# Proposed Amendments to Waterworks Ordinance (Cap. 102)



**Consultation Paper** 





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Development Bureau Water Supplies Department

November 2020

# **ABOUT THIS PAPER**

With a view to further enhancing drinking water safety and water use efficiency, the Government is now reviewing the Waterworks Ordinance (Cap. 102) and the Waterworks Regulations (Cap. 102A) and would like to consult the public on a number of legislative amendment proposals to strengthen the regulation of construction and maintenance of internal plumbing systems.

This paper contains legislative amendment proposals in relation to:

- (a) regulation of plumbing works;
- (b) control of plumbing materials;
- (c) control of drinking water dispensers and fountains;
- (d) safeguarding drinking water safety at consumers' taps;
- (e) Water Efficiency Labelling Scheme;
- (f) maintenance and rectification of water loss in communal part of internal plumbing system; and
- (g) others.

As drinking water safety and water use efficiency are issues of major public concern, you as members of the public are cordially invited to render your views and comments on any of the legislative amendment proposals in this paper. You are most welcome to submit your views and comments on or before 3 February 2021 using the Response Form in **Appendix A** of this paper through the following channels -

Mail: Legislative Review Unit, Water Supplies Department

46/F, Immigration Tower, 7 Gloucester Road,

Wan Chai, Hong Kong

E-mail: LR consultation@wsd.gov.hk

Facsimile: (+852) 2520 3256

This paper can be found on the internet (website: https://www.wsd.gov.hk/en/pconsultation/LegislativeReview.html). To protect the environment, we encourage you to provide your views and comments in the form of electronic submission.

Please note that the DEVB and the WSD would wish to be able to refer to views submitted in response to this consultation paper, either in discussion with others or in any subsequent report, whether privately or publicly. Any request to treat all or part of a response in confidence will be respected but if no such request is made, it will be assumed that the response is not intended to be confidential.

Development Bureau Water Supplies Department November 2020

# **ABBREVIATIONS**

The abbreviations used in this paper are listed below –

Abbreviation	Name in Full

**AR** Authorized Representative

COI Commission of Inquiry into Excess Lead Found

in Drinking Water

**COP** Code of Practice

**DD** Designated Director

**DEVB** Development Bureau

**DMC** Deed of mutual covenant

**DWDF** Drinking water dispensers and fountains

GA General Acceptance

IO Incorporated owners

LP Licensed plumber

MM Master Meter

RA Registered agent

RC Registered consumer

RLP Responsible licensed plumber

**RPC** Registered plumbing contractor

WA Water Authority

WELS Water Efficiency Labelling Scheme

WSD Water Supplies Department

**WWO** Waterworks Ordinance (Cap. 102)

**WWR** Waterworks Regulations (Cap. 102A)

# Consultation Paper on Proposed Amendments to Waterworks Ordinance (Cap. 102)

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# **CHAPTER 1 - BACKGROUND**

- 1. The provision and regulation of water supply in Hong Kong are governed by the Waterworks Ordinance ("WWO") (Cap. 102) and the Waterworks Regulations ("WWR") (Cap. 102A). To ensure the provision of a reliable, adequate and wholesome water supply, the Water Authority¹ ("WA") is empowered under the WWO and WWR to, amongst others, acquire and conserve water; maintain and manage public water supply facilities; regulate the construction and maintenance of internal plumbing systems², etc. Achieving drinking water safety and water use efficiency³ are two prime objectives of the WWO.
- 2. Since the enactment of the WWO and WWR in 1974, there have been much development and changes in the plumbing trade, including substantial increase in both the complexity of internal plumbing systems and the scale of the plumbing works, changes in trade practices, and significant technical advancement in plumbing technologies and materials. Where necessary, these development and changes have been regulated by the WA through administrative means, without commensurate legislative amendments to the regulatory frameworks. In view of the recommendations of the Commission of Inquiry into Excess Lead Found in Drinking Water<sup>4</sup> ("COI") and certain inherent limitations of the administrative measures, the Development Bureau ("DEVB") and the Water Supplies Department ("WSD") consider that a holistic review of the existing legislation based on the two prime objectives is necessary to bring the regulatory frameworks up to date in order to cope with the latest development and changes in the plumbing trade. Based on an initial review finding, the DEVB introduced prioritized legislative amendments, viz. the Waterworks (Amendment) Regulation 2017 and Waterworks (Amendment) (No. 2) Regulation 2017, wherein standards of plumbing materials in the WWR were updated, and the Waterworks (Amendment) Ordinance 2018, wherein the policy intent and the nowadays trade practices were better reflected in the legislation thus enabling workers to carry out plumbing works legitimately beyond doubt.
- 3. On the control over the construction of internal plumbing systems, the holistic review finds that there are areas requiring improvement in the WWO and WWR to enhance the drinking water safety and water use efficiency, such as the undefined roles

<sup>&</sup>lt;sup>1</sup> Pursuant to section 2 of the WWO, "Water Authority" means the Director of Water Supplies.

<sup>&</sup>lt;sup>2</sup> "Internal plumbing system" means "inside service" and "fire service", which are defined in section 2 of the WWO.

<sup>&</sup>lt;sup>3</sup> Water use efficiency concerns water conservation and reducing water wastage.

<sup>&</sup>lt;sup>4</sup> The COI was appointed by the Chief Executive in Council on 13 August 2015 to inquire into the incident of excess lead found in drinking water in public rental housing estates.

and responsibilities of some of the stakeholders and trade practitioners involved in plumbing works, control of plumbing works processes not on par with modern trade practices, absence of direct assessment of metal leaching from plumbing materials, etc. Therefore, the DEVB and the WSD have come up with legislative amendment proposals in these areas which are the subjects of this paper.

- 4. Separately, mindful of the impact arising from the climate change on our precious fresh water resources, the Government announced in the Policy Agenda in October 2017 the target of reducing the per capita fresh water consumption by 10% by 2030 (using 2016 as the base year). The Water Efficiency Labelling Scheme ("WELS") is amongst the host of measures to promote water conservation. A legislative amendment proposal on its mandatory implementation is put forward in this paper.
- 5. Moreover, since the water consumption in the communal part of internal plumbing systems ("communal service") is not charged, the parties responsible for the maintenance of the communal service have neglected the proper maintenance of it (particularly the underground part), resulting in serious hidden water loss. A number of legislative amendments are proposed to enhance rectification of serious water loss problem in the communal service and to ensure that there will be a responsible party actively undertaking the maintenance of the communal service.
- 6. Views from different stakeholder groups, including representatives from developers, professional institutions relevant to the trade, plumbing material suppliers, laboratories, contractors, licensed plumbers, plumbing workers have been tapped on the legislative amendment proposals. This paper outlines the amendment proposals to seek views from the interested parties, the general public and the above stakeholders as well so that we would take into account the views and concerns of the community in formulating the legislative amendment proposals that are conducive to supporting drinking water safety and water use efficiency.

# **CHAPTER 2 - REGULATION OF PLUMBING WORKS**

### 2.1. Introduction

7. The WWO regulates all works in relation to internal plumbing systems, ranging from the construction of internal plumbing systems for new development projects, plumbing works for individual shops or flats, to repairing and replacement of pipes or fittings of existing internal plumbing systems. The legislation, since its enactment in 1974, exercises control on these plumbing works primarily through the registration of Licensed Plumbers ("LPs"). With the substantial increase in complexity of internal plumbing systems and scale of plumbing works in the past decades, the DEVB and the WSD consider it necessary to holistically review the regulatory framework that could not fit in the tight timeframe of the previous legislative amendments as mentioned in paragraph 2 of Chapter 1 above.

# 2.2. Regulatory Framework on Plumbing Works

- 8. Under the current WWO, for new internal plumbing systems, plumbing proposal for the works must be submitted for approval of the WA before the works could be commenced<sup>5</sup>. Written permission from the WA has to be obtained by the Responsible LP ("**RLP**") prior to the construction, installation, alteration or removal of internal plumbing systems, except in case of alterations which are of a minor nature<sup>6</sup>. The completed or altered internal plumbing systems must not be put into use until they have been inspected and approved by the WA<sup>7</sup>.
- 9. The current WWO also requires the construction, installation, maintenance, alteration, repair or removal of an internal plumbing system, except for alterations or repairs which are of a minor nature, to be carried out by designated persons<sup>8</sup>. All plumbing works shall be carried out in accordance with the WWO; otherwise, both the RLP (in plumbing works for which a written permission is required) and the person who carries out the plumbing works may commit an offence<sup>9</sup>.

<sup>&</sup>lt;sup>5</sup> Regulations 3 and 5 of the WWR

<sup>&</sup>lt;sup>6</sup> Section 14 of the WWO

<sup>&</sup>lt;sup>7</sup> Regulation 6 of the WWR

<sup>&</sup>lt;sup>8</sup> Pursuant to section 15(6) of the WWO, designated person means an LP, a registered plumbing worker or a registered plumbing worker (provisional) registered under the Construction Workers Registration Ordinance (Cap. 583) in relevant trade, a person working under the instruction and supervision of an LP or registered plumbing worker, or a public officer authorized by the WA.

<sup>&</sup>lt;sup>9</sup> Sections 14(3) to 14(7) of the WWO

10. In this paper, plumbing works are classified into two types (Figure 1). Plumbing works requiring a written permission and to be carried out by designated persons are referred to as "**prescribed plumbing works**". However, the WA may waive the requirement of permission in case the plumbing works are required to be carried out in an emergency to rectify waste of water or protect public health or safety. Plumbing works requiring neither a written permission nor to be carried out by designated persons are referred to as "**minor plumbing works**".

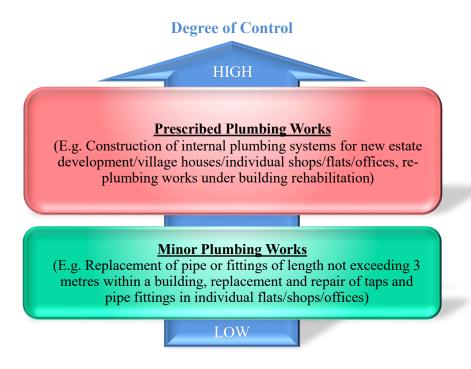


Figure 1: Types of plumbing works

# 2.3. Regulatory Framework on Minor Plumbing Works

11. Under the current WWO, minor plumbing works are alterations or repairs of internal plumbing systems which in the opinion of the WA are minor in nature. They must not adversely affect the efficiency of the internal plumbing systems in providing a reliable and adequate supply of water or the quality of the water<sup>10</sup>. The WSD has set out on its webpage for public reference plumbing works which in the opinion of the WA is minor in nature<sup>11</sup>. In general, these works, such as replacement of water taps in a domestic unit, are small-scale alterations or repairs and are of low risk to drinking water safety and water use efficiency. It would cause undue nuisance to the public

<sup>10</sup> Section 15A of the WWO

Please refer to the webpage of WSD at below: https://www.wsd.gov.hk/en/plumbing-engineering/licensed-plumbers/works-of-a-minor-nature/index.html

and induce higher compliance cost if written permission or engagement of designated persons is required.

