



水務署
Water Supplies Department

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檔號
Reference (17) in WSD 3318/50 Pt.6

26 September 2017

Distribution: To all Licensed Plumbers and Authorized Persons

Dear Sirs,

WSD Circular Letter No. 9/2017

New Commissioning Requirements for New Plumbing Works

The Water Authority (WA) will implement new commissioning requirements for adoption in newly installed inside services for potable water purposes in unoccupied¹ buildings and village houses. The Water Supplies Department (WSD) has consulted the Technical Committee on Plumbing on these requirements.

2. In essence, the new commissioning requirements will be implemented in two stages. In Stage 1, after issuance of Form WWO 46 Part V and water supply is effected by the WA, in addition to carrying out systematic flushing as required under WSD Circular Letter No. 6/2017, 6-hour stagnation (6HS) water samples are required to be taken for water sampling tests to ensure that the newly constructed potable water inside services have been adequately flushed. The Stage 1 requirements will apply to Form WWO 46 Part IV submitted on or after 15 October 2017. In Stage 2, both systematic flushing of newly constructed potable water inside services and water sampling tests including taking of 6HS water samples have to be satisfactorily completed before water supply will be effected by the WA. The Stage 2 requirements

¹ Re-plumbing works carried out in completely vacated buildings are regarded as new plumbing works for the purpose of this Circular Letter.

will apply to Form WWO 46 Part IV submitted on or after 1 January 2018. Details of the implementation of these two stages are outlined in the ensuing paragraphs.

Stage 1 New Commissioning Requirements

3. Details of the Stage 1 new commissioning requirements are as follows:

(a) 6-Hour Stagnation Water Sampling Tests after Completion of Systematic Flushing

The Licensed Plumber (LP) is required to submit to the WA an undertaking of carrying out the systematic flushing using the form in **Annex I** of this Circular Letter together with Form WWO 46 Part IV. After issuance of Form WWO 46 Part V for effecting water supply by the WA according to the prevailing requirements as stipulated in WSD Circular Letter Nos. 2/2012, 1/2015 and 5/2015, the building contractor/LP is required to carry out systematic flushing for the newly constructed potable water inside services using the protocol stated in paragraph 2 of WSD Circular Letter No. 6/2017. Upon completion of the systematic flushing, the LP is required to submit the record of systematic flushing within one month from the issuance of Form WWO 46 Part V using the form in **Annex II**. The issuance of Form WWO 1005 by the WA will not be affected by the submission of record of systematic flushing and 6HS water sampling tests results set out below.

The building contractor/LP is required to allow the water in the inside service to stagnant for 6 hours for collecting 6HS water samples for water sampling tests from the newly constructed potable water inside services after carrying out the systematic flushing. Details of the 6HS water sampling tests are as follows:

Water Sampling

(i) Metal Parameters

The first drawn *1-litre water sample* is to be taken for the testing of the metal parameters. The acceptance criteria are shown in Table 1.

	Test Parameters	Acceptance Criteria
Metal Parameters	Lead (µg/L)	≤ 10
	Chromium (µg/L)	≤ 50
	Nickel (µg/L)	≤ 70
	Cadmium (µg/L)	≤ 3
	Copper (µg/L)*	≤ 2,000
	Antimony (µg/L)*	≤ 20

Table 1: Acceptance criteria for Metal Parameters

*As Copper and Antimony are metals that may be contained in the plumbing material, they are now introduced in this Circular Letter as two additional parameters.

(ii) Chemical and Physical Parameters

500-ml water sample is to be taken immediately after the first drawn 1-litre water sample for testing of the chemical and physical parameters. The acceptance criteria are shown in Table 2.

	Test Parameters	Acceptance Criteria
Chemical and Physical Parameters	Turbidity (NTU)	≤ 3.0
	Colour (HU)	≤ 5
	pH at 25°C	≥ 6.5 and ≤ 9.2
	Free residual Chlorine (mg/L)	> 0 and ≤ 1.5
	Conductivity at 25°C (µS/cm)	≤ 300

Table 2: Acceptance criteria for Chemical and Physical Parameters

(iii) Bacteriological Parameters

Further 250-ml water sample is to be taken finally immediately after the 500-ml water sample for testing of the E. coli. The acceptance criterion is shown in Table 3.

Test Parameter[#]	Acceptance Criterion
E. coli (cfu/100mL)	0

Table 3: Acceptance criterion for E. coli

[#] Testing of Total coliforms and Heterotrophic Plate Count for 6HS sampling are not required.

