers.

Infectious diseases caused by pathogenic microorganisms, such as bacteria, fungi and viruses can be spread via surfaces from one person to another. Additionally, in the right conditions, films of potentially pathogenic microorganisms can grow within a system and enter the water source or else be ingested or inhaled by the users.

The presence of pathogenic microorganisms in or on a public water fountain could be as a result of:

- Insufficient and poor cleaning of the taps, trays and dispenser casing
- Cross contamination from the poor personal hygiene of users
- Failure to replace the filters regularly
- Inadequate cleaning and maintenance of the dispenser pipe work
- Incorrectly fitted systems which are not plumbed into mains water supplies
- Drinking directly from the tap - contact with saliva, lips and fingers
- Growth of algae if the cooler or water fountain is located in direct sunlight

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Controlling Risk

A risk assessment and controls should be identified to reduce, to as low as reasonably practicable the risks associated with the use of public drinking water fountains. Controls should include:

- Appropriate design and installation (using WRAS approved products), taking into account environmental factors, e.g. exposure to extreme weather conditions, as well as preventing unnecessary pipework/dead legs that could encourage stagnant water and microbial growth
- Appropriately trained staff to manage/maintain the facilities
- Monitoring for vandalism and contamination, maintenance and cleaning standards
- Sufficient maintenance regimes, carried out by qualified and competent engineers
- Regular cleaning, using appropriate chemicals as directed by the manufacturers. It is important that cleaning schedules clearly describe the activities needed, the frequency and who will carry them out

Additional Matters for Consideration

It is recognised that there is currently a trend towards the restoration of public water fountains in an effort to reduce significantly the use of single-use plastic bottles and the resulting adverse impact on the environment. However, the resource implications of ensuring the necessary controls are in place to ensure the quality of water from these is maintained will need to be considered.