12. To avoid over-regulation of minor plumbing works, the current regulatory framework allows these works to be carried out by any person. Notwithstanding this, if minor plumbing works do not comply with the requirements in the WWO and WWR, the person who personally carries out the works shall still be liable to an offence. We propose maintaining the current regulatory framework.

Que	Question 1				
	Do you agree to maintain the current regulatory framework that minor plumbing works can be carried out by any persons? If disagree, why?				
	Agree				
	Disagree, please specify the reason:				

# 2.4. Regulatory Framework on Prescribed Plumbing Works

13. For prescribed plumbing works, the current regulatory framework regulates only the RLP and designated person. Overall control to ensure the plumbing works complies with the WWO remains at installer level through registration of competent personnel for the selection of compliant materials, supervision and carrying out of plumbing works. However, in the actual operation, there are also other parties involved in the plumbing works, including but not limited to developers, consultants and contractors, whose roles and responsibilities are not provided for in the current legislation. In this holistic review, we intend to see whether there is a need to regulate these parties and if so, how it could be done in order to better achieve the legislative objectives.

### 2.4.1. Current Trade Practice

14. In reviewing the roles and responsibilities of the various parties in the plumbing works, it is noted that the parties involved and the working arrangement vary with the nature and scale of plumbing works. For instance, in new development projects and large-scale building rehabilitation projects, separate parties are responsible for the design and construction of the plumbing works. Very often, the developer, who

is the proponent for new development project, will engage a consultant to carry out the design and supervision of the works for the whole project including the plumbing works. The consultant will be responsible for obtaining the necessary approval of the plumbing proposal from the WA<sup>12</sup>. The developer will separately engage a main contractor to undertake the works of the project. The main contractor will normally engage a plumbing contractor who will in turn engage the RLP to obtain written permission for the plumbing works<sup>13</sup> from the WA before the commencement of the works. The plumbing contractor will carry out the plumbing works in accordance with the approved plumbing proposal.

- 15. On the other hand, "one-stop" working arrangement is commonly adopted for plumbing works or re-plumbing works of smaller scale such as those in village house development, individual flats/shops/offices, etc. The project proponent, usually the property owner or property manager, will appoint a plumbing contractor directly, who will be responsible for the design and preparation of plumbing proposal for approval of the WA, obtaining written permission for the plumbing works from the WA and carrying out the plumbing works.
- 16. Under either arrangement, the plumbing contractor who undertakes the plumbing works is the party having overall control over the plumbing works. It selects and procures the plumbing materials to be used, supervises the works and engages the work force (i.e. designated persons) to carry out the works. The plumbing contractor will also engage the RLP (either in-house LP or external LP engaged on job-by-job basis) who will apply for the written permission from the WA for the plumbing works, and inspection and approval by the WA of the completed or altered internal plumbing system. Both the RLP and designated persons are under statutory duties to carry out the plumbing works in compliance with the WWO while the plumbing contractor bears no legal responsibility to ensure compliance.

# 2.4.2. Project Proponent for Prescribed Plumbing Works – Developer, Property Owner, Property Manager, etc.

17. "Project proponent" for the prescribed plumbing works shall be the person who initiates the works. In general, the developer of the site will be the project proponent for prescribed plumbing works in new development projects. As regards prescribed plumbing works on existing internal plumbing systems, such as modification

<sup>&</sup>lt;sup>12</sup> Regulations 3 and 5 of the WWR

<sup>13</sup> Section 14(1) of the WWO

or replacement works, the person having management and control of the system, e.g. the property owner or property manager, will be the project proponent.

18. Project proponents have the power to control by whom and how the prescribed plumbing works are to be carried out. However, they do not normally possess the necessary skill and knowledge to carry out the works, and hence holding them liable for prescribed plumbing works contravening the statutory requirements is not reasonable. That said, it is considered that requiring the project proponent to ensure that the prescribed plumbing works are carried out by suitably qualified parties would certainly help to uphold the quality of the works and hence safeguarding the drinking water safety for the occupants in the premises and efficiency of the internal plumbing system. Therefore, we propose setting out in the legislation that the project proponent shall ensure that the prescribed plumbing works are carried out by a qualified plumbing contractor.

Que	estion 2		
Do	Do you agree that the project proponent should be required to ensure that the		
pre	prescribed plumbing works are carried out by a qualified plumbing contractor?		
If d	If disagree, why?		
	Agree		
	Disagree, please specify the reason:		

19. In association with this requirement, we propose that the project proponent who contravenes the above provisions will commit an offence and be liable on conviction to a maximum fine at level 6 (\$100,000).

# Ouestion 3 Do you agree that the penalty proposed for the project proponent contravening the relevant provisions in engaging qualified plumbing contractor to carry out the prescribed plumbing works should be set to a maximum fine at level 6 (\$100,000)? If disagree, why? □ Agree □ Disagree, please specify the reason: \_\_\_\_\_\_\_

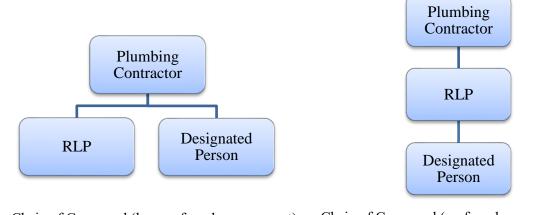
# 2.4.3. Designer for Prescribed Plumbing Works – Design Professional and LP

- 20. The current WWO does not provide for the roles and responsibilities of the design professional (hereinafter referred to as the "**Designer**"), who is responsible for the design of plumbing works including the plumbing proposals for new internal plumbing systems. As mentioned in section 2.4.1 above, for new development projects and large-scale building rehabilitation projects, the Designer is very often a consultant, such as professional engineers, building surveyors, etc. For other prescribed plumbing works of smaller scale, the Designer would usually be the plumbing contractor, who has an in-house LP or engages an external LP on job-by-job basis.
- 21. For new internal plumbing system, the Designer is responsible for preparing the plumbing proposal for approval by the WA. The plumbing proposal would contain the schematic design including pipe alignment and size to demonstrate that the proposed internal plumbing system complies with the technical requirements of the WA and the statutory requirements of the WWO and WWR. The Designer has limited control over the drinking water safety and water use efficiency, which would largely depend on the plumbing materials used and proper carrying out of the plumbing works by the plumbing contractor. On the other hand, the plumbing contractor has direct control over the materials to be used and the manner in which the plumbing works are to be carried out. In view of this situation, we consider inappropriate to impose any duty on the Designer to ensure drinking water safety and water use efficiency as these matters are beyond his realm of control.
- 22. To avoid over-regulating which would induce higher cost of compliance, we propose maintaining the current arrangement and not regulating the Designer for prescribed plumbing works in the legislation.

Que	estion 4		
Do	Do you agree not to regulate the Designer for prescribed plumbing works? If		
disa	agree, why?		
	Agree		
	Disagree, please specify the reason:		

# 2.4.4. Parties carrying out Prescribed Plumbing Works – Plumbing Contractor, LP and Designated Person

- 23. At present, the party undertaking the plumbing works is the plumbing contractor who is either engaged as subcontractor by the main contractor of the project proponent or by the project proponent directly. On the other hand, the RLP is personally responsible for the overall compliance of the plumbing works with the WWO and WWR while the designated persons are required to carry out the plumbing works in compliance with the WWO and WWR<sup>14</sup>.
- 24. Despite both the RLP and designated persons are engaged by the plumbing contractor, designated persons who carry out the works may not be directly under the command of the RLP. Designated persons may receive instruction directly from the plumbing contractor instead of the RLP and may result in limited control of the RLP over the designated persons (Figure 2). Furthermore, the RLP may have difficulties in providing adequate level of supervision over the plumbing works in his personal capacity, especially in plumbing works of relatively large-scale. In certain circumstances, the RLP may not even have control over the plumbing materials used as it is a common practice in the industry that the plumbing contractor would procure the plumbing materials. These factors can affect the quality of the plumbing works which may have an impact on the drinking water safety and water use efficiency.



Line of Command

<u>Chain of Command (less preferred arrangement)</u> <u>Chain of Command (preferred arrangement)</u>

Figure 2: Working arrangement for plumbing contractor, RLP and designated person

<sup>&</sup>lt;sup>14</sup> Pursuant to section 14(4) of the WWO, the RLP commits an offence if he fails to take all reasonable steps to ensure compliance of the plumbing works and designated persons commit an offence if they knowingly carry out the works which are not in compliance with the WWO and WWR.

- 25. The current statutory duties of the RLP and designated persons under the WWO and WWR to ensure compliance of the plumbing works are therefore considered disproportionate to their personal capacity. The situation may become even more undesirable in large-scale plumbing works. In contrast, the plumbing contractor undertaking the plumbing works, who is either engaged by the main contractor of the project proponent or by the project proponent directly, usually has direct control over the materials to be used and the manner in which the plumbing works are to be carried out. Yet, the plumbing contractor is neither regulated by the WA nor obliged under the WWO and WWR to ensure compliance of the plumbing works. This regulatory framework is considered not optimum to ensure drinking water safety and water use efficiency.
- 26. We have made reference to other regulatory frameworks for building works and building services works<sup>15</sup> for which the contractors carrying out the works are registered and regulated. For example, the general building contractors responsible for carrying out construction works are registered under the Buildings Ordinance (Cap. 123) and regulated by the Building Authority.
- 27. To tally with the actual trade practice and with reference to the regulatory frameworks for building works and building services works, we propose a system of registered plumbing contractor ("RPC") to take up the roles and responsibilities of the RLP and designated persons under the current regulatory regime. Under the proposed system, plumbing contractor shall appoint key personnel in order to be registered as RPC. These key personnel shall be familiar with requirements of the WA, WWO and WWR and have access to company resources including financial support and manpower for the execution of plumbing works. Details on registration requirements of RPC and the key personnel are shown below.

Details on registration requirements of RPC

With the regulatory control of registered general building contractors by the Buildings Department as a reference, we consider that the effectiveness of RPC being the gatekeeper and in discharging its statutory duties in ensuring compliance of the prescribed plumbing works with the technical requirements of the WA and statutory requirements of the WWO and WWR will rely heavily on its corporate governance and the capability of its key personnel. We propose the applicants seeking

<sup>&</sup>lt;sup>15</sup> Reference has been made to the Buildings Ordinance (Cap. 123), Fire Services Ordinance (Cap. 95), Electricity Ordinance (Cap. 406), Gas Safety Ordinance (Cap. 51) and Lifts and Escalators Ordinance (Cap. 618).

registration as an RPC are required to appoint two key personnel, namely the Authorized Representative ("AR") and the Designated Director ("DD"). A person is allowed to take up the role of both the AR and DD at the same time provided that he meets the requirements of both positions.

AR shall act on behalf of the RPC to manage the projects. He is the person designated to represent the RPC to communicate with the WA and shall be familiar with the plumbing works and the requirements of the WA, WWO and WWR. As such, we propose that AR shall be in possession of a Grade I LP qualification<sup>16</sup>.

