# PUBLIC UTILITIES ACT (CHAPTER 261, SECTION 72)

## PUBLIC UTILITIES (WATER SUPPLY) REGULATIONS

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[22nd November 2002]

# PART I

## **PRELIMINARY**

#### Citation

**1.** These Regulations may be cited as the Public Utilities (Water Supply) Regulations.

#### **Definitions**

- 2. In these Regulations, unless the context otherwise requires
  - "authorised officer" means an officer of the Board authorised in that behalf by the Board;
  - "backflow" means flow upstream, that is in a direction contrary to the intended normal direction of flow within or from a water fitting;

- "British Standard" means a standard or specification issued by the British Standards Institution;
- "building" means any structure (including a floating structure) whether of a permanent character or not, and whether movable or immovable, and, without prejudice to the generality of the foregoing, includes any caravan, vessel, boat or houseboat;
- "connecting pipe" means a pipe from the water main to the meter position;
- "consumer" includes
  - (a) any person supplied or applying to be supplied with water by the Board;
  - (b) any person otherwise liable for the payment of water rates, charges or rent; and
  - (c) any owner or occupier of the premises supplied or to be supplied with water by the Board;
- "corrosion-resisting material" means any material which is highly resistant to any corrosive action to which it is likely to be subjected in the circumstances in which it is used;
- "distributing pipe" means any pipe (other than an overflow pipe or a flush pipe) conveying water from a storage tank under pressure by gravity or a boosting system from such tank;
- "float-operated valve" means a valve for controlling the flow of water into a storage tank or flushing cistern, the valve being operated by the vertical movement of a float riding on the surface of the water;
- "install", in relation to a water fitting, apparatus, pump, hot water apparatus or any other article or device to which these Regulations apply, includes to arrange or connect;
- "master meter" means a meter registering water all or part of which is subsequently registered by one or more sub-meters;

- "meter" means any appliance or device supplied by the Board to measure, ascertain or regulate the amount of water taken or used from the supply by the Board;
- "meter position" means the position where a meter or master meter (not being a sub-meter) is installed;
- "meter reader" means an employee or an agent of the Board who is authorised to read any meter;
- "potable water" means water supplied for human consumption;
- "registered professional engineer" means a professional engineer registered under the Professional Engineers Act (Cap. 253);
- "service pipe" means any pipe or part thereof which is downstream to the meter position and is meant for supplying water from a water main to any premises and is subject to water pressure from that main, or would be so subject but for the closing of some stop-valve;
- "Singapore Standard" means a standard or specification issued by the Standards, Productivity and Innovation Board;
- "stop-valve" means any device (including a stop-cock or stoptap) other than a draw-off tap, for stopping at will the flow of water in a pipe;
- "storage tank" means any tank or storage cistern, other than a flushing cistern, having a free water surface under atmospheric pressure, but does not include a drinkingtrough or drinking-bowl for animals (including poultry);
- "sub-meter" means any meter owned and maintained by the Board which registers all or part of any water which has already been metered since leaving the water main;
- "warning pipe" means an overflow pipe so fixed that its outlet, whether inside or outside a building, is in a conspicuous position where the discharge of any water therefrom can be readily seen;

"Water Efficiency Label" means a label referred to in regulation 40A;

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- "water fittings" includes pipes (other than water mains), pipe fittings, taps, cocks, valves, ferrules, meters, storage tanks, flushing cisterns and other similar apparatus used in connection with the supply and the use of water;
- "water main" means any pipe vested in and owned by or under the control of the Board and used for the conveyance of water but does not include a connecting pipe.

# Board may adopt or issue standards, codes of practice or guidelines

- **3.**—(1) The Board may, from time to time, adopt or issue any standard, code of practice or guidelines on water supply, water services, water conservation, plumbing practices, maintenance of water service installations, and any requirements (including standards, designs, specifications and procedures) relating to any type of water fitting or water service installation.
- (2) Where any requirement of any standard, code of practice or guidelines adopted or issued by the Board conflicts with any specific requirement specified in these Regulations, the latter requirement shall prevail.
- (3) The Board shall cause all standards, codes of practice or guidelines adopted or issued by it to be published in such a manner as will give persons to whom the standards, codes of practice or guidelines relate adequate notice of the requirements specified therein.

#### PART II

### WATER FITTINGS AND WATER SERVICE INSTALLATIONS

# Requirements for installation, etc., of water fittings, etc.

**4.**—(1) No person shall install, alter, repair or use, or cause or permit to be or to remain installed, altered, repaired or used, any water fitting, apparatus or pump in such a manner that —

- (a) affects or is likely to affect the quality, pressure or efficient supply of water by the Board (including in any water main or other pipe of the Board);
- (b) causes or permits, or is likely to cause or permit, waste, undue consumption, misuse, erroneous measurement or contamination of water supplied by the Board or reverberation in pipes; or
- (c) contravenes any applicable requirement specified in the First Schedule or any standard, code of practice or guidelines adopted or issued by the Board under regulation 3.
- (2) No person shall install, or cause or permit to be or to remain installed, any water fitting, apparatus or pump which
  - (a) is damaged, worn or faulty;
  - (b) for any reason
    - (i) affects or is likely to affect the quality, pressure or efficient supply of water by the Board (including in any water main or other pipe of the Board); or
    - (ii) causes or permits, or is likely to cause or permit, waste, undue consumption, misuse, erroneous measurement or contamination of water supplied by the Board or reverberation in pipes; or
  - (c) contravenes any applicable requirement specified in regulation 5, the First Schedule or any standard, code of practice or guidelines adopted or issued by the Board under regulation 3.
- (3) No person shall install, alter, repair or use, or cause or permit to be or to remain installed, altered, repaired or used, any water service installation or part thereof intended to receive or convey only potable water supplied by the Board in such a manner that it receives or conveys any water other than potable water supplied by the Board.
- (4) Any person who contravenes paragraph (1), (2) or (3) shall be guilty of an offence.

