



Public Utilities Board

Your Ref:

PLEASE ADDRESS ALL CORRESPONDENCES TO WATER DEPARTMENT

Our Ref: WE 92413/94

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Date: 2 Jul 2003

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<Professional Engineers Board>
<The Institute of Engineers, Singapore>
<Singapore Plumbing Society>
<Association of Consulting Engineers, Singapore>
<Association of Property and Facility Managers>
<Jurong Town Corporation>
<Singapore Institute of Architects>
<The Association of Management Corporations in Singapore>

Dear Sir

5-YEAR INSPECTION AND CERTIFICATION OF WATER SERVICE INSTALLATIONS

Section 45 of the Public Utilities Act, Cap 261, 2002 Edn requires management corporations and building owners responsible for the maintenance of any water service installation having any master meter and water storage tank to engage, once in every 5 years, a professional engineer to inspect and certify that the installation is fit and safe to use, properly maintained and free from leakage, contamination and pollution or the likelihood of such. This provision puts additional focus on the integrity and maintenance of the entire water service installation.

2 The Public Utilities Board (PUB) will be administering the 5-year inspection and certification programme for water service installations in all residential, commercial and industrial premises with master meter and water storage tank. PUB will be notifying the management corporations and building owners when their water service installations are due for inspection and certification.

3 Enclosed is a Guide to the 5-Year Inspection & Certification of Water Service Installations to further assist you. You will find more information and details in the Guide. We will appreciate it very much if you could also disseminate the information to your members.

4 Please feel free to call me at 67313406 or my colleague Mr Thomas Pang at 67313556 if you have any queries or require further clarification.

5 To assist you to better understand the 5-Year Inspection & Certification of Water Service Installations, we would like to invite you to a briefing session. Details of the briefing session are as follows:

Date : 24 July 2003
Time : 3.00 pm
Place : MacRitchie Room
Water Department
Public Utilities Board
111 Somerset Road #14-05
Singapore 238164

6 We would appreciate it very much if you can call Mr Thomas Pang at 67313556 to confirm your attendance by 17 Jul 2003. This will help us in our preparations for the briefing.

7 Thank you and we hope to see you at the briefing session.

Yours faithfully



RAMAHAD SINGH
SENIOR MANAGER (INSPECTORATE)
for DIRECTOR
WATER DEPARTMENT

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GUIDE TO THE 5-YEAR INSPECTION & CERTIFICATION OF WATER SERVICE INSTALLATIONS

INTRODUCTION

This guide serves to explain what is the 5-Year Inspection & Certification of Water Service Installations, its purpose, why it is needed and what it entails. It also serves to inform persons responsible for the maintenance of water service installations and professional engineers of the requirements of such inspections and certifications and their roles and responsibilities.

The 5-year inspection and certification of water service installations is one of the mandatory requirements under Section 45 of the Public Utilities Act, Cap 261, 2002 Edn. This Section is reproduced below:

45.—(1) Any person responsible for the maintenance of any water service installation shall ensure that the water service installation is properly maintained, kept in a fit and safe condition, and free from any defect.

(2) Any person responsible for the maintenance of any water service installation in any residential, commercial or industrial premises having any master meter and water storage cistern shall engage, once in every 60 months, a water service worker who is a professional engineer registered under the Professional Engineers Act (Cap. 253) to inspect and certify that —

(a) the water service installation is fit and safe to use;

(b) the water service installation is properly maintained and there is no contamination or pollution or likelihood of such contamination or pollution to the water in the water service installation; and

(c) there is no leakage and no likelihood of leakage in the water service installation.

(3) Every professional engineer engaged under subsection (2) shall ensure that the requirements set out in that subsection are complied with.

(4) If any of the requirements set out in subsection (2) is not complied with, the professional engineer shall immediately notify —

(a) the person responsible for the maintenance of the water service installation; and

(b) the Board,

of such non-compliance and the remedial measures that have to be taken by that person.

(5) Upon notification by the professional engineer, the person referred to in subsection (4)(a) shall immediately take the remedial measures.

(6) The professional engineer shall issue a certificate of inspection and fitness to the person responsible for the maintenance of the water service installation if he is satisfied that the water service installation complies with all the requirements set out in subsection (2).

(7) Any person who contravenes any of the provisions of this section shall be guilty of an offence.

This guide shall be read in conjunction with the above Act and any other guidelines which the Public Utilities Board (PUB) may issue from time to time for compliance.

The 5-Year Inspection & Certification of Water Service Installations is administered by the Inspectorate Section of Water Department, PUB. It is located at the following address:

Inspectorate Section
Water Department
Public Utilities Board
111 Somerset Road #14-01
Singapore 238164

WHAT IS A WATER SERVICE INSTALLATION?

A water service installation means any installation within any premises including any pipe, water fitting, pump, storage tank, apparatus or appliance, connecting a water meter to the premises and used for the supply of PUB water.

WHAT IS THE 5-YEAR INSPECTION & CERTIFICATION OF WATER SERVICE INSTALLATIONS?