On the other hand, DD shall be able to make decisions for the RPC and has access to its resources, including financial support and manpower for the execution of the plumbing works. We propose that DD shall have the experience in managing a plumbing contractor or he shall possess relevant knowledge and experience in plumbing industry.

We have also taken into account that RPC may be operated in different business forms, including corporation, partnership and sole proprietorship. If the RPC is a corporation, it shall appoint at least one director from the board of directors to be DD. For sole proprietorships, unlike corporation, the sole proprietor is the sole person who owns and controls the businesses (i.e. RPC). Due to this business structure, the sole proprietor shall take up the role of DD by himself. For partnership, the business (i.e. RPC) is owned and controlled by the partners and it has to appoint at least one partner who meets the requirements of the position to take up the role of DD. The RPC, irrespective of the business forms, shall appoint at least one person to be AR.

To ensure that adequate supervision and proper management are provided for the carrying out of plumbing works and to avoid possible situation of conflict of interest, a person who has been appointed as the AR or DD for an RPC cannot act as AR or DD for another RPC at the same time.

We propose that an RPC's registration shall be valid for a period of 3 years. Upon expiry, the RPC may apply for renewal of their registration.

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<sup>&</sup>lt;sup>16</sup> According to regulation 33(1) of the WWR, a person shall hold a Craft Certificate in Plumbing and Pipefitting and a Certificate in Plumbing Services (Hong Kong) issued by Vocational Training Council or equivalent qualification before applying for a Grade I plumber's licence. Moreover, a minimum of 4 years relevant working experience is required for enrolling in the Certificate in Plumbing Services (Hong Kong).

Ouestion 5  Do you agree that a person holding a Grade I LP qualification is sufficient to take up the role of an AR of RPC to manage the plumbing works? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		
Mandatory continuous training for LPs		
There has been progressive advance in the materials and technology in plumbing industry and		
updating of relevant standards for pipes and fittings over the years.		
launched a voluntary Continuing Professional Development Scheme for LPs in 2016 to upkeep		
themselves with the latest plumbing knowledge and practice. To continue to uphold the technical		
capability of LPs, we recommend mandating continuous training for LPs as one of their licence		
renewal requirements.		
Question 6		
Do you agree to include mandatory continuous training for LPs as one of the LP licence		
renewal requirements? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

28. We propose that only RPCs may carry out prescribed plumbing works. Designated person and plumbing contractor not registered shall carry out prescribed plumbing works under the supervision of an RPC. Any person contravening the above commits an offence and shall be liable on conviction to a maximum fine at level 6 (\$100,000). The RPC shall assume overall control of the prescribed plumbing works and bear all the current responsibilities of the RLP and designated persons under the WWO and WWR for ensuring compliance of the works. The RPC shall be responsible for obtaining written permission of the WA before commencement of the prescribed plumbing works, engaging designated persons to carry out the works, providing continuous supervision during the course of the works, and applying for inspection and approval of the completed or altered internal plumbing systems which the RPC shall ensure compliance with technical requirements of the WA and the statutory requirements of the WWO and WWR. The WA, on the other hand, shall manage a register of RPCs including registration of plumbing contractors who meet the above requirements and taking disciplinary actions such as suspension or removal from the register against those who have failed to properly discharge their duties<sup>17</sup>.

- 29. Since the RPC will assume primary responsibility to ensure compliance of the prescribed plumbing works with technical requirements of the WA and the statutory requirements of the WWO and WWR, the RLP and the designated persons shall be released from their current liability under the WWO and WWR.
- 30. Furthermore, we consider that senior management of an RPC should be vested with a duty to ensure that the RPC is acting in compliance with the statutory requirements of the WWO and WWR. In this regard, we propose that if an offence committed by an RPC is proved to have been committed with the consent or connivance of the key personnel<sup>18</sup> or a senior manager concerned in the management of the RPC, that person shall also be guilty of the offence.

Question 7
Do you agree that only RPC should be allowed to carry out prescribed plumbing
works and should be responsible for the compliance of the prescribed plumbing
works with technical requirements of the WA and the statutory requirements of
the WWO and WWR? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:
(You may still provide responses to Questions 8 to 14 in this Chapter
assuming that RPC system is pursued.)
Question 8
Do you agree that the current liability of the RLP and designated person under
the current WWO and WWR can be released under the RPC system? If
disagree, why?
□ Agree
☐ Disagree, please specify the reason:

<sup>&</sup>lt;sup>17</sup> The WA will promulgate a set of rules for the administration of the registered plumbing contractor system.

<sup>&</sup>lt;sup>18</sup> See paragraph 27 above.

Que	estion 9
Do	you agree that if an offence committed by an RPC is proved to have been
con	nmitted with the consent or connivance of the key personnel or a senior
mai	nager concerned in the management of the RPC, that person shall also be
guil	ty of the offence? If disagree, why?
	Agree
	Disagree, please specify the reason:

# 2.5. Statutory Technical Requirements on Carrying Out of Works on Internal Plumbing Systems

- 31. Apart from reviewing the regulatory framework, we also take the opportunity to review the technical requirements for the plumbing works prescribed in the WWO and WWR. Considering that drinking water safety is of utmost importance, we propose retaining all these drinking water safety related requirements in the WWO and WWR (e.g. soldering materials must be lead-free). Furthermore, to reflect the seriousness of non-compliance, we propose that an RPC contravening these requirements shall commit an offence and the maximum penalty level shall be raised from the current level 4 (\$25,000)<sup>19</sup> to level 6 (\$100,000). Moreover, the RPC shall be subject to disciplinary actions if the RPC has been convicted by any court of the above-mentioned offence.
- 32. For other technical requirements not related to drinking water safety (e.g. prescribed minimum pipe size), we propose transferring them from the WWO and WWR to a Code of Practice ("COP") which can be updated more timely to catch up with the ever-changing technological advancement for the trade to follow. Non-compliance with the requirements of COP shall not be an offence in itself but shall be a ground for the WA to withhold approval of the plumbing proposal, completed or altered internal plumbing system, as well as to initiate disciplinary actions against the concerned RPC for non-conformity with the COP. The WA shall be empowered to issue and update the COP by notice in the Gazette.

<sup>&</sup>lt;sup>19</sup> Sections 14(4) and 35(1) of the WWO

Question 10	
Do you agree that in case of non-compliance with technical requirements related	
to drinking water safety, the RPC should be liable on conviction to a maximum	
fine at level 6 (\$100,000) and subject to disciplinary actions upon convicted by	
any court? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 11	
Do you agree that in case of non-compliance with technical requirements not	
related to drinking water safety, the RPC should be subject to disciplinary	
actions instead of being liable to an offence? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

# 2.6. Quality Control of Prescribed Plumbing Works

33. In general, construction of internal plumbing systems for residential development with more than one block (involving about 400 flats) is considered as large-scale prescribed plumbing works. Typical examples of small-scale and large-scale prescribed plumbing works are listed in the following table-

Small-scale Prescribed Plumbing Works	<ul> <li>Construction of internal plumbing systems for individual village houses</li> <li>Replacement of individual pipe sections in communal service</li> <li>Conversion to salt water for flushing</li> <li>Installation of separate meter for a restaurant</li> </ul>
Large-scale Prescribed Plumbing Works	<ul> <li>Construction of internal plumbing systems for new estate development</li> <li>Construction of internal plumbing systems for redevelopment and conversion of buildings</li> <li>Comprehensive re-plumbing works for a housing estate</li> </ul>

- 34. Under the current regulatory framework, quality control of plumbing works is administered by way of controlling the qualification and skill of persons who carry out the works at the installer level. For prescribed plumbing works, the RLP is required to inspect the carrying out of the works as often as is reasonable to ensure that the works are delivered in accordance with the requirements of the WWO and WWR, having regard to the nature of the works, the risks involved in the works and the knowledge and experience of the designated person who carries out the works. A designated person is an LP or a registered plumbing worker in possession of craftsmanship of plumbing works and has the necessary qualifications<sup>20</sup>, or a worker who has to work under instruction and supervision of an LP or a registered plumbing worker in carrying out the works.
- 35. This form of quality control system is viable for small-scale prescribed plumbing works under the current regulatory framework as the RLP is capable of managing and supervising the plumbing works personally. However, for large-scale prescribed plumbing works, the RLP may have to be assisted by a site supervision team to better discharge his duties in providing a better quality control of the plumbing works.
- 36. Addressing the concern on management and supervision of large-scale prescribed plumbing works, we propose introducing a new statutory requirement to strengthen the quality control of these plumbing works. We propose requiring the RPC to provide an in-house site supervision team led by a qualified person with sufficient knowledge and experience in project management and plumbing works to provide continuous management and supervision of the large-scale plumbing works. The site supervision team shall be appointed prior to the commencement of the works and be maintained throughout the life of the project to strengthen the quality control of the works. Small-scale prescribed plumbing works do not require these quality control enhancement measures as the key personnel of the RPC is capable of managing and supervising the plumbing works personally.

RPC's site supervision team

RPC is required to provide a site supervision team to supervise full-time the carrying out of large-scale prescribed plumbing works. The scale of the plumbing works will determine the size of the site supervision team. RPC shall appoint an AR who possesses knowledge on project management

<sup>&</sup>lt;sup>20</sup> Pursuant to regulation 33(1) of the WWR, LP should hold a Craft Certificate in Plumbing and Pipefitting and a Certificate in Plumbing Services (Hong Kong) or equivalent qualifications. Pursuant to Schedule 1 to the Construction Workers Registration Ordinance (Cap. 583), registered worker has to satisfy certain qualification and skill requirements.

and coordination skills to lead the site supervision team and exercise overall control of the plumbing works. It is recommended that the AR for this scale of projects shall have at least higher diploma qualification in relevant field and experience in supervising plumbing works projects in addition to the qualification of a Grade I LP. Details on provision of site supervision team (including its duties and composition) would be stipulated in a COP for practitioners to follow.

Immediate and full adoption of the proposed additional requirements on AR may render difficulties for the trade to have sufficient supply of ARs to carry out large-sale prescribed plumbing works. To minimize disruption to the existing plumbing contractors and the livelihood of Grade I LPs, we consider putting in place a one-off transitional arrangement for senior Grade I LPs and senior managers holding management position in a plumbing contractor (e.g. project manager), who play a key role in overseeing large-scale prescribed plumbing works currently. These practitioners should have possessed an aggregate of not less than 10 years' relevant experience in supervising plumbing works projects but may not acquire the requisite qualifications. A top-up course will be provided for these plumbing practitioners during the transitional period. Top-up course on project management will be provided for senior Grade I LP not in possession of the pre-requisite requirement of academic attainment, whereas a top-up course on plumbing practice and the requirements of the WA, WWO and WWR will be provided for senior managers not in possession of the pre-requisite requirement of a Grade I LP but with a higher diploma in relevant disciplines. Upon completion of their respective top-up course, they will be eligible for becoming an AR for large-scale prescribed plumbing works. To allow time for the plumbing practitioners to prepare for the registration and complete the top-up course, a transitional period of 2 years will be provided upon the enactment of the bill.

