THE WORSHIPFUL COMPANY OF WATER CONSERVATORS

Contribution to Initial Discussions on a Review of the Water Supply (Water Fittings) Regulations 1999, the Water Supply (Water Quality) Regulations 2016 and/or any other relevant legislation to address wasteful product issues with toilets and enable new water-efficient technologies.

June 8th 2023

PROLOGUE

1 This think piece on water fittings regulation is produced by the Worshipful Company of Water Conservators (WCWC), the City of London Livery Company focussed on the long-term health of our water resources and the broader environment. Our members include senior professionals from water, environmental and related industries and regulators, along with others who share our passion for water and the environment. Our experience and knowledge ranges from the complexities of environmental sciences, through the application of engineering to deliver the goals identified by those sciences, and the subsequent management of the assets created. The Company's purpose is ***Promoting a diverse and sustainable environment.*** The acronym WCWC is used in this paper to avoid any confusion in reference to water companies. A summary of observations is given in highlighted red for ease of reference.

2 Defra states that it received many responses on this issue in our 2019 consultation on measures to reduce personal water use. It also ran a call for evidence as part of our consultation on WC Suite Performance Specifications to further understand what actions can be taken around testing and standards and to enable manufacturers to reduce leakage from WCs. It will publish our response to the call for evidence on toilet leakage in summer 2023.

3 The outline of the Review states that The Plan for Water roadmap on water efficiency in new developments and retrofits includes: Action 2) Review the Water Supply (Water Fittings) Regulations 1999, the Water Supply (Water Quality) Regulations 2016 and/or any other relevant legislation to address wasteful product issues with toilets and enable new water-efficient technologies.

4 Defra is keen to discuss a number of possible next steps, including a small but tight number of regulatory changes. These include: A. Updating the Water Supply (Water Fittings) Regulations 1999 to remove the valve systems with the worst leakage rates, B. Updating the Water Supply (Water Fittings) Regulations 1999 to clearly set out dual flush button/operating controls that clearly distinguish between half and full flush, C. Further information gathering about Emerging Technology.

5 Defra is keen to hear from stakeholders about these change proposals on the following pages. These are to prompt discussion and inform any future consultation.

SUMMARY

6 The WCWC supports the technical changes proposed for discussion in this Review, but suggests that the time is right for a Review of the overall effectiveness of the delivery of the

relevant Regulations in the context of the Water Plan and of the objective of streamlining legislation.

7 In responding to the consultation on WC Suite Performance Specifications, (https://www.waterconservators.org/wp-content/uploads/Fittings-position-paper.pdf) the WCWC observed that Water Companies are the Water Fittings Regulators as a consequence of a long history of involvement with water fittings, and manifest the expectation that Water Companies will work with customers to reduce water consumption. The decision to vest this responsibility on Water Companies, rather than Local Authorities, was made in the formulation of the Water Fittings Regulations. But as this paper sets out, there are several interfaces between these two sectors.

8 As an example, Local Authorities have responsibilities under the Building Regulations to ensure that new build has appropriate facilities for water and for waste water. Local Authorities have regulatory functions under the Water Industry Act, including the direct responsibility for private water supplies (although leakage is likely to be less of a problem).

9 It is likely that Local Authorities will be responsible for the regulation of water efficiency labelling. (https://www.waterconservators.org/wp-content/uploads/water-efficiency-labelling.pdf)

10 The WCWC has advocated a holistic approach to the disposal of used care and sanitary products to minimise sewage-borne litter including the regulation of labelling vested in local authority trading standards
(https://www.waterconservators.org/wp-content/uploads/Defra-consultation-response-Feb-22.pdf).

Who knows what other retail regulations will be needed to deliver the aspirations of water management?

11 And there will be interface issues arising from the implementation of Schedule Three of the 2010 Floods and Water Management Act (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128073/The_review_for_implementation_of_Schedule_3_to_The_Flood_and_Water_Management_Act_2010.pdf) and the possible modification of the automatic rights of sewerage connection under S106 of the Water Industry Act 1991. But that is a complete issue in its own right. In fact, the WCWC suggests, as indeed have many other organisations, that entire relationship of the provision of water services and development planning needs review as the Water Plan Roadmap to Water Efficiency shows.