The sampling number and locations are shown in **Annex III**.

Retesting arrangement

If any result(s) of the 6HS water sampling test(s) fails to comply with any of the acceptance criteria stated in Table 1 to Table 3 above, the building contractor/LP is required to carry out cleansing and/or disinfection as appropriate for the part(s) of newly constructed potable water inside services represented by the failed sample(s).

If any result(s) of metal parameter(s) fails to comply with the acceptance criteria stated in Table 1, the building contractor/LP is required to carry out, in addition to cleansing and/or disinfection, one more cycle of systematic flushing for the part(s) of newly constructed potable water inside services represented by the failed sample(s).

After that, the building contractor/LP is required to collect 6HS water sample(s) at the same location(s) of failed sample(s) for retesting. Retesting of all parameters in Tables 1 to 3 is required for any failed sample(s) in metal parameters. For any failed sample(s) other than metal parameters, retesting is required for the failed parameter(s) only.

(b) Submission of Test Reports of 6HS Water Sampling Tests

The LP shall arrange with the accredited laboratories or the Water Science Division of Water Supplies Department to send all the test reports for the 6HS water sampling tests directly to the WA via email following the details as set out in paragraph 13 of WSD Circular Letter No. 2/2016 within one month from the issuance of Form WWO 46 Part V. If the test reports are not received by the WA by the prescribed time mentioned above without acceptable justification, all other new plumbing projects undertaken by that LP and covered by WSD Circular Letter No. 4/2017 “Random Inspection of New Plumbing Works during Construction Stage”² will be given a higher weighting of being selected for random inspection.

Stage 2 New Commissioning Requirements

4. Details of the Stage 2 new commissioning requirements are as follows:

² The WSD Circular Letter No. 4/2017 stipulates a one-year pilot scheme for the random inspection of fresh water plumbing works under construction on a risk-based approach with effect from 1 April 2017, which covers new plumbing works in domestic buildings and buildings for sensitive consumers such as hospital, clinic, convalescent home, elderly home, school etc.

(a) Systematic Flushing, Cleansing and Disinfection of Newly Constructed Potable Water Inside Services

After satisfactory completion of final inspection including conducting non-destructive tests for solder joints, the WA will issue the new Form WWO 46 Part V(a). The building contractor/LP is then required to carry out systematic flushing using the protocol stated in paragraph 2 of WSD Circular Letter No. 6/2017. The flushing protocol as detailed in WSD Circular Letter No. 6/2017 will be further modified if necessary based on the experience gained in implementation of Stage 1. (There is no need for the building contractor/LP to wait for the issue of Form WWO 46 Part V(a) before proceeding with the systematic flushing.) During the systematic flushing, the LP is required to keep record of systematic flushing carried out using the form in **Annex II**. The building contractor/LP shall then cleanse and disinfect the potable water inside services according to WSD Circular Letter No. 2/2012.

(b) New Sampling Protocols

To ensure that the newly constructed potable water inside services have been adequately cleansed, disinfected and flushed, water sampling tests shall be carried out according to the following:

Water Sampling

(i) Flushed Sample for Heterotrophic Plate Count (HPC)

After flushing for 2 minutes, *250-ml water sample* is to be taken for HPC testing. The acceptance criterion is shown in Table 4.

Test Parameter	Acceptance Criterion
Heterotrophic Plate Count (cfu/mL)	≤ 20

Table 4: Acceptance criterion for Heterotrophic Plate Count

(ii) 6HS Water Samples for Other Parameters

After the water had been left stagnant for 6 hours in the potable water inside services, water samples shall be taken for water sampling test according to the details and acceptance criteria stated in Paragraphs 3(a)(i) to 3(a)(iii) above.

The sampling number and locations are shown in **Annex III**. [The Annex in WSD Circular Letter No. 5/2015 is to be superseded by **Annex III** of this Circular Letter with effect from the implementation of Stage 2 of the New Commissioning Requirements.]

Retesting of Failed Water Samples

If the result(s) of the HPC water sampling test(s) failed to comply with the acceptance criterion stated in Table 4 above, the building contractor/ LP is required to carry out cleansing and disinfection as appropriate for the part(s) of newly constructed potable water inside services represented by the failed sample(s) and collect water sample(s) at the same location(s) of failed sample(s) for retesting.

Re-testing of 6HS water sample(s) for other failed parameters shall be the same as the retesting arrangement as set out in paragraph 3(a) for Stage 1.