Question 12		
Do you agree with the proposed one-off transitional arrangement for securing sufficient ARs		
eligible for supervising large-scale prescribed plumbing works? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

Question 13
Do you agree that the following requirements should be imposed on large-scale prescribed plumbing works? If disagree, why?
(1) RPC to provide a site supervision team
(2) RPC to appoint a key person with higher qualification to lead the site supervision team
☐ Agree (may tick more than one box)
☐ RPC to provide a site supervision team
☐ RPC to appoint a key person with higher qualification to lead the site supervision team
☐ Disagree, please specify the reason:
Question 14
Do you agree that the above requirements are not necessary to be applied on small-scale prescribed plumbing works? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:

# **CHAPTER 3 - CONTROL OF PLUMBING MATERIALS**

### 3.1. Introduction

37. In Chapter 2, we have discussed the regulation on two types of plumbing works, namely prescribed plumbing works and minor plumbing works. In this chapter, we will discuss our proposals to introduce new testing requirements for plumbing materials (including pumps) to further safeguard drinking water safety and the control of plumbing materials for use in plumbing works. The commonly used plumbing materials are shown in the photos below<sup>21</sup>.



Figure 3: Commonly used plumbing materials

# 3.2. Introduction of Relevant Testing Requirements in AS/NZS 4020 for Plumbing Materials

38. Currently, the WWR prescribes the standards and technical requirements of the plumbing materials that can be used in an internal plumbing system. Among the requirements related to drinking water safety, the standards prescribed in the WWR for

<sup>&</sup>lt;sup>21</sup> This illustration is not intended to limit the scope of plumbing materials to be regulated under the WWO and WWR.

the plumbing materials specify the chemical composition of the metallic components to ensure no adverse effect on the drinking water quality through metal leaching from the plumbing materials. After further study, we propose introducing the relevant testing requirements benchmarked against the joint Australian/New Zealand standard AS/NZS 4020 to assess the leachability of metals from plumbing materials for use in internal plumbing systems, which is considered as a more direct assessment of their effect on drinking water quality. The testing requirements shall apply to plumbing materials that can be used in the part of an internal plumbing system for supplying water for drinking purposes, such as copper pipes, water pumps and mixers, etc. Such testing requirements are adopted in some overseas countries such as Australia, New Zealand and Singapore.

Question 15
Do you agree to introduce the relevant testing requirements benchmarked
against AS/NZS 4020 to assess the leachability of metals from plumbing
materials for use in the part of an internal plumbing system for supplying wate
for drinking purposes? If disagree, why?
□ Agree

# 3.3. Control of Plumbing Materials for Use in Prescribed Plumbing Works

Disagree, please specify the reason:

39. We now turn to discuss the WA's control of plumbing materials for use in plumbing works. As for prescribed plumbing works, the WA has been controlling through regulatory means the use of plumbing materials by requiring RLP to obtain written permission from the WA prior to the plumbing works, as well as through inspection and approval of completed or altered internal plumbing systems before it can be put into use. In applying for the written permission from the WA, the applicant (currently the RLP and in the future the RPC<sup>22</sup>) shall demonstrate to the satisfaction of the WA that the plumbing materials he intends to use comply with the relevant standards and technical requirements in the WWR before the WA grants the written permission. The installers (currently the RLP and designated persons and in the future the RPC<sup>23</sup>) are responsible for ensuring that the plumbing materials used are those proposed during

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<sup>&</sup>lt;sup>22</sup> See section 2.4.4 in Chapter 2.

<sup>&</sup>lt;sup>23</sup> Ditto

application for written permission from the WA as well as in compliance with the relevant requirements in the WWR, in order to obtain the approval of the WA for the completed or altered internal plumbing systems. To facilitate the process, the WA has put in place through administrative means a General Acceptance ("GA") system to allow suppliers (or other relevant persons) to attest that plumbing materials have been tested as compliant for use in internal plumbing systems (these plumbing materials are hereinafter called "GA products").

### Details of GA system

Under the GA system, the WA will issue a GA Letter to a person (usually the plumbing material supplier) who can demonstrate that a plumbing material has been tested compliant with the relevant standards and technical requirements in the WWR. The applicant has to submit certificates, laboratory type test reports and relevant information demonstrating the compliance to the WA's satisfaction, before the WA issues a GA Letter indicating the suitable usage(s) of the plumbing material in an internal plumbing system. GA Letters are valid for a maximum period of 5 years from the date of issuance. The list of plumbing material types for which the GA system are applicable is at https://www.wsd.gov.hk/filemanager/en/share/pdf/pipes\_and\_fittings\_to\_be\_reported\_in\_wwo1149\_e.pdf

The list will be updated when necessary. Installers (currently the RLP and designated persons and in the future the RPC) applying for written permission from the WA prior to carrying out plumbing works can use the GA letters for demonstration of compliance with the relevant standards and technical requirements in the WWR for the plumbing materials intended to be used in the plumbing works.

40. After the incident of excess lead in drinking water in 2015, which was caused by misuse of wrong types of soldering materials in some of the internal plumbing systems, the WA has imposed a number of new regulatory requirements to strengthen the control on use of plumbing materials in prescribed plumbing works. Among other requirements, the WA has required applicants for written permission to report the types of soldering materials to be used. The WA has also implemented a surveillance programme to further assess the conformity situation of GA products with the relevant requirements in the WWR. Moreover, the WA has tightened up the commissioning requirements for new plumbing systems and introduced a systematic flushing and 6-hour stagnation water sampling test for six health-related metal parameters. So far, the enhanced regulatory requirements are effective in controlling the compliance of plumbing materials used in prescribed plumbing works.

### 3.4. Control of Plumbing Materials for Use in Minor Plumbing Works

- 41. As discussed in section 2.3 in Chapter 2, minor plumbing works are of low risk to drinking water safety and water use efficiency. Therefore, they are exempted from the regulatory requirements on the use of plumbing materials in prescribed plumbing works mentioned in paragraphs 39 and 40 above, except that the installers (persons who personally carry out the works) are still responsible for ensuring the plumbing materials used are in compliance with the standards and technical requirements in the WWR and the failure to comply with which is an offence.
- 42. Installers (who may be members of the general public) will usually procure the plumbing materials from the retail market for minor plumbing works. Realizing the importance of using compliant plumbing materials in minor plumbing works, the WA has been promoting a wider use of GA products which have greater assurance to compliance. The administrative measures currently in place include publishing a public directory of GA products in the WSD website and encouraging plumbing material suppliers to affix a label to the packing of the GA products and/or at the display counter in retail outlets for identification of their GA status by the public. We consider that, with these administrative measures in place, the public have sufficient information on whether a product is a GA product in the retail market. Although there are products not having been attested compliant under the GA system ("non-GA products") in the retail market<sup>24</sup> to date, there is no evidence indicating that they have adverse effect on drinking water safety<sup>25</sup>. Based on the above, we consider that there is currently no need to step up the regulatory control of plumbing materials for use in minor plumbing works to avoid imposing excessive compliance burdens on the plumbing industry and the society.
- 43. In fact, many plumbing material suppliers supply GA products to the plumbing contractors for prescribed plumbing works and concurrently sell them in retail outlets. The WSD has rolled out a voluntary registration scheme for retail outlets that supply GA products and has been encouraging and inviting shops to join the scheme in order to facilitate the purchase of GA products by the public.

<sup>&</sup>lt;sup>24</sup> According to a study commissioned by the WSD, it is estimated that about 30% of taps, mixers and valves, and 90% of pipes and pipe fittings, and soldering and brazing materials, in the retail market are attested compliant under the GA system.

<sup>&</sup>lt;sup>25</sup> The WSD has conducted an ad-hoc study to gauge the effect of non-GA products in the retail market on drinking water safety. A total of 34 non-GA products (8 taps, 5 copper pipes, 18 copper alloy pipe fittings and 3 valves) were purchased from several retail shops randomly for the metal leaching test in accordance with joint Australian/New Zealand standard AS/NZS 4020 (see section 3.2 above), and they all passed the test.

Question 16		
Do you agree that we should continue with the administrative measures to		
facilitate the public to purchase GA products in the retail market for use in		
minor plumbing works, as a measure to safeguard drinking water safety and		
water use efficiency? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

# CHAPTER 4 - CONTROL OF DRINKING WATER DISPENSERS AND FOUNTAINS

### 4.1. Introduction

Drinking water dispensers and fountains ("**DWDF**") are commonly installed in restaurants, schools, sport centres and pantries, etc., to supply water for direct drinking purpose. These DWDF are either connected directly to internal plumbing systems or stand-alone units (i.e. units not connected to internal plumbing systems and water is fed to the units by other means, such as via flexible hoses from taps). DWDF of the former type are regarded as water using apparatuses under the WWR<sup>26</sup>.



Figure 4: Examples of DWDF

45. Under the current regulatory regime, a water using apparatus requires permission from the WA before it can be connected to an internal plumbing system. The objective of such control is to prevent backflow of water from the apparatus into the internal plumbing system and the public water supply system in the upstream. Such backflow of water, in case of contamination of the water inside the apparatus, may cause drinking water safety issue in the public water supply upstream.

# 4.2. Control of Drinking Water Dispensers and Fountains

46. Currently, no standards or requirements on DWDF are specified in the WWO or WWR, or in any other ordinances or regulations in Hong Kong. In 2016, the WSD conducted a study in respect of wall-mounted hot water dispensers and found that some of them were fabricated using leaded solder, adversely affecting drinking water safety. The WSD has since then developed and promulgated guidelines on the purchase of wall-mounted hot water dispensers for ensuring safety of drinking water in them. The

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<sup>&</sup>lt;sup>26</sup> Regulation 24 of the WWR.

WSD has also issued an advice to local suppliers and manufacturers of wall-mounted hot water dispensers reminding them to only use components of low lead content for fabricating the dispensers and avoid leaded soldering materials. In a follow-up study by the WSD in 2017, it was found that all wall-mounted hot water dispenser samples were able to pass the test on the lead content of the drinking water in them.

- A7. Nonetheless, since DWDF have become more frequently installed in internal plumbing systems, and water is commonly consumed directly from them, we consider that clearly specifying the requirements in the legislation for these apparatuses for safeguarding the safety of drinking water conveyed by them is necessary.
- 48. We propose that DWDF connected directly to an internal plumbing system shall comply with a metal leaching requirement benchmarked against recognized standards or specifications, such as WaterMark Technical Specification WMTS-105 published by the Australian Building Codes Board<sup>27</sup>. As stand-alone type DWDF are not connected to internal plumbing systems, regulation of them is outside the scope of the WWO or WWR.
- 49. It will be the responsibility of installers (who will be the RPC and the person who personally installs DWDF for prescribed plumbing works and minor plumbing works respectively) to ensure that DWDF connected to the internal plumbing systems comply with the requirement proposed in paragraph 48 above, failing which they may commit the offence of carrying out plumbing works not complying with the requirements in the WWO and WWR. In addition, we will include DWDF in the GA system. We will also take the action discussed in paragraph 43 in Chapter 3 to further facilitate the public to purchase DWDF that are GA products.