The 5-Year Inspection & Certification of Water Service Installations requires a person responsible for the maintenance of a water service installation to engage, once in every 5 years, a water service worker who is a registered professional engineer under the Professional Engineers Act to inspect and certify that the water service installation is:

- (a) fit and safe to use;
- (b) free from leakage and likelihood of leakage; and
- (c) properly maintained and that there is no contamination or pollution or likelihood of contamination or pollution to the water in the water service installation.

THE PURPOSE AND NEED FOR INSPECTION AND CERTIFICATION OF WATER SERVICE INSTALLATIONS

The purpose of such inspections and certifications is to ensure that

- (a) water in the water service installation is free from contamination or pollution or the likelihood of such contamination or pollution; and
- (b) defects, deterioration and abuse of the water service installation are identified early so that appropriate remedial actions can be taken before the installation deteriorates further.

The requirement will enable persons responsible for the maintenance of water service installations such as management corporations and building owners to take a more active role in the maintenance of their water service installations to ensure that they are properly maintained and the water contained therein free from contamination. It also serves to protect the interests of consumers who receive their water supply through such water service installations.

While the certification and inspection will mean additional costs for management corporations and building owners, the additional costs will not be significant and incurred only once in 5 years. The benefits to be accrued to all, on the other hand, will be great and will more than outweigh the additional costs incurred.

WATER SERVICE INSTALLATIONS IN WHICH TYPE OF BUILDINGS ARE REQUIRED TO BE INSPECTED AND CERTIFIED?

Water service installations in any residential, commercial or industrial building having any master meter and water storage tank shall be inspected and certified.

WHO ARE THE PARTIES INVOLVED?

Three parties are involved in the inspection and certification process:

- (a) The Water Department of PUB which administers the system and ensures that inspections and certifications are carried out in accordance with the requirements of the Public Utilities Act;
- (b) The person responsible for the maintenance of the water service installation (such as management corporations and building owners) who shall engage a professional engineer to carry out the inspection and certification; and
- (c) The professional engineer, who is registered as a Professional Engineer under the Professional Engineers Act, engaged to inspect and certify the water service installation.

HOW FREQUENTLY SHALL WATER SERVICE INSTALLATIONS BE INSPECTED AND CERTIFIED?

Water service installations shall be inspected and certified once in every 5 years after the issue of the Certificate of Statutory Completion. As the deterioration of pipes, fittings and tanks develops slowly, 5 years is a reasonable period of time to require inspections and certifications to be carried out.

The interval of 5 years between mandatory inspections and certifications of the water service installation does not imply that the water service installation need not be inspected and certified until the due time. Water service installations should be regularly inspected and maintained. As and when defects, deterioration or abuse are detected, the person responsible for the maintenance of the water service installation should engage a professional engineer or licensed water service plumber to investigate and propose remedial measures.

DOES THE REQUIREMENT FOR THE 5-YEAR INSPECTION & CERTIFICATION OF WATER SERVICE INSTALLATIONS MEAN THAT THE REQUIREMENT FOR THE ANNUAL INSPECTION AND CERTIFICATION OF WATER STORAGE TANKS IS NO LONGER REQUIRED?

The requirement for the annual inspection and certification of water storage tanks focuses on water quality and requires a person responsible for the maintenance of any water service installation having any water storage tank (except in residential premises without master meter) to engage a licensed water service plumber at least once every year to inspect and certify and if necessary, to clean the water storage tank. This will continue to apply. The requirement for the 5-year inspection and certification of water service installations is over and above this requirement and puts additional focus on the integrity and maintenance of the entire water service installation not confined just to the water storage tanks.

HOW WOULD I KNOW IF MY WATER SERVICE INSTALLATION IS DUE FOR INSPECTION AND CERTIFICATION?

A water service installation shall be inspected and certified once in every 5 years after the issue of the Certificate of Statutory Completion for the building. PUB will help to remind those affected by sending them a Notification Letter when their water service installations are due for inspection and certification. Notwithstanding this, the onus still rests with the persons responsible for the maintenance of the water service installations to monitor their schedule for the inspection and certification of their water service installations and to ensure that they are inspected and certified when due.

WHAT DO I DO WHEN I RECEIVE A NOTIFICATION LETTER FOR THE INSPECTION AND CERTIFICATION OF MY WATER SERVICE INSTALLATION?

When you receive a Notification Letter from the Director of Water Department, you shall appoint a professional engineer registered under the Professional Engineers Act to carry out an inspection of your water service installation and subsequently to submit a certificate of inspection and fitness to you as soon as practicably possible but no later than one year from the date of the Notification Letter.

WHO CAN BE APPOINTED TO CARRY OUT THE INSPECTION AND CERTIFICATION?

A professional engineer registered under the Professional Engineers Act can inspect your water service installation.

Persons responsible for the maintenance of water service installations who have difficulties identifying a professional engineer registered under the Professional Engineers Act can refer to a list of professional engineers registered under the Act at the following location:

Professional Engineers Board
5 Maxwell Road #01-00
Ministry of National Development Building
Singapore 069110

WHAT ARE THE DUTIES AND RESPONSIBILITIES OF THE PROFESSIONAL ENGINEER?