(c) Effect of water supply

The LP shall follow the arrangement as set out in paragraph 3(b) above for the submission of all test reports. When the water test reports indicating all water samples are within the acceptance criteria, and the record of systematic flushing in **Annex II** are received by the WA, the WA will issue Form WWO 46 Part V(b). Upon the issue of Form WWO 46 Part V(b), the WA will effect water supply within seven days after disinfection is carried out at the connection point. Form WWO 1005 will be issued upon request after water supply is effected.

5. In connection with the above requirements, the Form WWO 46 (1/2018) with the revised part highlighted italic is set out in **Annex IV**. The revised Form WWO 46 (1/2018) shall be used for all submissions (Part I, II and IV) with effect from 1 January 2018.

Collecting Water Samples of Longer Stagnation Time for Data Acquisition and Evaluation

6. To enable WSD to evaluate the feasibility of adopting longer stagnation water sampling tests as acceptance criteria in the long run for offering better protection to the consumers, WSD will randomly select new plumbing works to collect longer stagnation samples (or water samples taken from potable water inside services that has been left stagnant for up to 24 hours) at sampling locations selected by WSD for carrying out water sampling test after water supply is effected. WSD will inform building contractor and LP within 2 weeks upon the issuance of the Form WWO 46 Part V(b) if his plumbing works are suitable for collecting such samples. Subject to agreement of the building contractor/LP, they shall make necessary arrangement to facilitate WSD to collect the samples for water sampling tests within one month upon the WSD's notification. All the sampling and testing of longer stagnation samples will be carried out by WSD. The results of the longer stagnation samples are for WSD's reference only.

Flowchart of new commissioning requirements

7. Flowcharts showing the two stages of new commissioning requirements are provided at **Annex V**.

Enquiry

8. Should you have any enquiry, please contact our Engineer/Technical Support(4) at telephone no. 3428 5814.

Yours faithfully,

(Original signed)

(CHAN Chung Kun)
for Water Authority

Encl.
(with Chinese translation)

c.c.

Housing Department (Attn: SM/QM)

Buildings Department

Architectural Services Department

Fire Services Department

The Hong Kong Housing Society

The Hong Kong Institute of Architects

The Hong Kong Institution of Engineers

The Hong Kong Institute of Surveyors

The Chartered Institute of Plumbing and Heating Engineering – Hong Kong Council

Hong Kong Plumbing and Sanitary Ware Trade Association Ltd.

Hong Kong Licensed Plumbing Professionals Association Ltd.

Hong Kong Plumbing General Union

Hong Kong Water Works Professionals Association Ltd.

The Hong Kong Institution of Plumbing and Drainage Ltd.

Plumbing Technology Student Association

The Association of Registered Fire Service Installation Contractors of Hong Kong Limited

Real Estate Developers Association of Hong Kong

Hong Kong Institute of Vocational Education

Construction Industry Council

The Hong Kong Construction Association, Ltd

Hong Kong General Building Contractors Association Ltd

The Hong Kong Federation of Electrical & Mechanical Contractors Ltd

Contractor's Authorised Signatory Association Ltd

Registered Minor Works Contractor Signatory Association Ltd

Hong Kong Registered Contractors Association Company Ltd

Building Services Operation and Maintenance Executives Society

The Hong Kong Air Conditioning and Refrigeration Association Ltd

Hong Kong Licensed Plumbers Union Limited

Li Ka Shing Institute of Professional and Continuing Education, The Open University of Hong Kong

The Association of Electrical and Mechanical Engineering (Hong Kong) Ltd

WSD 3318/15/81

Undertaking of carrying out systematic flushing in new plumbing works

To the Water Authority,

We hereby undertake that systematic flushing will be carried out in the Approved Plumbing Works covered by Form WWO 46 Part IV (ASN No. _____) using the prescribed systematic flushing protocol set out in paragraph 2 of WSD Circular Letter No. 6/2017.

Signature of Licensed Plumber

Name in full

Plumber's License No.