# Ouestion 17 Do you agree to regulate DWDF connected to internal plumbing systems under which they should comply with metal leaching requirement to safeguard the safety of drinking water conveyed by them? If disagree, why? □ Agree □ Disagree, please specify the reason: \_\_\_\_\_\_\_

<sup>&</sup>lt;sup>27</sup> WMTS-105 is a technical specification under WaterMark certification of the Australian Building Codes Board for appliances similar to DWDF.

# CHAPTER 5 - SAFEGUARDING DRINKING WATER SAFETY AT CONSUMERS' TAPS

### 5.1. Introduction

Safeguarding drinking water safety is one of the prime objectives of the WWO. Arising from the increasing public concern over drinking water safety at taps, the WA has implemented a series of enhancement measures to control internal plumbing systems so as to safeguard drinking water safety. However, there is no provision in the legislation for any drinking water standards and insufficient provisions to enable the WA to discharge his duty efficiently in this aspect. The Hong Kong Drinking Water Standards will be introduced in the legislation as a legal basis to define the drinking water quality.

# **5.2.** Empowering Water Authority to Enter Premises for Ascertaining Drinking Water Safety

Currently, the WA is not empowered under the WWO to enter premises for the purpose of ascertaining the drinking water quality in the internal plumbing systems. As such, we propose providing the WA with the power of entry into premises to take water samples for ascertaining drinking water quality when there is a concern over the drinking water safety thereof. The WA will only enter premises in case of urgency.

Question 18		
Do you agree to empower the WA to enter premises in case of urgency to		
ascertain drinking water quality in internal plumbing systems when there is a		
concern over drinking water safety thereof? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

52. Where there is a drinking water quality problem identified, the WA would conduct preliminary investigation so as to identify the cause of the problem and the parties responsible for the maintenance of the internal plumbing system. However, the WA is not empowered under the WWO to require the responsible parties to investigate the exact area that causes the problem and ascertain the works required to rectify the problem. Therefore, we propose providing the WA with the power to issue

a notice to the party who is responsible for the maintenance of the internal plumbing systems (i.e. the Registered Agent ("RA") or Registered Consumer ("RC")) to carry out investigation and necessary rectification works to resolve the drinking water quality problem in internal plumbing systems within a reasonable period with a view to safeguarding drinking water safety.

Question 19
Do you agree to empower the WA to issue a notice requiring the party who is responsible for the maintenance of the internal plumbing systems to investigate and rectify the drinking water quality problem in internal plumbing systems? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:
5.3. Prohibiting Any Person from Contaminating Drinking Water in Internal Plumbing Systems
Other than the parties regulated under the proposed regulatory regime or plumbing works described in Chapter 2, there is no expressed requirement in the current WWO to prohibit any other persons from contaminating drinking water in internal plumbing systems. We propose that any person who does any wilful act causing contamination to drinking water in an internal plumbing system shall be guilty of an offence. The maximum penalty for contravention is proposed to be a fine at level (\$100,000) and imprisonment of 1 year to reflect the seriousness of the offence.
Question 20  Do you agree that any person who does any wilful act causing contamination to drinking water in an internal plumbing system shall be guilty of an offence? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:

Que	estion 21
If y	ou agree to Question 20, do you agree that the level of punishment shall be
set	to a maximum fine of level 6 (\$100,000) and imprisonment of 1 year? If
disa	agree, why?
	Agree
	Disagree, please specify the reason:

## **CHAPTER 6 - WATER EFFICIENCY LABELLING SCHEME**

## 6.1. Introduction

To promote water conservation, the WSD has launched a WELS since 2009 and implemented it in phases for six types of plumbing fixtures and water-consuming devices (hereinafter collectively referred to as "products of the prescribed WELS Types"), viz. showers for bathing <sup>28</sup>, water taps <sup>29</sup>, washing machines <sup>30</sup>, urinal equipment<sup>31</sup>, flow controllers<sup>32</sup> and water closets<sup>33</sup>. Products registered under the WELS bear water efficiency labels ("WELS labels") showing their water consumption and water efficiency to help consumers choose water efficient products for water conservation. The water efficiency is rated under a grading system according to their flow rates, water consumption or flush volumes (whichever applicable) in which Grade 1 is the most water efficient whereas Grade 4 is the least water efficient.



Figure 5: WELS labels (e.g. shower for bathing)

<sup>&</sup>lt;sup>28</sup> The term "showers for bathing" covers showerheads installed to fixed arms/concealed pipes in the wall or ceiling, showerheads installed to pivotal arms and hand-held showers.

<sup>&</sup>lt;sup>29</sup> The term "water taps" covers the mixing or non-mixing type water taps installed at bathroom/toilet washing basins and pantry/kitchen sinks. Water taps equipped with automatic sensing open/close device or automatic closing mechanism are also included. However, water taps installed at bath tub/shower, any system, machinery and devices such as irrigation system, washing machines, water dispensers, etc. which serve for bathing/operational use, are excluded.

<sup>&</sup>lt;sup>30</sup> The term "washing machines" covers the washing machines that have washing capacity not exceeding 10 kilograms for household use. The washing machines that have larger capacity or for industrial use or have no spin extraction capability or use non-electric energy sources are excluded.

<sup>&</sup>lt;sup>31</sup> The term "urinal equipment" covers the urinals with traps and automatic/manual urinal flushing valves. Those urinals with traps coupled with urinal flushing valves to form a combination or urinal suites (urinals with traps equipped with integrated sensing type flushing valves) are also included. However, urinals without integral or external traps, trough urinals, flushing cistern as well as waterless urinals are excluded.

<sup>&</sup>lt;sup>32</sup> Applicable to flow controllers installed to use with water taps or showers for bathing.

The term "water closet" covers toilet suite (one-piece water closet pan); water closet pan only; water closet cistern only; and a combination of a water closet pan and cistern (close-coupled suite).

55. Under the WELS, products of the prescribed WELS Types complying with the relevant requirements could be registered with the WA for applying WELS labels. The WA will vet the laboratory test report and relevant information submitted by the applicant voluntarily to confirm compliance with the relevant requirements before issuing a registration certificate and WELS label.

## **6.2.** Current Situation

- 56. The use of water efficient products of the prescribed WELS Types could help water conservation and a labelling scheme showing their water consumption and water efficiency would help consumers choose the water efficient products. Moreover, other jurisdictions such as Australia, Singapore, Taiwan and China have been progressively migrating their water efficiency labelling schemes from voluntary to mandatory to drive the use of the water efficient products to achieve water conservation.
- We propose migrating the WELS from voluntary participation to mandatory implementation. We propose that the upper tier suppliers, such as importers and local manufacturers, shall have the legal responsibility to register their products of the prescribed WELS Types under the WELS for sale in Hong Kong. Besides, lower tier suppliers, such as distributors and retailers who acquire the products from the upper tier suppliers shall have the legal responsibility to ensure that the products they sell have been registered under the WELS and affixed with WELS labels either on the products or their individual packages before putting them for sale in the retail outlets.

Que	estion 22
Do	you agree to require the mandatory provision of WELS labels showing the
wat	er consumption and water efficiency grades of the products of prescribed
WELS Types on the products or their individual packages to facilitate consumer	
sele	ction in the retail outlets? If disagree, why?
	Agree
	Disagree, please specify the reason:

## **6.3.** Proposed Transitional Period

- 58. The WSD has launched the WELS since 2009. To encourage the use of water efficient products for water conservation, the WA has required the use of showers for bathing, water taps and urinal equipment of prescribed water efficiency grades in designated part of premises in prescribed plumbing works since 2018<sup>34</sup>. The same requirements for the use of water closets has been promulgated in 2019 <sup>35</sup>. Notwithstanding, given the current nature of voluntary participation, there are still many products of the prescribed WELS Types available in the market not yet registered under the WELS.
- 59. To allow adequate time for the suppliers to have their products registered under the scheme, a transitional period of 2 years is proposed after enactment of the WWO provisions for the mandatory implementation of the WELS.

Question 23	
Do you agree to provide a transitional period for the products of prescribed WELS Types to be registered under the WELS after enactment of the WWO provisions for the mandatory implementation of the WELS? If disagree, why?	
☐ Agree, with a transitional period of 2 years/ [ ]# years after enactment of the WWO provisions for the mandatory implementation of the WELS	
☐ Disagree, please specify the reason:	
*Delete as appropriate	

60. After the amended WWO comes into force, the WA will continue maintaining the register showing the details of the products of the prescribed WELS Types registered and regularly update the registration records in the WELS register to be uploaded to the WSD's website for public information. The WA will randomly select the registered products of the prescribed WELS Types for testing on their conformance with the water

<sup>&</sup>lt;sup>34</sup> WSD Circular Letter No. 2/2017 promulgated the requirements with a grace period of 12 months starting from 1 February 2017. Under the arrangement, licensed plumbers are required to use showers for bathing, water taps and urinal equipment registered under the WELS and of the prescribed water efficiency grades in plumbing works for kitchens of domestic premises as well as toilets and bathrooms of all premises. The requirements have been fully implemented since 1 February 2018.

<sup>&</sup>lt;sup>35</sup> WSD Circular Letter No. 11/2019 promulgated the requirements with a grace period of 12 months starting from 1 December 2019. Under the arrangement, licensed plumbers are required to use water closets registered under the WELS and of the prescribed water efficiency grades in plumbing works for toilets of all premises.

efficiency grades as well as other relevant technical requirements of the WA under the WELS. The WA may remove a model of product from the WELS register if the WA has reasonable grounds to believe that the model is non-conforming. The supplier who has initially applied to have the concerned model registered, normally the importer or local manufacturer, will be notified and needed to return the corresponding registration certificate to the WA. For the sake of transparency to the consumers in choosing water efficient products, the WA will make an announcement (e.g. press release and/or post on the WSD website) to inform the general public of the removal of the concerned model from the WELS register. Suppliers such as distributors and retailers should ensure that the products of the prescribed WELS Types they sell are registered under the WELS.

61. In addition, the WA will carry out surveillance inspections of the products of the prescribed WELS Types on their compliance with the requirements under the legislation. We propose that (i) sale of products of the prescribed WELS Types not registered under the mandatory WELS in Hong Kong; or (ii) unauthorized use of WELS label will be an offence with a maximum penalty of fine at level 4 (\$25,000). We also propose empowering the WA to obtain information or documents relating to the origin of the unregistered products for investigating whether there is sufficient evidence on the upper tier suppliers contravening sale of those unregistered products in Hong Kong, and taking prosecution action on them, apart from the lower tier suppliers.

Question 24		
Do you agree that the penalty for (i) sale of products of the prescribed WELS		
Types not registered under the mandatory WELS in Hong Kong; or (ii)		
unauthorized use of WELS label should be set to a maximum fine at level 4		
(\$25,000)? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

As for the sale of a product of the prescribed WELS Types registered under the mandatory WELS in the retail outlets but without affixing a WELS label or affixing a non-compliant WELS label, we consider that this non-compliance of the labelling requirement will be a much less serious offence and a lower penalty should be set. Therefore, we propose that the supplier who commits such offence will be liable to a fixed penalty of \$1,000.

