

## Checklist on Water Tank Cleansing, Enhanced Water Quality Examination and Plumbing Inspection

*(This form can be used for more than one building)*

### A. Cleansing of Water Tanks *(please use additional sheets if necessary)*

<i>Name of building(s)</i>	<i>The last 3 inspections</i>			<i>No. of water tanks cleansed</i>
	<i>Date 1</i>	<i>Date 2</i>	<i>Date 3</i>	

Please attach documentary support (including record photos) on the frequency of cleansing with dates.

Any notification served to the affected consumers? Yes / No\*

Any complaint arising due to cleansing? Yes / No\*

If yes, actions taken to handle complaints:

---



---



---

Actions taken to prevent future complaints:

---



---



---

### B. Enhanced Water Quality Examination

The purpose of the water quality examination is to check if there is any deterioration in the conditions of the plumbing system that affects water quality. For new/renewal applications, sets of samples<sup>1</sup> in either the communal area (“Basic Plan”) or the non-communal area (“Extended Plan”) shall be taken and collected for physical,

<sup>1</sup> For communal part, samples shall be collected at communal system/cold water tap without water filter installed. For non-communal part, i.e. plumbing system of individual household, samples shall be taken at the kitchen cold water tap without water filter installed.

chemical (including additional testing parameters of Lead, Cadmium, Chromium and Nickel) and bacteriological analyses by an accredited laboratory as per standard procedures (see page 6) of the Water Supplies Department (WSD).

#### Basic Plan – Communal Area

<i>No. of storeys in each building</i>	<i>Water sampling locations</i>
≤ 20	At least one set of samples at the top level for each roof tank (samples from the washout of roof tank are also acceptable) and at least one set of samples at the lowest point of each down feed pipe, or riser if down feed pipe does not exist, under the jurisdiction of the applicant
> 20	At least one set of samples at the top level for each roof tank (samples from the washout of roof tank are also acceptable), at least one set of samples at the lowest point of each down feed pipe and at least one set of sample to be taken at an intermediate level between the top and the lowest point of each down feed pipe under the jurisdiction of the applicant

For branched down feed pipes, one set of samples is to be taken at the lowest point of the branched pipe and for branched down feed pipes covered over 20 storeys, one set of samples at the intermediate level is also required.

#### Extended Plan – Non-communal Area

<i>Please check ONE box</i>	<i>No. of samples taken from individual household in each building and complied with testing criteria</i>	<i>Merit to be shown on certificates awarded</i>
<input type="checkbox"/>	5	☆
<input type="checkbox"/>	10	☆☆
<input type="checkbox"/>	15	☆☆☆

#### ***Sampling***

Dates of sampling: \_\_\_\_\_

Name of laboratories (see Note 1 under Table 1 in Page 4) employed for sampling:

\_\_\_\_\_

#### ***Testing***

Dates of testing: \_\_\_\_\_

Name of laboratories (see Note 1 under Table 1 in Page 4) employed for testing samples:

\_\_\_\_\_

#### ***Testing Results***

Please complete Table 1 in Page 4 and attach documentary support (i.e. test reports (original/certified true copy), see Note 1 under Table 1 in Page 4) on the results. The

test reports/certificates of heavy metals (i.e. Lead, Cadmium, Chromium and Nickel) that complied with the requirement of the Scheme will be valid for 4 years. If the applicants want to use the test results of 4 heavy metals for two consecutive applications, they shall submit the first application within 3 months from the date of test results of 4 heavy metals and the subsequent renewal application within 3 months after the expiry of the first certificate. The requirements on the test reports/certificates for other test parameters (i.e. pH, colour, turbidity, conductivity, Iron, E. Coli and total Coliforms) will remain unchanged. That is, each water sample should be tested for 11 items (i.e. pH, colour, turbidity, conductivity, Iron, E. Coli, total Coliforms, Lead, Cadmium, Chromium and Nickel).