12 The focus of the Water Fittings Regulations has evolved to give greater prominence to leakage and, hence, ‘leaky loos’ and the focus of this Review. A good deal of the water lost by customers appears to be in the private pipes (supply pipes) carrying water from the distribution system to premises and the regulation of these losses is dealt with separately under the 1991 Water Industry Act.

13 So the WCWC poses the following questions: Is there a need to streamline the execution of regulations relating to water use efficacy and efficiency? Do we carry on as at present? However, we move forward there will be more than one regulator involved, so how can we satisfy the government’s wish to simplify regulation? It is unlikely that either the water or local government sectors would agree to any change for various practical reasons. But the

WCWC suggests that the time is now right to include a more structured approach to the way that the sectors work together, possibly led by a concordat between the Local Government Association and Water UK. And this should be a delivery mechanism for the Roadmap to Water Efficiency. The note produced for the meeting has minor amendments referring to the Roadmap.

THE CONTEXT OF THE REVIEW

Responsibility for pipework

14 To aid readers of this Paper, who might not be so familiar with this topic of water management, an explanation is provided on the background. Useful references are provided by Ofwat (Responsibility for pipes and pumping stations - Ofwat) and WaterSafe (https://www.watersafe.org.uk).

15 In simple terms, water is transported from the mains supply by 'communication' pipes to the boundary of a private property and are owned by the water service provider (the Water Company). The pipes, thereafter, transporting to the premises on that property are known as 'supply' pipes and are owned by the property. At the junction of the boundary is located the external stop valve and the meter. There are variations on this basic model, for example joint services.

16 Under the Drinking Water Regulations (the latest version being 2016) the legal responsibility of the Water Company for wholesomeness finishes at the boundary but in order to ensure that consumers are protected the water is sampled within the premises, usually at a kitchen tap. This provides for detection of any supply pipe or domestic plumbing contamination and identification of subsequent action. Lead piping has long been an issue and in some places the water supplied has been dosed with orthophosphate to reduce plumbosolvency; there have been, and are, programmes of replacement of lead communication and supply pipes.

Water Industry Act 1991 and the Water Fittings Regulations 1999

17 To provide clarity on how this interface should be managed, the Water Industry Act 1991 provided for Regulations for preventing contamination, waste etc. and with respect to water fittings. Extracts are given in Appendix 1.

18 And as consequence the Water Fitting Regulations were introduced in 1999, including an amendment to S73 of the 1991 Water Industry Act:

> In section 73 of the Act (offences of contaminating, wasting and misusing water etc.), after subsection (1) there shall be inserted:–
>
> "(1A) In any proceedings under subsection (1) above it shall be a defence to prove–
>
> (a) that the contamination or likely contamination, or the wastage, misuse or undue consumption, was caused (wholly or mainly) by the installation, alteration, repair or connection of the water fitting on or after 1st July 1999;

(b) that the works were carried out by or under the direction of an approved contractor within the meaning of the Water Supply (Water Fittings) Regulations 1999; and

(c) that the contractor certified to the person who commissioned those works that the water fitting complied with the requirements of those regulations."

19 The Regulations require water fittings to be an appropriate quality and standard and suitable for the circumstances in which they are used. Regulator Specifications that provide detailed performance and verification can also be approved. The Regulations and Regulator Specifications are enforced by water companies within their respective areas. The Regulations make it an offence to install, or have the intention of installing, fittings which do not comply with the Regulations. Water companies, as the enforcers of the Regulations, will inspect to check compliance.

20 The aspect relating to wastage from customers properties has become much more evident and hence the focus of this Review and the high profile of 'leaky loos.

21 There is also the issue of wastage from the supply pipe. When it leaks a Water Company can serve a notice requiring a customer to repair it and if it not repaired within 14 days of the leak being confirmed, a Defective Water Fittings enforcement process under Section 75 (2) (b) and 170 of the Water Industry Act 1991 may be served and the Company then has the right to repair the leak and charge the customer. The WCWC suggests that a review is needed to ensure that this provision is functioning well.

Involvement of Local Authorities in water supplies

22 In addition to the regulatory role of the Drinking Water Inspectorate, S 78 of the 1991 Act defines a role for Local Authority functions in relation to undertakers' supplies.