Date: _____

Record of Systematic Flushing
(Only one record is required for each building)

ASN: _____

Location of new plumbing works: _____

Systematic Flushing has been carried out at the above-mentioned plumbing works as follows:

Cycle	Date	Steps	Start Time	End Time
1		Thoroughly flush at drinking water tap(s)		
		Water stagnation for at least 3 hours		
		Thoroughly flush at drinking water tap(s) again		
		Overnight water stagnation		
2		Thoroughly flush at drinking water tap(s)		
		Water stagnation for at least 3 hours		
		Thoroughly flush at drinking water tap(s) again		
		Overnight water stagnation		
3		Thoroughly flush at drinking water tap(s)		
		Water stagnation for at least 3 hours		
		Thoroughly flush at drinking water tap(s) again		
		Overnight water stagnation		
-		Final thorough flushing at drinking water tap(s) after three cycles of systematic flushing		

Record of additional systematic flushing before re-testing (if applicable):

Cycle	Date	Steps	Start Time	End Time
-		Thoroughly flush at drinking water tap(s)		
		Water stagnation for at least 3 hours		
		Thoroughly flush at drinking water tap(s) again		
		Overnight water stagnation		
-		Final thorough flushing at drinking water tap(s) after additional cycle of systematic flushing		

Signature of Licensed Plumber

Name in full

Plumber's License No.

Date: _____

**Guidelines for Water Sampling and Solder Joint Sampling for
Newly Constructed Potable Water Inside Services**

Type	Water Sampling Locations for Each Building	Solder Joint Sampling for Non-destructive Test of Lead Content for Each Building
(a) Building of storeys ≥ 4	<p><u>Indirect Supply System</u> Samples shall be collected at the following locations:</p> <ul style="list-style-type: none"> (i) One sample at one of the sump tank(s); (ii) One sample at one of the roof tank(s); and (iii) For each downpipe, one sample to be collected at drinking water tap (normally kitchen tap) located at the extremities as selected by representatives of the Water Authority. <p><u>Direct Supply System</u> One sample at drinking water taps at :</p> <ul style="list-style-type: none"> (i) Extremity of supply system; and (ii) Another location selected by representatives of the Water Authority. <p><u>Underground Potable Water Mains</u> One sample at each connection point selected by representatives of the Water Authority.</p>	<p>During routine inspections of concealed pipes and fittings, two joints selected by representatives of the Water Authority for each inspection.</p> <p>During final inspection, two joints selected by representatives of the Water Authority for every five storeys, including :</p> <ul style="list-style-type: none"> (i) One joint at communal pipes; and (ii) One joint in individual units. <p>For four-storey buildings, two joints will be selected by representatives of the Water Authority, including:</p> <ul style="list-style-type: none"> (i) one joint at communal pipes; and (ii) one joint in individual units.
(b) Village House (c) Building of storeys < 4	<p>One sample at drinking water tap (normally kitchen tap) selected by representatives of the Water Authority.</p> <p><u>Underground Potable Water Mains</u> One sample at each connection point selected by representatives of the Water Authority.</p>	<p>Two joints selected by representatives of the Water Authority.</p>
(d) Separate Meter	<p>One sample at water tap located at the extremity of system.</p>	<p>One joint selected by representatives of the Water Authority.</p>

Remarks :

1. The method of non-destructive tests on solder joints shall be agreed by the Water Authority. The tests shall be arranged by the Licensed Plumber (LP) and witnessed by representatives of the Water Authority. The Water Authority may choose to carry out the test itself if considered necessary.
2. For non-compliance on solder joints sampled, the LP shall examine all the pipe joints in the concerned part of inside service and rectify the non-compliance. After the rectification works have been completed, the LP shall apply to the Water Authority for re-inspection of the concerned part of inside service. Sampling of the pipe joints shall be conducted for non-destructive testing in accordance with the above table.
3. Water sample for connection point for underground pipes larger than 40mm diameter shall be collected and tested by Water Science Division of the Water Supplies Department whereas water samples taken at newly completed inside service, connection point for underground pipe diameter less than or equal to 40mm and all above ground connection points are collected and tested by accredited laboratories.



**APPLICATION FOR CONSTRUCTING, INSTALLING,
 ALTERING OR REMOVING AN INSIDE SERVICE OR FIRE SERVICE**
Under Section 14 of the Waterworks Ordinance (Cap. 102)
and Reg. 3 / 5 of the Waterworks Regulations (Cap. 102A)

Part I (To be completed by the Licensed Plumber. Part I shall also be signed by the Authorized Person for new building project) (See Note 1)

To the Water Authority,

Inside Service or Fire Service for the Premises at

*I/We am/are engaged by the *consumer[#] / agent[#] / applicant for new water supply in Part II to *construct / install / alter / remove an *inside service / fire service at the above premises. Details of the approved plumbing proposal(s) for the inside service / fire service (“Approved Plumbing Works”) are as follows:-

WSD approval letter reference : _____ dated _____ ASN _____

Approved drawing no. (if no drawing has been required, describe briefly the plumbing works): _____

 _____).

Approved Plumbing Works covered by this Form: *Whole of the Works / Part of the Works (If this application relates only to part of the Approved Plumbing Works, please specify the relevant part of the plumbing works :

 _____).

Size and no. of water meters involved/required : _____

Anticipated date when water supply is required : _____ (see Note 4)

Remarks : _____

A set of duly completed Annex to this Form is attached to show details of pipes and fittings and any materials intended to be installed/used at the above premises for the Approved Plumbing Works covered by this Form.