Do you agree with the imposition of a fixed penalty of \$1,000 on suppliers for sale of a product of the prescribed WELS Types registered under the mandatory WELS in the retail outlets but without affixing a WELS label or affixing a non-compliant WELS label? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Besides, the WA will continue the public education and promotion to increase the public awareness of choosing water efficient products for water conservation. The market force may drive the suppliers to sell more water efficient products in the retail outlets. With reference to the experience of other jurisdictions as mentioned in paragraph 56 above, minimum water efficiency requirements have been imposed such that products having flow rates, water consumption or flush volumes (whichever applicable) greater than the prescribed limits are not permitted to be supplied or sold in the jurisdiction to enhance water conservation. We will monitor the use of water efficient products after the mandatory implementation of the WELS comes into force to see if such more stringent measure should be implemented.	
Question 26	
Do you agree that we should monitor the use of water efficient products after the mandatory implementation of the WELS under the WWO comes into force to see if the more stringent measure should be implemented to impose the minimum water efficiency requirements for the products of the prescribed WELS Types sold in Hong Kong? If disagree, why?  □ Agree	
☐ Disagree, please specify the reason:	

**Question 25** 

## CHAPTER 7 - MAINTENANCE AND RECTIFICATION OF WATER LOSS IN COMMUNAL PART OF INTERNAL PLUMBING SYSTEM

## 7.1. Maintenance Responsibility of the Communal Service<sup>36</sup>

- Onder the current WWO, the maintenance responsibility of the communal service is undertaken by a person or company registered with the WA as RA. For a new development, the company for the development (established by the developer) will normally register as the RA to apply for water supplies to the development. Some of them may pass on the maintenance responsibility of the communal service to the property manager of the development, who would register as the RA to continue the undertaking to maintain the communal service, after all the units of the development have been sold. However, many of them may simply dissolve the company leading to the general situation that there is no longer RA undertaking the maintenance responsibility for the communal service.
- Moreover, for existing developments, even if there is a property manager registered as the RA for the communal service, it is still necessary for it to raise money from individual units of the development for carrying out the maintenance and repair works required for the communal service. Since the current WWO has not required that the property owners of individual units shall have the ultimate maintenance responsibility if the RA cannot perform the duty, it is not infrequent that consensus among individual units cannot be reached and hence no funding is available for carrying out the maintenance and repair works. It results in the situation that many communal services are not properly maintained causing serious water loss.
- Under the current WWO, if there is water loss in the communal service, the WA may suspend the water supply to stop the water loss and prevent waste of water<sup>37</sup>. If there are leaks in the communal service, the WA may issue a repair notice to require the RA to carry out the repair works and rectify the water loss<sup>38</sup>, failing which the water supply may be disconnected<sup>39</sup>.

<sup>&</sup>lt;sup>36</sup> The communal service is the communal part of the internal plumbing systems used in common by multiple RCs.

<sup>37</sup> Section 9(b) of the WWO

<sup>38</sup> Section 16(1)(a) of the WWO

<sup>39</sup> Section 10(e) of the WWO

- 67. However, based on experience, both measures have practical difficulties in implementation. Suspension or disconnection of water supply to the communal service will seriously affect the daily lives of large number of RCs served by the communal service usually for a prolonged period of time and thus will seldom be resorted to. This results in inaction of the relevant parties to carry out repair works for the communal service with water loss.
- 68. Therefore, there is a need to review the maintenance responsibility of communal service under the WWO to make sure that there will always be a party responsible for the maintenance of the communal service.
- 69. We propose amending the WWO to the effect that if there is no RA or if in the opinion of the WA the RA cannot perform the maintenance duties, while the RA (if present) shall continue to be responsible for the maintenance of the communal service, the maintenance responsibility of the communal service shall be taken up by the incorporated owners ("IO") or the deed of mutual covenant ("DMC") manager<sup>40</sup> or, if there is no IO or DMC manager, all the property owners of the development.

## **Question 27**

Do you agree with the proposal to amend the WWO such that if there is no RA or if in the opinion of WA the RA cannot perform the maintenance duties, while the RA (if present) shall continue to be responsible for the maintenance of the communal service, the maintenance responsibility of the communal service shall be taken up by the IO or DMC manager, or if there is no IO or DMC manager, all the property owners of the development? If disagree, why?

Agree	
Disagree, please specify the reason:	

<sup>&</sup>lt;sup>40</sup> DMC manager is the person who is specified in the deed of mutual covenant to manage the building as defined in Section 34D(1) of Building Management Ordinance (Cap. 344).

## 7.2. Proposed Communal Water Loss Charge for Water Loss in the Communal Service

- 70. Fresh water consumed is measured by water meters for all individual customers in Hong Kong. Based on the monitoring result of the WSD in recent years, there is a significant discrepancy between the water supplied to individual development and the total consumption of consumer meters within the development representing a significant water loss through the private water supply systems, which may be caused by leakage through defective communal services, legitimate uses in the communal service such as cleaning or flushing of the communal water tanks, or inappropriate uses such as illegal extension of the communal service for car washing, toilet flushing or irrigation.
- 71. In order to monitor water loss in communal service, the WSD has been installing master meters ("**MMs**") close to lot boundaries of private developments to measure the total amount of fresh water supplied to the developments.
- 72. Since 2006, all new developments with more than one building block are required to provide MMs within the developments next to the lot boundaries. For pre-2006 developments, installation of MMs within or outside private lot boundaries are being carried out by the WSD progressively. The WSD targets to complete installation of MMs in about 550 numbers of large housing developments (each with more than 1,000 household flats) by end 2023. Upon completion of the installation programme in 2023, about 70% of consumers in Hong Kong will be covered by MMs. The WSD will assess the need for and prioritize the installation of MMs for the remaining pre-2006 developments after 2023.
- 73. Each MM measures the quantity of water supplied by the WSD to a development<sup>41</sup>. The volume of water loss in the communal services can be assessed by deducting the aggregated water consumption of all RCs as measured by their water meters (i.e. consumer meters) and the legitimate uses of water through the communal service from the quantity of water supplied to the development measured by the MMs.

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<sup>&</sup>lt;sup>41</sup> Individual master meters are provided for potable water supply, fire fighting water supply and temporary flushing fresh water supply (if applicable) in a development.

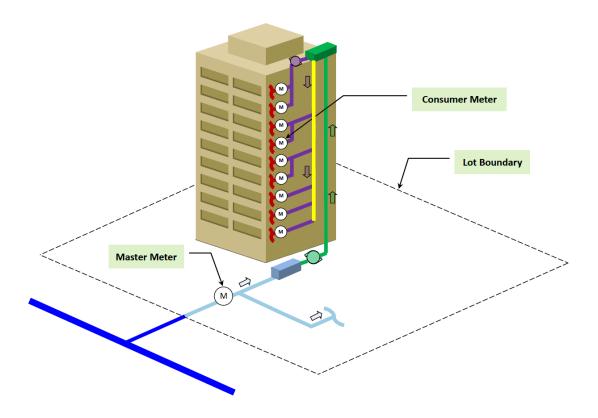


Figure 6: Typical internal plumbing system

- 74. In order to encourage early rectification of water loss in communal service, we propose imposing a communal water loss charge for the water loss through communal services. Since it would be very difficult to achieve zero water loss in a water supply system and that faulty individual consumer meters or accuracy of water meters<sup>42</sup> may also affect the assessment of water loss in the communal services, it is necessary to determine an appropriate water loss level that each development should achieve beyond which the communal water loss charge will be imposed. This water loss level is referred to as "Actionable Level" which is set as a percentage of the total quantity of water supplied to the development measured by the MMs.
- 75. The WSD will use the MMs to monitor communal water loss in developments and in case communal water loss exceeds the Actionable Level the WA may issue a notice requiring the party responsible for maintenance of the communal services to carry out investigation and repair (see section 7.1 above and section 7.4 below). We propose that a fixed grace period shall be allowed for the investigation and rectification works before imposition of the water loss charge. A three-tier grace periods of 4

<sup>&</sup>lt;sup>42</sup> Regulation 30(3) of the WWR stated that a meter shall be deemed to register correctly if its accuracy does not exceed 3% above or below the correct amount.

months, 8 months and 12 months are proposed depending on the scale and complexity of the communal services and the site constraints. The WSD will make reference to a set of objective criteria to determine the grace period for each development and will consider granting extension for special circumstances where there are difficulties beyond the control of the responsible party. Water loss charge will be imposed when the water loss assessed by the WA still exceeds the Actionable Level upon expiry of the grace period. In case the responsible party fails to rectify the water loss for a prolonged period of time, the WA may carry out the repair works and seek for reimbursement of relevant repair cost from the party responsible for maintenance of communal service. Any outstanding payment of reimbursement of cost of relevant repair works may lead to an encumbrance under the Land Registry.

- 76. We propose amending the WWO to empower the WA to impose a water loss charge based on the amount of water loss in communal services assessed by the WA. The charge will continue until the water loss is reduced to below the Actionable Level.
- The party responsible for the maintenance of the communal service will be liable for the payment of the communal water loss charge. If the proposal in section 7.1 above is adopted, the RA will receive a bill for communal water loss charge. In the absence of an RA or the WA considers that the RA cannot perform the maintenance duties, the bill will be issued to the IO or DMC manager, if present. If there is no RA, IO or DMC manager, the WA will issue a bill to each of the property owners of the development with the communal water loss charge apportioned in accordance with the management shares or, in the absence thereof, the undivided shares of the development.

## **Question 28**

In order to encourage early rectification of the water loss problem in communal service, do you agree with the introduction of communal water loss charge for the water loss in communal service when the party responsible for maintenance of communal service fails to rectify the water loss problem upon expiry of the grace period? If disagree, why?

Agree	
Disagree, please specify the reason:	
	Agree Disagree, please specify the reason:

Question 29	
What is your view on the proposed percentage of assessed water loss in communal services (i.e. the Actionable Level) above which the water loss charge shall be imposed?	
☐ The Actionable Level shall be set at 15% of the total quantity of water supplied to the development measured by the MMs	
☐ Other suggestion:%	
Question 30	
Do you agree to adopt the proposed three-tier grace periods of 4 months, 8 months and 12 months before imposition of the communal water loss charge? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 31	
If the WA issues a bill to each of the property owners of the development for the communal water loss charge, do you agree that the charge shall be apportioned in accordance with the management shares or, in the absence thereof, the undivided shares of the development? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

# 7.3. Regular Announcement of Developments with Excessive Level of Communal Water Loss

78. In order to make known to the public the situation of communal water loss charging due to excessive level of communal water loss in developments, we propose introducing regular announcement of the names of developments with the amount of water loss in the communal service exceeding the Actionable Level after the grace period has lapsed.