The professional engineer engaged shall be responsible for the inspection and certification of the water service installation to ensure that:

- (a) the water service installation is fit and safe to use;
- (b) the water service installation is properly maintained and there is no contamination or pollution or likelihood of such contamination or pollution to the water in the water service installation;
- (c) there is no leakage and no likelihood of leakage in the water service installation; and
- (d) the water service installation complies with the Public Utilities Act, the Public Utilities (Water Supply) Regulations, the Singapore Standard CP48 – Code of Practice for Water Services and any other requirements which the PUB may stipulate from time to time for compliance.

The professional engineer shall carry out the inspection and certification in a manner specified under Section 45 of the Public Utilities Act, Cap 261, 2002 Edn. Information relating to the design, construction and maintenance of the water service installation must also be scrutinised. The inspection shall not only be one which involves only a visual record of the professional engineer's observations. The fact that a professional engineer, rather than any other person, is required to carry out the inspection and certification, points to the importance of professional

assessment, judgment and advice required of the professional engineer in such inspection and certification. Water samples shall also be taken from the water service installation for chemical and bacteriological analysis at a SINGLAS-accredited laboratory or government laboratory as part of the inspection.

If the inspection by the professional engineer shows that the water service installation does not comply with any of the requirements set out in the first paragraph of this Section, the professional engineer shall immediately notify the person responsible for the maintenance of the water service installation and PUB in writing of such non-compliance and the remedial measures that the person responsible for the maintenance of the water service installation has to take. Upon notification, the person responsible for the maintenance of the water service installation shall immediately take the remedial measures.

When the professional engineer is satisfied that the water service installation complies with all the requirements set out in the first paragraph of this Section, the professional engineer shall issue a certificate of inspection and fitness to the person responsible for the maintenance of the water service installation.

The professional engineer who is appointed by the person responsible for the maintenance of the water service installation shall be fully responsible for the inspection and certification. He shall, with reasonable diligence, take active and personal interest in the inspection and certification of the water service installation. He should not totally delegate the inspection work to other persons or his assistants.

CONTENTS OF A CERTIFICATE OF INSPECTION AND FITNESS

The certificate of inspection and fitness shall at least include the following details:

- (a) The address of the premises housing the water service installation;
- (b) The details of the person/s responsible for the maintenance of the water service installation;
- (c) Confirmation that the water service installation has been inspected and found to comply with all the requirements set out in Section 45 of the Public Utilities Act, Cap 261, 2002 Edn;
- (d) Date of certification; and
- (e) Details of the Professional Engineer including signature and stamp.

The results of the analysis of water samples taken from the water service installation during inspection shall accompany the certificate of inspection and fitness and form part of it.

WHAT ARE THE RESPONSIBILITIES AND DUTIES OF THE PERSON RESPONSIBLE FOR THE MAINTENANCE OF THE WATER SERVICE INSTALLATION?

A person responsible for the maintenance of the water service installation shall ensure that it is regularly and properly maintained, kept in a fit and safe condition and free from any defect, contamination or pollution and the likelihood of such.

He shall monitor the schedule for the 5-year inspection and certification of the water service installation and shall engage a professional engineer to inspect and certify the water service installation once every 5 years when due. PUB will help to remind the person responsible for the maintenance of the water service installation by sending him a Notification Letter when the water service installation is due for inspection and certification. The person responsible for the maintenance of the water service installation shall ensure that it is inspected and certified by a professional engineer no later than one year from the date of PUB's Notification Letter.

When notified by the professional engineer of areas where the water service installation fails to comply with the requirements set out in Section 45 of the Public Utilities Act, Cap 261, 2002 Edn and the remedial measures to be taken, the person responsible for the maintenance of the water service installation shall immediately take remedial action to rectify the faults. He shall only engage licensed water service plumbers or professional engineers to carry out any remedial water service works.

The person responsible for the maintenance of the water service installation shall always keep a copy of the certificate of inspection and fitness issued by the professional engineer and shall produce the certificate to PUB as and when requested to do so, without fail.

PENALTIES FOR NON-COMPLIANCE

Any person responsible for the maintenance of any water service installation or professional engineer who fails to comply with any of the provisions of Section 45 of the Public Utilities Act, Cap 261, 2002 Edn shall be guilty of an offence. The penalty for non-compliance is a fine not exceeding \$10,000 or imprisonment for a term not exceeding 12 months or to both and, in the case of a continuing offence, a

further fine not exceeding \$250 for every day or part thereof during which the offence continues after conviction.

ENQUIRIES

If you require clarification or have any queries on the 5-Year Inspection & Certification of Water Service Installations, you can call, write, fax or e-mail to:

Inspectorate Section
Water Department
Public Utilities Board
111 Somerset Road #14-01
Singapore 238164
Telephone: 67313406/ 67313556
Fax: 67313023
E-mail: pub_waterfittings@pub.gov.sg