2. **PURPOSE OF SUBMISSION** (See Note 2)

*I/We hereby apply to the Water Authority for approval to commence the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form, which will be commenced on _____

*I/We CERTIFY that the pipes and fittings to be installed and any materials to be used for the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form, including those as listed on the attached Annex to this Form and those not listed, shall be as prescribed by the Waterworks Regulations.

* Delete whichever is not applicable

The meaning of ‘consumer’ and ‘agent’ shall be as defined in Section 2 of the Waterworks Ordinance.



3. *I/We fully understand and agree that the Water Authority may use the data collected from *me/us in connection with this application for the purposes of, or directly related to, the processing of this application and any follow-up actions in relation to the construction, installation, alteration or removal of the inside service or fire service approved under this application. If *I/we do not provide sufficient data, the Water Authority may not be able to process *my/our application. *I/We agree that the data collected may be transferred to other Government bureaux and departments [and any other relevant parties] for the aforesaid purposes. *I/We further agree that the data (including the name of the Licensed Plumber, the Authorized Person and the details of the premises concerned) may be made known to the general public (eg. by publishing the same on the internet). *I/We understand that *I/we may make a request to the Departmental Secretary of the Water Supplies Department at 48/F, Immigration Tower, 7 Gloucester Road, Hong Kong for access to and correction of my/our personal data.

Licensed Plumber

Authorized Person
 (only applicable to a new buildings project)

Plumber's Licence No : _____ Registration No.: _____

Name : _____ Name : _____

Signature : _____ Signature : _____

Date : _____ Date : _____

Tel No : _____ Tel No : _____

Fax No : _____ Fax No : _____

E-mail : _____ E-mail : _____

Company Name of Employer⁺ : _____ *HKID/Passport/Business Registration No. : _____

_____ Address : _____

Business Registration No. of Employer⁺ : _____

Address of Employer⁺ : _____

Preferred Contact Method: * by mail/e-mail/fax

Preferred Contact Method: * by mail/e-mail/fax

+ The Licensed Plumber shall provide the name, business registration no. and address of the company/contractor by/for which he/she is employed or working.

* Delete whichever is not applicable

The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.



Part II (To be completed by the consumer[#] / agent[#] / applicant for new water supply) (See Note 1)

To the Water Authority,

I endorse the information submitted by my Licensed Plumber *and the Authorized Person in Part I.

I fully understand and agree that the Water Authority may use the data collected from me in connection with this application for the purposes of, or directly related to, the processing of this application of my Licensed Plumber and any follow-up actions in relation to the construction, installation, alteration or removal of the inside service or fire service approved under this application. If I do not provide sufficient data, the Water Authority may not be able to process my Licensed Plumber's application. I agree that the data collected may be transferred to other Government bureaux and departments and any other relevant parties for the aforesaid purposes. I further agree that for the aforesaid purposes the name of the premises concerned may be made known to the general public (e.g. by publishing the same on the internet). I understand that I may make a request to the Departmental Secretary of the Water Supplies Department at 48/F, Immigration Tower, 7 Gloucester Road, Hong Kong for access to and correction of my personal data.

Signature : _____ Name : _____

(*consumer[#] / agent[#] / applicant for new water supply)

Tel No : _____

Fax No : _____

Address : _____

_____ Date : _____

Company's chop (if applicable)

* Delete whichever is not applicable

[#] The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.



Part III (To be completed by the Water Authority)

To the Licensed Plumber,
 Licensed Plumber Mailing Address

To the Authorized Person (if any),
 Authorized Person Mailing Address

To the consumer/agent/applicant,
 Consumer/agent/applicant Mailing Address

Permission is given for you to proceed with the Approved Plumbing Works covered by this Form.

_____	Name : _____
(Signed for the Water Authority)	Post : _____
	Tel No : _____
Date: _____	Fax No : _____

* Delete whichever is not applicable

The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.