Question 32
Do you agree with the regular announcement of developments with the amount of water loss in the communal service exceeding the Actionable Level after the grace period has lapsed? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:
7.4. Investigation of Cause of Water Loss in Communal Service
79. For underground/concealed communal service where the water loss is usually hidden and not noticeable by visual inspection, it is necessary to carry out detailed investigation to identify the actual causes and locations of the water loss to ascertain the required rectification works. It will be difficult and not appropriate for the WA to enter into private lands to carry out extensive investigation which may take considerable time and cause significant disturbance to private properties.
80. We propose empowering the WA to issue a notice to require the party who is responsible for the maintenance of the communal service as identified according to section 7.1 above to carry out investigation and necessary rectification works to resolve the water loss problem of underground/concealed communal service. If necessary, the WSD may provide technical advice on step tests to identify the sections of underground/concealed communal service with leakage and engagement of leak detection specialists. Riding on this proposal, we also recommend that the WA be given the power to issue such a notice to the responsible parties to investigate and rectify any problems in relation to weak pressure or inefficiency of water supply of a communal service.
Question 33  Do you agree to empower the WA to issue a notice requiring the responsible parties to investigate and rectify the hidden water loss in communal service? If disagree, why?
□ Agree
☐ Disagree, please specify the reason:

Question 34		
Do you agree to empower the WA to issue a notice requiring the responsible parties to investigate and rectify any problem in relation to weak pressure or inefficiency of water supply of a communal service? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		
7.5. Penalty for Non-compliance with Repair Notice		
In view of the practical difficulties in exercising the power to disconnect the water supply as a coercion means to rectify water loss as discussed in paragraphs 66 and 67 above, we propose making it an offence for any person who, without reasonable excuse, fails to comply with a repair notice served on him <sup>43</sup> . We propose a maximum penalty of a fine at level 4 (\$25,000) for this offence.		
Ouestion 35  Do you agree that any person who, without reasonable excuse, fails to comply with a repair notice served on him shall be guilty of an offence? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		
Question 36		
If you agree to Question 35, do you agree that the level of punishment shall be set to a maximum fine at level 4 (\$25,000)? If disagree, why?		
□ Agree		
☐ Disagree, please specify the reason:		

The repair notice for a communal service will be served to the persons identified according to section 7.1 above. The repair notice for an inside service or fire service will be served to RC.

## **CHAPTER 8 - OTHERS**

## **8.1.** Water Charge in Sub-divided Units

- 82. According to regulation 47(2) of the WWR, the RC of the inside service (usually the property owner for premises with sub-divided units) can recover the cost of water from the occupiers of the premises (usually the tenants of the sub-divided unit) for the water supplied to them. The cost of water includes water charge and other reasonable costs for supplying water through the inside service to the occupiers, for example the maintenance cost of the inside service. If the tenants of the sub-divided units suspect that their property owners overcharge the water supplied to them, they can report the case to the WA who will carry out investigation. If there is sufficient evidence of overcharging of the water supplied to the tenants, the WA will take prosecution action against the relevant persons. A person who is guilty of an offence under regulation 47 of the WWR shall be liable on summary conviction to a fine at level 3, the current amount of which is HK\$10,000.
- 83. The WA has adopted a proactive approach on the issue of overcharging tenants of sub-divided units for the cost of water supplied to them by conducting investigation into referral cases, conducting proactive inspection of premises with sub-divided units, publishing and distributing posters and leaflets and through the WSD website to help the property owners and tenants of the sub-divided units better understand that overcharging for water is a criminal offence, and suspected cases of overcharging for water shall be reported to the WSD.
- 84. Moreover, the WA will allow setting up separate water account for each tenant of sub-divided unit such that the tenant can pay water charge directly to the WA according to their actual water consumption. According to the prevailing policy of the WSD, property owners or tenants of premises applying for water account should meet relevant requirements, including provision of a proper mailing address for receiving water bills from and communication with the WSD, and the water meters must be installed in the communal areas of the building for meter reading by the WSD staff. Nonetheless, to assist tenants of sub-divided units in applying for separate water account, the WSD has put in place concessionary measures to facilitate their compliance with the relevant requirements, such as allowing them to provide an email address instead of a formal mailing address. Also, if tenants of the sub-divided units cannot find suitable space in the communal areas for installation of the separate water meters, the WSD will consider installing smart water meters within the sub-divided units for remote meter reading by the WSD staff without entering their units.

85. Notwithstanding, there is concern that the current provision in regulation 47(2) of the WWR which allows the charging of cost on top of water charge may provide rooms for the property owners of the premises with sub-divided units to overcharge their tenants for the water supplied to them. Therefore, there is a suggestion that the RC shall only be allowed to recover from the occupiers of his premises the water charge paid to the WA for water consumption but not any other costs. Nevertheless, there is also the view that even if the WWR is amended to allow charging of water charges only, the property owners of the premises with sub-divided units can still charge their tenants the previous charge on water supplied by increasing management fees, rents, etc. if there is no rent control in place and hence it will not be effective to alleviate the financial burden of the tenants of sub-divided units. With the Government setting up the Task Force for the Study on Tenancy Control of Sub-divided Units, it may now be the opportune time to review the provision of regulation 47(2) of the WWR. In addition, there are views that the current penalty level for contravention of regulation 47 of the WWR does not have adequate deterrent effect on overcharging of water supplied to the tenants by property owners of premises with sub-divided units and the penalty level should be raised. In view of the above, the opinions of the public are sought on the water cost that can be recovered by the RC from occupiers and the penalty level for contravention of regulation 47 of the WWR as follows.

Question 37	
Do you agree that the RC should only be allowed to recover from the occupiers	
of the premises the water charge for water consumption paid to the WA but not	
any other costs? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 38	
Do you agree to raise the penalty level for contravention of regulation 47 of the	
WWR from maximum fine at level 3 (\$10,000) to level 4 (\$25,000)? If disagree,	
why?	
□ Agree	
☐ Disagree, please specify the reason:	

## 8.2. Penalty for Unlawful Taking of Water

- 86. There are cases of unlawful taking of water identified from time to time. Examples include unlawful taking of water from Government mains or hydrants for use, taking water from communal inside service without being measured by water meters, drawing water from fire hose reel for washing or cleansing purposes, etc. Pursuant to section 29 of the WWO, unless the WA has given a permission, these acts are regarded as unlawful taking of water and any person performing the acts commits an offence. These acts essentially take the water for use without paying the water charge.
- 87. The current maximum penalty for committing an offence under section 29 is a fine at level 4 (\$25,000), payment of the charge for the water taken, and a further fine of \$1,000 for every day during which the offence continues. Upon review including benchmarking against the penalty levels in similar offences in other legislations such as Theft Ordinance (Cap. 210) and Inland Revenue Ordinance (Cap. 112), it is considered that the current penalty level neither reflects the seriousness of the offence nor imposes sufficient deterrent effect against the taking of water unlawfully and evading the water charge. We therefore propose that the maximum penalty be a fine at level 4 (\$25,000), with a further fine of trebling the charge of the water taken and an imprisonment term for 6 months. The daily fine of \$1,000 for every day during which the offence continues will be removed in view of the trebling of the charge of water taken.
- 88. To further combat the unlawful taking of water, we also propose penalizing those who construct or alter a fire or inside service enabling others to take water unlawfully. Besides, any person who interferes with a water meter in such a manner that causes erroneous measurement of water consumption shall also be penalized. We propose a maximum penalty of a fine at level 4 (\$25,000) and imprisonment for 6 months for these offences.

# Ouestion 39 Do you agree to increase the maximum penalty for the offence of unlawful taking of water under section 29 of the WWO to a fine at level 4 (\$25,000) plus trebling the charge of water taken and imprisonment for 6 months? If disagree, why? □ Agree □ Disagree, please specify the reason: \_\_\_\_\_\_

Question 40	
Do you agree that the person who constructs or alters a fire or inside service enabling others to take water unlawfully and the person who interferes with a water meter in such a manner that causes erroneous measurement of water consumption shall be guilty of an offence? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 41	
If you agree to Question 40, do you agree that the level of punishment shall be set to a maximum fine at level 4 (\$25,000) and imprisonment for 6 months? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

### 8.3. **Conversion to Salt Water for Flushing**

89. Using salt water for flushing is one of the key measures to conserve the precious fresh water resources. The WA has expanded the salt water supply coverage to 85% of the population and continued the planning for extension of the use of salt water for flushing whenever it is economically justified. For areas where salt water supply is not available at the moment, as an interim measure, the WA will supply fresh water for flushing on a temporary basis. When granting the approval of fresh water for flushing in the premises, the WA would advise the RCs that they should convert to salt water flushing when the salt water supply has become available. If the RCs refuse or do not take action to comply, the WA will consider formally withdrawing the approval to use fresh water for flushing. As a last resort, the WA has the option of disconnecting the flushing supply<sup>44</sup> if the RCs continue to use fresh water for flushing after the approval is withdrawn.

<sup>44</sup> Section 10(g) of the WWO

- 90. However, based on experience, such coercion measures have practical difficulties in implementation. If the WA withdraws the approval to use fresh water for flushing but the occupiers continue to use it, the occupiers and the owners of the relevant premises commit an offence<sup>45</sup> and are liable to a maximum fine at level 3 (\$10,000). In the case of multi-storey buildings or sizeable establishments, a large number of occupiers and owners are at risk of committing an offence and the WA has to deploy huge resources for effective enforcement. With regard to disconnection of flushing supply to the premises, there would be hygiene problems and serious inconvenience to a large number of occupiers usually for a prolonged period of time. Thus, there is an inherent difficulty to resort to this option.
- 91. In view of the above practical difficulties, we consider it effective if we can introduce financial disincentive scheme to those non-compliant RCs who have refused to convert to salt water flushing. The current charge rate for fresh water for flushing (per 4 month period) is free for the first 30 cubic meters and \$4.58 per cubic meter for the remainder; while salt water for flushing is free of charge. We propose that if the RCs fail to comply within a reasonable time, their flushing water consumption will be charged at the highest rate for fresh water supply for domestic purposes (i.e. \$9.05 per cubic meter of consumption presently) without any free allowance. If the situation persists for a prolonged period of time, the WA will consider withdrawing the approval to use fresh water for flushing and disconnecting the flushing supply.

