Asses to water for drinking and sanitary purposes is a fundamental human right, yet the demand for drinking water is ever increasing and therefore the need to protect this valuable resource is essential to ensure we continue to have access now, and indeed going forward.

The Water Supply (Water Fittings) (Scotland) Byelaws 2014 (and the iterations in Wales, England and Northern Ireland) are a regulatory tool that ensure this valuable resource in managed in such a way as to ensure that the plumbing installation and the products used in its supply do not:

Waste, Misuse, undue consume or contaminate the water.

For accuracy we cannot forget the prevention of erroneous measurement of water. The Byelaws/Regulations are applicable for the complete installations and the products that make up the installation such as taps, valves, pipes, WC's etc.

The **installation** must be compliant with Schedule 2 of the Water Supply (Water Fittings) (Scotland) Byelaws 2014 and includes the following sections:

Interpretations, materials and substances in contact with water, requirements for water fittings, water system design and installation, prevention of cross connection, Backflow prevention, hot and cold-water services, flushing devices and urinals, baths, sinks, showers and taps, washing machines etc and water for outside use.

The **products (water fittings)** must be compliant with Water Supply (Water Fittings) Regulations/Byelaws -4(1)(a) that requires the water fitting to be of an appropriate quality and standard.

This can be determined in a few ways and in this respect there is divergence between Scotland, Northern Ireland and Wales and England.

Regulation 4(2) states a water fitting is of an appropriate quality or standard only if it-

- (a) bears an appropriate CE marking in accordance with Regulation (EU) No 305/2011 of the European Parliament and of the Council laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC(g);
- (b) conforms to an appropriate British Standard or some other national specification of **an EEA State** which provides an equivalent level of protection and performance; or
- (c) conforms to an appropriate specification approved pursuant to regulation 4(2)(d) of the Water Supply (Water Fittings) Regulations 1999.

The text in italics isn't applicable in Wales/England

Manufacturers of water fittings can demonstrate compliance of the Byelaws/Regulations by having their products tested and or certified against one of the methods detailed above (a), (b) or (c) with the conventional route being conforming to an appropriate specification (c).

The Kiwa Reg4 approval also offers alternatives to the appropriate specification with over 40 International standards also being considered to provide an equivalent level of protection and performance.

The Kiwa reg4, lists all approved water products on its website that can be found using the following link https://www.kiwa.com/gb/en/about-kiwa/water-products/

Being able to readily provide evidence of compliance with the Byelaws/Regulations is very important as they also detail penalties for contravening the Byelaws/Regulations with fines up to £1000 for any contravention of the installation and or fittings with the owner/occupier of the installation being liable for any breach.

Kiwa Watertec and their staff have over 130 years of experience approving products against the Water Byelaws/Regulations and indeed their predecessor the 1986 Water Byelaws. Kiwa Watertec

offer a Kiwa reg4 approval for a wide range of products and if required will also facilitate approvals for other reg4 companies as well as being able to help with European approvals EN/ISO/BRL.

During the election campaign and the different philosophies being presented by the different parties I'm reminded of a quote by John Gardener who said:

The society that scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy.

Neither its pipes nor its theories will hold water.