Part IV (To be completed by the Licensed Plumber) (see Note 6)

(For new building project, also to be signed by the Applicant and the Authorized Person)

To the Water Authority,

ASN : _____

* The *whole / part of* the Approved plumbing works (please specify and submit relevant drawings : _____
 _____) covered by this Form *was/were* completed on _____.

I apply for your inspection and approval of the plumbing works mentioned above. * I also undertake the correctness of the meter positions of the plumbing works mentioned above. I certify that the pipes and fittings installed and any materials used for the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form are as prescribed by the Waterworks Regulations.

 (Signature of the Licensed Plumber in Part I) Name : _____

Plumber's License No. : _____

Date : _____

* I am satisfied with the correctness of the meter positions indicated above by the Licensed Plumber.

 (Signature of the Applicant in Part II) Name : _____

Company's chop (if applicable) Date : _____

* I am satisfied with the correctness of the meter positions indicated above by the Licensed Plumber.

 (Signature of the Authorized Person in Part I) Name : _____

Registration No.: _____

Date : _____

* Delete whichever is not applicable

The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.



Part V(a) (To be completed by the Water Authority)

To the Licensed Plumber,
 Licensed Plumber Mailing Address

To the Authorized Person (if any),
 Authorized Person Mailing Address

To the Applicant,
 Applicant Mailing Address

Inspection, including but not limited to carrying out spot-check of the pipes and fittings at the premises, was carried out on _____ on the Approved Plumbing Works covered by this Form. There is no irregularity apparent to us during the above mentioned inspection.

Subject to the completion of random sampling of the water supply to be carried out at inside service *and connection point with satisfactory water test results as required by the Water Authority, *and on payment of the charge prescribed in Part 1 of Schedule 1 of the Waterworks Regulations, the WWO 46 Part V(b) will be issued. *The connection to the main will then be made *and the part of the inside service on land held by the Government will be installed afterwards.

	Name : _____
(Signed for the Water Authority)	Post : _____
	Tel No : _____
Date : _____	Fax No : _____

* Delete whichever is not applicable

The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.



Part V(b) (To be completed by the Water Authority)

To the Licensed Plumber,
 Licensed Plumber Mailing Address

To the Authorized Person (if any),
 Authorized Person Mailing Address

To the Applicant,
 Applicant Mailing Address

Random sampling of the water supply has been carried out at inside service *and at connection point, and satisfactory water test results were received on _____ as required by the Water Authority. There is no irregularity apparent to us. *Subject to payment of the charge prescribed in Part 1 of Schedule 1 of the Waterworks Regulations, *the connection to the main will then be made *and the part of the fire service or inside service on land held by the Government will be installed.

Attention of the Licensed Plumber is drawn to the Licensed Plumber's duty to construct, install, alter or remove the Approved Plumbing Works covered by this Form in compliance with the approved plumbing proposals and the Waterworks Regulations. Neither the issuance of this Form nor approval of the plumbing proposals nor the granting of the connection to the main *and the installation of the part of the fire service or inside service on land held by the Government shall be construed as a ratification of any contravention of any of the provisions of the Waterworks Ordinance or the Waterworks Regulations.

_____ (Signed for the Water Authority)	Name : _____ Post : _____ Tel No : _____ Fax No : _____
Date : _____	

* Delete whichever is not applicable

The meaning of 'consumer' and 'agent' shall be as defined in Section 2 of the Waterworks Ordinance.

ASN: _____

Form Serial No _____

Premises Address _____

(For official use)

PIPES AND FITTINGS INTENDED TO BE INSTALLED:-

Page ____ of ____

Description of pipes and fittings (see Note 10)	<i>Brand</i>	Size	Manufacturer	Country of origin	Categories of compliance (each fitting may have more than one category of compliance) (see Note 8)	Location of designated products registered under WELS/combined water saving devices

Please use additional sheet(s) if required.