# Ouestion 42 Do you agree that if the RCs fail to comply with the WA's request to convert to salt water for flushing within a reasonable time, their flushing water consumption will be charged at the highest rate for fresh water supply for domestic purposes (i.e. \$9.05 per cubic meter of consumption presently) without any free allowance? If disagree, why? □ Agree □ Disagree, please specify the reason: \_\_\_\_\_\_\_

<sup>45</sup> Regulation 12(1) of the WWR

## **APPENDIX A – RESPONSE FORM FOR CONSULTATION**

Please send this Response Form to us <b>on or before 3 February 2021</b> by one of these means:				
Mail:	Legislative Review Unit,			
	Water Supplies Department			
	46/F, Immigration Tower,			
	7 Gloucester Road,			
	Wan Chai, Hong Kong			
E-mail:	LR_consultation@wsd.gov.hk			
Facsimile:	(+852) 2520 3256			
This is a  ☐ corporate response (representing the views of a group or an organization).				
☐ individual re	sponse (representing the views of an individual).			
Name / Name of orga	anisation (optional):			
	☐ general public ☐ trade practitioner			

## **CONSULTATION QUESTIONS**

## Chapter 2 – Regulation of Plumbing Works

<b>Question 1</b> Do you agree to maintain the current regulatory framework that minor plumbing works can be carried out by any persons? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 2	
Do you agree that the project proponent should be required to ensure that the	
prescribed plumbing works are carried out by a qualified plumbing contractor?  If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 3	
Do you agree that the penalty proposed for the project proponent contravening	
the relevant provisions in engaging qualified plumbing contractor to carry out	
the prescribed plumbing works should be set to a maximum fine at level 6 (\$100,000)? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

Question 4	
Do you agree not to regulate the Designer for prescribed plumbing works? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 5	
Do you agree that a person holding a Grade I LP qualification is sufficient to take up the role of an AR of RPC to manage the plumbing works? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 6	
Do you agree to include mandatory continuous training for LPs as one of the LP licence renewal requirements? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

Do :	Question 7 Do you agree that only RPC should be allowed to carry out prescribed plumbing works and should be responsible for the compliance of the prescribed plumbing works with technical requirements of the WA and the statutory requirements of the WWO and WWR? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	
	(You may still provide responses to Questions 8 to 14 in this Chapter assuming that RPC system is pursued.)	
Do :	you agree that the current liability of the RLP and designated person under current WWO and WWR can be released under the RPC system? If agree, why?	
	Agree	
	Disagree, please specify the reason:	
Do com mai	you agree that if an offence committed by an RPC is proved to have been mitted with the consent or connivance of the key personnel or a senior nager concerned in the management of the RPC, that person shall also be lty of the offence? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	

Que	Question 10	
to di fine	Oo you agree that in case of non-compliance with technical requirements related of drinking water safety, the RPC should be liable on conviction to a maximum one at level 6 (\$100,000) and subject to disciplinary actions upon convicted by my court? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	
Que	stion 11	
relat	Do you agree that in case of non-compliance with technical requirements not related to drinking water safety, the RPC should be subject to disciplinary actions instead of being liable to an offence? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	
	stion 12	
	ou agree with the proposed one-off transitional arrangement for securing cient ARs eligible for supervising large-scale prescribed plumbing works?	
	sagree, why?	
	Agree	
	Disagree, please specify the reason:	

Question 13	
Do you agree that the following requirements should be imposed on large-scale prescribed plumbing works? If disagree, why?	
(1) RPC to provide a site supervision team	
(2) RPC to appoint a key person with higher qualification to lead the site supervision team	
☐ Agree (may tick more than one box)	
☐ RPC to provide a site supervision team	
☐ RPC to appoint a key person with higher qualification to lead the site supervision team	
☐ Disagree, please specify the reason:	
Question 14	
Do you agree that the above requirements are not necessary to be applied on small-scale prescribed plumbing works? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Do you agree that the above requirements are not necessary to be applied on small-scale prescribed plumbing works? If disagree, why?  □ Agree	

## Chapter 3 – Control of Plumbing Materials

<b>Question 15</b>	
Do you agree to introduce the relevant testing requirements benchmarked against AS/NZS 4020 to assess the leachability of metals from plumbing materials for use in the part of an internal plumbing system for supplying water for drinking purposes? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 16	
Do you agree that we should continue with the administrative measures to facilitate the public to purchase GA products in the retail market for use in minor plumbing works, as a measure to safeguard drinking water safety and water use efficiency? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

## Chapter 4 – Control of Drinking Water Dispensers and Fountains

Question 17	
Do you agree to regulate DWDF connected to internal plumbing systems under which they should comply with metal leaching requirement to safeguard the safety of drinking water conveyed by them? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Chapter 5 – Safeguarding Drinking Water Safety at Consumers' Taps	
Question 18	
Do you agree to empower the WA to enter premises in case of urgency to ascertain drinking water quality in internal plumbing systems when there is a concern over drinking water safety thereof? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

Que	Question 19	
resp and	you agree to empower the WA to issue a notice requiring the party who is ponsible for the maintenance of the internal plumbing systems to investigate I rectify the drinking water quality problem in internal plumbing systems? lisagree, why?	
	Agree	
	Disagree, please specify the reason:	
Que	estion 20	
drir	you agree that any person who does any wilful act causing contamination to nking water in an internal plumbing system shall be guilty of an offence? If agree, why?	
	Agree,	
	Disagree, please specify the reason:	
Que	estion 21	
set	If you agree to Question 20, do you agree that the level of punishment shall be set to a maximum fine of level 6 (\$100,000) and imprisonment of 1 year? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	

## Chapter 6 – Water Efficiency Labelling Scheme

Question 22	
Do you agree to require the mandatory provision of WELS labels showing the water consumption and water efficiency grades of the products of prescribed WELS Types on the products or their individual packages to facilitate consumer selection in the retail outlets? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 23	
Do you agree to provide a transitional period for the products of prescribed WELS Types to be registered under the WELS after enactment of the WWO provisions for the mandatory implementation of the WELS? If disagree, why?	
☐ Agree, with a transitional period of 2 years/ [ ]# years after enactment of the WWO provisions for the mandatory implementation of the WELS	
☐ Disagree, please specify the reason:	
*Delete as appropriate	

Do Typ una	Question 24 Do you agree that the penalty for (i) sale of products of the prescribed WELS Types not registered under the mandatory WELS in Hong Kong; or (ii) unauthorized use of WELS label should be set to a maximum fine at level 4 (\$25,000)? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	
Do sale WE	Question 25  Do you agree with the imposition of a fixed penalty of \$1,000 on suppliers for sale of a product of the prescribed WELS Types registered under the mandatory WELS in the retail outlets but without affixing a WELS label or affixing a noncompliant WELS label? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	
	estion 26	
	you agree that we should monitor the use of water efficient products after mandatory implementation of the WELS under the WWO comes into force	
	see if the more stringent measure should be implemented to impose the	
min	imum water efficiency requirements for the products of the prescribed	
WE	LS Types sold in Hong Kong? If disagree, why?	
	Agree	
	Disagree, please specify the reason:	

Chapter 7 – Maintenance and Rectification of Water Loss in Communal Part of Internal Plumbing System

Ques	Question 27	
Do you agree with the proposal to amend the WWO such that if there is no RA or if in the opinion of WA the RA cannot perform the maintenance duties, while the RA (if present) shall continue to be responsible for the maintenance of the communal service, the maintenance responsibility of the communal service shall be taken up by the IO or DMC manager, or if there is no IO or DMC manager, all the property owners of the development? If disagree, why?		
	Agree	
	Disagree, please specify the reason:	
_		
Ques	etion 28	
servions the work of contract the work of contract the service of contract the service of the se	der to encourage early rectification of the water loss problem in communal ce, do you agree with the introduction of communal water loss charge for vater loss in communal service when the party responsible for maintenance mmunal service fails to rectify the water loss problem upon expiry of the e period? If disagree, why?	
	Agree	
□ I	Disagree, please specify the reason:	

Question 29	
What is your view on the proposed percentage of assessed water loss in communal services (i.e. the Actionable Level) above which the water loss charge shall be imposed?	
☐ The Actionable Level shall be set at 15% of the total quantity of water supplied to the development measured by the MMs	
☐ Other suggestion:%	
Question 30	
Do you agree to adopt the proposed three-tier grace periods of 4 months, 8 months and 12 months before imposition of the communal water loss charge? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	
Question 31	
If the WA issues a bill to each of the property owners of the development for the communal water loss charge, do you agree that the charge shall be apportioned in accordance with the management shares or, in the absence thereof, the undivided shares of the development? If disagree, why?	
□ Agree	
☐ Disagree, please specify the reason:	

Question 32			
Do you agree with the regular announcement of developments with the amount of water loss in the communal service exceeding the Actionable Level after the grace period has lapsed? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			
Question 33			
Do you agree to empower the WA to issue a notice requiring the responsible			
parties to investigate and rectify the hidden water loss in communal service? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			
Question 34			
Do you agree to empower the WA to issue a notice requiring the responsible			
parties to investigate and rectify any problem in relation to weak pressure or inefficiency of water supply of a communal service? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			

Question 35			
Do you agree that any person who, without reasonable excuse, fails to comply with a repair notice served on him shall be guilty of an offence? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			
Question 36			
If you agree to Question 35, do you agree that the level of punishment shall be set to a maximum fine at level 4 (\$25,000)? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			
Chapter 8 – Others			
Question 37			
Do you agree that the RC should only be allowed to recover from the occupiers of the premises the water charge for water consumption paid to the WA but not any other costs? If disagree, why?			
□ Agree			
☐ Disagree, please specify the reason:			

Que	estion 38		
Do you agree to raise the penalty level for contravention of regulation 47 of the WWR from maximum fine at level 3 (\$10,000) to level 4 (\$25,000)? If disagree, why?			
	Agree		
	Disagree, please specify the reason:		
Que	estion 39		
Do you agree to increase the maximum penalty for the offence of unlawful taking of water under section 29 of the WWO to a fine at level 4 (\$25,000) plus trebling the charge and imprisonment for 6 months? If disagree, why?			
	Agree		
	Disagree, please specify the reason:		
Que	estion 40		
Do you agree that the person who constructs or alters a fire or inside service enabling others to take water unlawfully and the person who interferes with a meter in such a manner that causes erroneous measurement of water consumption shall be guilty of an offence? If disagree, why?			
	Agree		
	Disagree, please specify the reason:		

Question 41  If you agree to Question 40, do you agree that the level of punishment shall be set to a maximum fine at level 4 (\$25,000) and imprisonment for 6 months? If disagree, why?			
	Agree		
	Disagree, please specify the reason:		
Do salt condon	you agree that if the RCs fail to comply with the WA's request to convert to water for flushing within a reasonable time, their flushing water sumption will be charged at the highest rate for fresh water supply for nestic purposes (i.e. \$9.05 per cubic meter of consumption presently) without free allowance? If disagree, why?		
	Agree		
	Disagree, please specify the reason:		

## OTHER VIEWS AND COMMENTS

Please provide other views and comments below:		

(Please use additional sheets if necessary)

## PERSONAL DATA COLLECTION STATEMENT

- 1. It is voluntary for any member of the public to supply his/her personal data upon providing views on the consultation document. Any personal data provided with a response form for consultation will only be used for this consultation exercise. The response forms and personal data collected may be transferred to the relevant Government bureaux, departments or agencies for purposes directly related to this consultation exercise. The relevant parties receiving the data are bound by such purposes in their subsequent use of such data.
- 2. The names and views of individuals and organisations which submit response forms in response to the consultation document (senders) may be published for public viewing after conclusion of the consultation exercise. The DEVB and the WSD may, either in discussion with others or in any subsequent report, whether privately or publicly, attribute comments submitted in response to the consultation document. We will respect the wish of senders to remain anonymous and/or keep the views confidential in relation to all or part of a submission; but if no such wish is indicated, it will be assumed that the sender can be named and his/her views be published for public information.
- 3. Any sender providing personal data to the DEVB and the WSD in the submission will have the right of access and correction with respect to such personal data. Any request for data access or correction of personal data should be made in writing to the contact specified above.