### C. Inspection of Internal Plumbing System related to Water Quality<sup>2</sup>

Name of building(s)	No. of water tanks / pumps inspected		Communal riser / down feed pipe (✓/✗)		The last 3 inspections		
	tanks	pumps	riser	downfeed	Date 1	Date 2	Date 3

Name of Licensed Plumber/Building Services Engineer<sup>\*\*</sup>/Building Surveyor<sup>\*\*</sup> employed for inspection: \_\_\_\_\_

\_\_\_\_\_  
(Plumber's licence / Membership no., if applicable)

Documentary support for the inspection results shall be submitted in the format as shown on Table 2 of Page 5.

\* please delete whichever not applicable.

\*\* submission of proof of relevant qualifications is required

<sup>2</sup> Alternatively, the applicant may select to provide the following information/documents that indicate the buildings under application are administered by a robust maintenance system (instead of filling in Part C and Table 2 of this form and submitting the document under item 4 of Part E of Form A) for the WSD's consideration:

- the names of the buildings under application;
- the composition and strength of the responsible maintenance team with adequate in-house qualified professionals and technical staff responsible for the concerned buildings;
- a copy of the maintenance contract;
- the mechanism in handling routine tasks and emergencies; and
- the relevant performance pledge/targets with respective statistics in the previous 12 months from the submission date of application/renewal application



**Table 2: Inspection Results** (*use additional sheets if necessary*)

Date(s) of inspection: \_\_\_\_\_

Component	Action	Findings (✓/✗)						Date of follow up actions completed
		Name of building(s)						
Water pipe (from connection point, communal riser to down feed pipe) and pump	Is there any leakage?							
	Is there any serious corrosion to cause discolouration?							
	Abandoned pipe disconnected?							
Filter if installed	Is it installed for supply from a water tank?							
	Is it maintained with replacement of filter cartridge in accordance with the instructions given by the supplier?							
Water tanks	Is the water dirty?							
	Are the tanks dirty?							
	Is there any cross connection between the fresh water storage tank and the flushing or fire service water tank?							
	Are the metallic components susceptible to corrosion?							
	Is there any sign of corrosion?							
	Are the overflow and warning pipes functioning and free from obstructions?							
	Are the access manholes provided with raised necks?							
Are the access manhole covers double-sealed and locked?								

Inspected by: \_\_\_\_\_ (Name and Plumber's licence / Membership no., if applicable)

## Quality Water Supply Scheme for Buildings – Fresh Water (Plus)

### Sampling for Water Quality Examination

Samples of drinking water for physical, chemical and bacteriological analyses under the above scheme shall be collected, preserved and handled using the standard and techniques such as those listed below:

<i>Standard and techniques</i>	<i>Sections to be followed</i>
ISO 5667 Water Quality – Sampling <sup>[1]</sup>	Part 1: Guidance on the design of sampling programmes and sampling techniques
	Part 3: Guidance on the preservation and handling of water samples
	Part 5: Guidance on sampling of drinking water and water from treatment works and piped distribution systems
ISO 19458: Water quality – Sampling for microbiological analysis <sup>[2]</sup>	-
APHA Standard Methods for the Examination of Water and Wastewater 22 <sup>nd</sup> Edition <sup>[3]</sup>	Section 1060: Collection and Preservation of Samples

The procedures and techniques stipulated in the above standards complement each other and should be followed as appropriate.

Notes:

<sup>[1]</sup> International Standard ISO 5667-1:2006, ISO 5667-3:2012 and ISO 5667-5:2006, Water Quality – Sampling, International Organization for Standardization, Geneva, Switzerland.

<sup>[2]</sup> International Standard ISO 19458:2006 Water quality – Sampling for microbiological analysis, International Organization for Standardization, Geneva, Switzerland.

<sup>[3]</sup> Standard Methods for the Examination of Water and Wastewater, the 22<sup>nd</sup> Edition, 2012, American Public Health Association, American Water Works Association and Water Environment Federation.