(1) It shall be the duty of a local authority to notify any water undertaker of anything appearing to the authority to suggest—

(a) that any supply by that undertaker [F1, or by a [F2 water supply licensee] using that undertaker's supply system,] of water for domestic or food production purposes to any premises in the area of that authority is, has been or is likely to become unwholesome or (so far as any such premises are concerned) insufficient for domestic purposes;

(b) that the unwholesomeness or insufficiency of any such supply is, was or is likely to be such as to cause a danger to life or health; or

(c) that the duty imposed on that undertaker by virtue of section 68 (1) (b) above is being, has been or is likely to be so contravened as to affect any supply of water to premises in that area.

23 And Local Authorities have duties to take certain steps in relation to private water supplies to ensure that the water provided is wholesome and sufficient for human consumption. A private water supply is defined in section 93 of the Water Industry Act 1991 as a supply of water provided otherwise than a water undertaker (including a supply provided for the purposes of bottling water). There are separate Regulations for this; The Private Water Supplies (England) Regulations 2016 (as Amended).

Building Regulations

24 Local Authorities have responsibilities to ensure that the infrastructure within new buildings for water supplies are fit for purpose The Building Regulations Approved Document G: 'Sanitation, hot water safety and water efficiency' came into force in April 2010. Together with the Code for Sustainable Homes, it ensures a reduction in water use, sets standards for water quality and promotes the safety of hot water systems. Extracts including the Guidance are given in Appendix 2.

Water Efficiency Labelling

25 In late 2022 Defra consulted on water efficiency labelling.

To which the WCWC responded (https://www.waterconservators.org/wp-content/uploads/water-efficiency-labelling.pdf).

26 The proposals asked for views on appropriate Regulators. The WCWC suggested that the principles established for energy efficiency labelling are well tested.

- The Office for Product Safety and Standards should be the Market Surveillance Authority
- The Advertising Standards Authority should be responsible for enforcing the marketing of products with water efficiency information
- Local authorities should be responsible for enforcing the Regulations in relation to dealers
- British Standards Institute to continue as the UK representative in ISO dealing with matters such as an update of the Standard

27 If this suggestion is followed through it raises the issue of the plethora of Regulators dealing with non-commercial water use at a time when there is a push for regulatory streamlining. The WCWC has already anticipated the role of Local Authorities in its response on water fittings (https://www.waterconservators.org/wp-content/uploads/Fittings-position-paper.pdf) and has suggested that the whole matter of regulation of water fitting needs review.

28 This then leads on to the question posed in the relation to other Regulations. Quite apart from the alliance of water efficiency labelling to the Water Supply (Water Fittings Regulations) 1999, it raises the question of whether Building Regulations should be modified to ensure that at only fittings with a minimum level of efficiency should be specified for new build and in refitting commercial premises.

Other interfaces with Local Authorities

29 The focus of this paper is water supply, but there are other areas of interface between Water Companies and local authorities relating to sewerage systems. (https://www.citizensadvice.org.uk/consumer/water/water-supply/sewerage/who-is-responsible-for-repairing-drains-and-sewers/)

https://www.ofwat.gov.uk/nonhouseholds/supply-and-standards/public-and-private-sewers/

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128073/The_review_for_implementation_of_Schedule_3_to_The_Flood_and_Water_Management_Act_2010.pdf

30 Local Authorities have a role to play under Approved Document H of the Building Regulations https://www.gov.uk/government/publications/drainage-and-waste-disposal-approved-document-h

31 And there will be interface issues arising from the implementation of Schedule Three of the 2010 Floods and Water Management Act. (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128073/The_review_for_implementation_of_Schedule_3_of_The_Flood_and_Water_Management_Act_2010.pdf)

The possible modification of the automatic rights of sewerage connection under S106 of the Water Industry Act 1991. But that is a complete issue in its own right. In fact, the WCWC suggests, as indeed have many other organisations, that the entire relationship of the provision of water services and development planning needs review as the Water Plan Roadmap to Water Efficiency shows.

32 And it may well be that Local Authorities could play a role in the control of the sale of sanitary products and any modification to Building Regulations which might help with the problems of the disposal of used sanitary wastes in toilets.

FINAL THOUGHTS

33 The WCWC repeats its observations in earlier consultation responses, that there are many areas of interaction between Water Companies and Local Authorities There was a debate in the formulation of the 1999 Regulations as to whether or not the Regulator should be a Water Company or Local Authority and it was decided that it should be the former. The WCWC is not suggesting that this decision should be revisited. It is likely that the Water Companies and Local Authorities would resist a change for different practical reasons. But, taking into account the wide range of interfaces, the WCWC suggests that the Review of the technical functioning of the 1999 Regulations should be set in the context of streamlining legislation in which both Water Companies and Local Authorities have roles.