Please see notes overleaf

Signature of the Licensed Plumber : _____ Licence No. : _____ Date : _____

Notes :-

1. The Form is applicable to premises supplied or to be supplied with water from the Waterworks. Part I of the Form and the Annex are to be completed by the Licensed Plumber to apply for the permission by the Water Authority of the commencement of the Approved Plumbing Works covered by this Form. For a new building project, the Authorized Person, as defined in the Buildings Ordinance (Cap. 123), is required to sign in Part I also. Part II is to be completed by the consumer[#]/agent[#]/applicant of new water supply. Omission of any details in the Form and the Annex may cause delay to your application.
2. Parts I and II of this Form shall be submitted to the Water Authority for permission to commence the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form. All pipes and fittings and any materials to be used for the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form shall comply with the requirements of the Waterworks Regulations. All water taps, showers for bathing and urinal flushing valves intended to be installed shall be registered under the Water Efficiency Labelling Scheme (WELS) and comply with the prescribed water efficiency requirements stipulated in the Hong Kong Waterworks Standard Requirements for Plumbing Installation in Buildings (HKWSR). Any change of the previously approved pipes and fittings and any materials to be used for the Approved Plumbing Works covered by this Form shall be submitted to the Water Authority for approval and to the Water Supplies Department (WSD) for registration under WELS (if applicable) before installation. The Licensed Plumber, the Authorized Person and the consumer[#]/agent[#]/applicant should update and sign Parts I, II and Annex to this Form and submit the Form to the Water Authority for approval.
3. The Form with the Annex shall be mailed/faxed to the Water Authority. *Submission of the copies of approval letters of the General Acceptance products are not required.*
4. Different sets of Forms are required for different phases of the plumbing that require water supply at different dates. **The consumer[#]/agent[#]/applicant of new water supply in Part II and/or the Licensed Plumber/Authorized Person in Part I shall inform the Water Authority in writing whenever there is any change to the ‘anticipated date when water supply is required’ in Part I of the Form.**
5. On completion of processing the application, the Licensed Plumber, the Authorized Person and the consumer[#]/agent[#]/applicant will receive Part III of the Form with a Form Serial No. printed on it. A copy of Parts I and II of the Form will also be returned.
6. Reporting completion of part of the Approved Plumbing Works covered by this Form (including water pipe to be concealed) shall be made in Part IV of the Form. Licensed Plumber, and the Authorized Person and consumer[#]/agent[#]/applicant as appropriate, should complete Part IV of the Form and submit it together with a copy of Parts I, II and III of the Form to report completion of the Approved Plumbing Works covered by this Form. **Please quote Form Serial No. and ASN on Part IV.**
7. All pipes intended to be used for the Approved Plumbing Works covered by this Form are required to be reported in the Annex. For fittings intended to be used for the Approved Plumbing Works covered by this Form, only those fittings listed in WSD’s website and showers for bathing need to be reported in the Annex.
8. All pipes and fittings including any materials intended to be used for the construction, installation, alteration or removal of the Approved Plumbing Works covered by this Form shall comply with the relevant British Standard listed out in WSD’s website and all water taps, showers for bathing and urinal flushing valves intended to be installed shall be registered under WELS and comply with the prescribed water efficiency requirements stipulated in the HKWSR. If the following four categories apply to any pipes, fittings or materials intended to be used, the applicant should specify the relevant category on the Annex and provide the relevant supporting documents:
 - Category A – Marked in accordance with the appropriate British Standard and bearing the British Standard Institution Kitemark. The relevant approval certificate should be provided.
 - Category B – Accepted by the Water Supply (Water Fittings) Regulations, United Kingdom (formerly known as the Water Byelaws). The relevant approval certificate should be provided.
 - Category C – Accepted by the Water Authority in writing. Copies of the relevant WSD approval

letters should be provided to facilitate final inspection.

Category D – Accepted by the WSD in writing for registration under WELS and in compliance with the prescribed water efficiency requirements stipulated in the HKWSR. Copies of the relevant WSD approval letters should be provided to facilitate final inspection.

A directory of pipes and fittings including any materials with currently valid approval by the Water Authority as well as the registers of products covered by the current WELS can be found in the WSD's website. For pipes and fittings not yet approved by the Water Authority, submission of details and samples of such pipes and fittings including any materials listed in the Annex may be required. For water taps, showers for bathing and urinal flushing valves not yet registered under WELS, submission of details of such fittings listed in the Annex may be required for registration under WELS.