34 At least, the WCWC suggests that the time has come for there to be a more structured national concordat between the two sectors, led possibly by the Local Government Association and Water UK in order to deliver the Water Plan most effectively. And this should be a delivery mechanism for the Roadmap to Water Efficiency.

APPENDIX 1 Water Industry Act provisions leading to the Water Fitting Regulations

Offences of contaminating, wasting and misusing water etc.

S 73 (1) If any person who is the owner or occupier of any premises to which a supply of water is provided by a water undertaker [F1or [F2water supply licensee]] intentionally or negligently causes or suffers any water fitting for which he is responsible to be or remain so out of order, so in need of repair or so constructed or adapted, or to be so used—

(a) that water in a water main or other pipe of a water undertaker, or in a pipe connected with such a water main or pipe, is or is likely to be contaminated by the return of any substance from those premises to that main or pipe;

(b) that water that has been supplied by the undertaker [F3or [F4licensee]] to those premises is or is likely to be contaminated before it is used; or

(c) that water so supplied is or is likely to be wasted or, having regard to the purposes for which it is supplied, misused or unduly consumed,
that person shall be guilty of an offence and liable, on summary conviction, to a fine not exceeding level 3 on the standard scale.

74 (1) The Secretary of State may by regulations make such provision as he considers appropriate for any of the following purposes, that is to say—

(a) for securing—

(i) that water in a water main or other pipe of a water undertaker is not contaminated; and

(ii) that its quality and suitability for particular purposes is not prejudiced,
by the return of any substance from any premises to that main or pipe;

APPENDIX 2 RELEVANT PROVISIONS OF BUILDING REGULATIONS

The Approved Document G of the Building Regulations covers:

1. G1: Cold water supply; meaning there must be a suitable drinking water supply, as well as water for cooking, washing and bathing purposes. There must also be water available in any room with a sanitary convenience that has a flushing device (i.e., a toilet).

2. G2: Water efficiency; meaning the amount of wasted water should be minimised where possible.

3. G3: Hot water supply and systems; meaning a property should have a suitable installation that safely supplies hot water for bathrooms and kitchens.

4. G4: Sanitary conveniences and washing facilities; meaning every property should provide occupants with adequate sanitary facilities, including conveniences such as toilets, and spaces suitable for washing hands. These should also be separate from any kitchen or space where food is prepared.

5. G5: Bathrooms; meaning every building should provide a bathroom that contains a washbasin and either a fixed bath or shower.

6. G6: Food preparation areas, meaning a suitable sink should always be provided in areas that are going to be used for cooking.

And there are Appendices

Appendix A: Water Efficiency Calculator for New Dwellings

This addition to the Building Regulations on mains water supply adds a method of assessing the level of "potable" (drinking) water consumption in a new house. The appendix was added in order to ensure compliance with the water performance targets set out in the Building Regulations. However, it is only to be used as a guide, as it cannot predict how much actual water will be used daily by a property once it has occupants.

It should also be noted that this calculator is not to be used as a design tool for water supplies or drainage systems for properties.

Appendix B: Wholesome Water

Wholesome water refers to water that complies with the regulations made under Section 67 of the Water Industry Act 1991. This means that the water is safe and fit to use for drinking, cooking or washing without any danger to human health, in terms of biological, chemical and physical quality (it has safe levels of bacteria, minerals and is the right colour, flavour and odour). This appendix ensures that the public water supply is controlled by legislation, and that it undergoes regular testing to prevent loss of quality during transmission and storage. Any private water supply provided to a property must go through similar testing and is subject to similar requirements. As such, it can also be considered wholesome.

Within a property, water systems are subject to the Water Regulations, which ensures that the water does not become contaminated once it has left the mains supply.
What are the Water Regulations?

Once you have had water supplied to a property, it is covered under the Water Regulations. These by-laws set out a series of legal requirements for the design, installation, maintenance and operation of plumbing and drainage systems, water fittings and all appliances which use water in a home or business. The regulations also have an important role in safeguarding water supplies, protecting the health of the public and promoting efficient water usage.

JUNE 8TH 2023