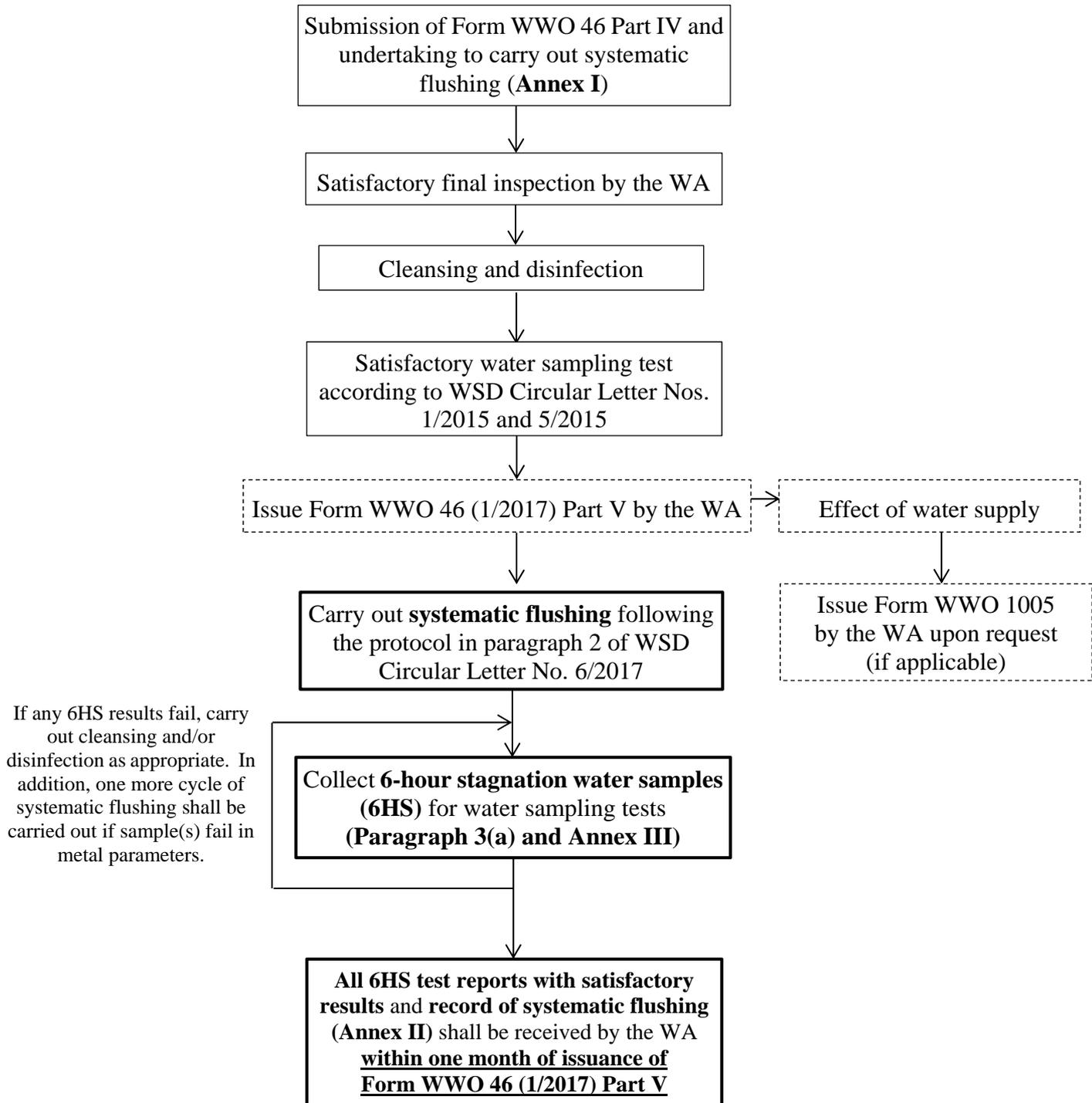
9. Licensed Plumber and Authorized Person should always be aware of the anti-corruption laws and avoid to contravene them during their course of works. For details, please refer to the website of Independent Commission Against Corruption at <http://www.icac.org.hk/>
10. For a water tap or shower for bathing not complying with the prescribed water efficiency requirements stipulated in the HKWSR, the Water Authority will accept the alternative of installing inside the water tap or shower for bathing a flow controller registered under WELS and of appropriate water efficiency grade to form a “combined” water saving device that meets the prescribed water efficiency requirements. To select such flow controller for non-mixing type water tap, applicant should refer to the WELS registers in WSD's website to ascertain its nominal flow rate to achieve the prescribed water efficiency requirements. Details of the WELS compliant flow controller to be installed to form a combined water saving device shall also be included in the Annex.

[#] The meaning of ‘consumer’ and ‘agent’ shall be as defined in Section 2 of the Waterworks Ordinance.

Flowchart for Two Stages of the New Commissioning Requirements

Stage 1

(Applicable to WWO 46 Part IV submitted on or after 15 October 2017)



Stage 2

(Applicable to WWO 46 Part IV submitted on or after 1 January 2018)