## Requirements for water fittings

- **5.**—(1) Every water fitting shall be
  - (a) of an appropriate quality and standard;
  - (b) suitable for the circumstances in which it is used;
  - (c) fit for the conveyance of potable water;
  - (d) except in the case of exposed terminal fittings such as taps, resistant to dezincification if such fitting is made of brass; and
  - (e) capable of withstanding a hydrostatic field test pressure of not less than 12 bars or an internal water pressure of not less than 1½ times the maximum pressure to which the fitting is designed to be subjected in operation, whichever is the greater.
- (2) For the purposes of paragraph (1)(a), a water fitting is of an appropriate quality and standard only if it conforms to
  - (a) such standard as the Board may stipulate from time to time for compliance, being
    - (i) an appropriate Singapore Standard;
    - (ii) an appropriate British Standard; or
    - (iii) some other standard which provides an equivalent or higher level of protection and performance; and
  - (b) such other requirements as the Board may stipulate from time to time for compliance.
- (3) For the purposes of paragraph (2)(a), a water fitting shall be treated as conforming with a standard stipulated by the Board if it is certified or tested as complying with such standard by
  - (a) a product certification body or a testing laboratory accredited by the Singapore Accreditation Council or any of its Mutual Recognition Arrangement partners; or
  - (b) such other product certification body or testing laboratory as the Board may allow.

(4) Any person who wishes to supply or install any water fitting for which no standard or requirement has been stipulated by the Board under paragraph (2) shall submit a request to the Board for the Board to stipulate the appropriate standard and requirement for that fitting for compliance.

## Accessibility to water fittings

- **6.**—(1) No person shall install, or cause or permit to be or to remain installed, any water fitting which has to be operated inside or outside a building in such a position as to prevent reasonable access to the water fitting for purposes of examination, repair and replacement, unless such access is not reasonably practicable.
  - (2) Nothing in paragraph (1) shall prohibit
    - (a) the enclosing of any pipe or fitting in a chase or duct, or in plastering, if the pipe or fitting is reasonably accessible for the purposes referred to in paragraph (1); or
    - (b) the installation of any pipe in a pipe sleeve or duct located under or within a solid floor if the pipe can be readily removed from such sleeve or duct and replaced.
- (3) Any person who contravenes paragraph (1) shall be guilty of an offence.

# Requirements for installation of hot water apparatus

- 7.—(1) No person shall install, or cause or permit to be or to remain installed, any hot water apparatus unless the hot water apparatus is fitted with an adequate device or constructed
  - (a) so as to prevent any backflow of water to the hot water apparatus or any pipe conveying water supplied by the Board; and
  - (b) so as not to cause wastage or contamination of water or to have any adverse effect on the water.
- (2) Where a water heater is installed on any premises, no person shall connect, or cause or permit to be or to remain connected, any mixing valve, pipe or other water fitting in which hot water and cold water are mixed, so as to mix —

- (a) water supplied from the water heater connected directly to a service pipe, with cold water not supplied directly from a service pipe; or
- (b) water supplied from the water heater not connected directly to a service pipe, with cold water supplied from a service pipe.
- (3) Any person who contravenes paragraph (1) or (2) shall be guilty of an offence.

# Supply of water fittings

- **8.**—(1) No person shall
  - (a) supply; or
- (b) offer, display or advertise for supply, any water fitting for use in Singapore unless
  - (i) the water fitting complies with
    - (A) regulation 5;
    - (B) paragraphs 1, 2, 5, 7, 8, 9, 10, 11(1)(*a*) and (4), 13(1) and (3), 14, 15, 18(1), (2) and (5) and 19 of the First Schedule; and

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- (C) such standard, code of practice or guidelines adopted or issued by the Board under regulation 3, as the Board may specify; and
- (ii) any standard referred to in regulation 5(2)(a) or (4) applicable to that water fitting is appropriately indicated on the water fitting or on the packaging for that water fitting.
- (2) Any person who contravenes paragraph (1) shall, if the Board so requires, recall all water fittings supplied by him in contravention of that paragraph at his own cost and expense.
- (3) Any person who contravenes paragraph (1) or (2) shall be guilty of an offence.

## Board may require testing of water fittings

- **9.**—(1) The Board may, by notice in writing, require any person who
  - (a) installs or offers or advertises to install; or
- (b) supplies or offers, displays or advertises for supply, any water fitting for use in any water service installation to have the water fitting tested or examined by
  - (i) a product certification body or a testing laboratory accredited by the Singapore Accreditation Council or any of its Mutual Recognition Arrangement partners; or
  - (ii) such other product certification body or testing laboratory as the Board may allow,

and such person shall deliver samples of the water fitting to the product certification body or testing laboratory within the time specified in the notice.

- (2) Any costs and expenses incurred for the testing or examination of a water fitting (including fees payable to the product certification body or testing laboratory) shall be borne by the person referred to in paragraph (1).
- (3) A person who receives a notice referred to in paragraph (1) shall not
  - (a) install or offer or advertise to install; or
  - (b) supply or offer, display or advertise for supply,

any water fitting referred to in such notice unless and until the Board is satisfied that the water fitting is fit for use in a water service installation.

(4) Where the Board is not satisfied that the water fitting is fit for use in a water service installation, the person referred to in paragraph (1) shall immediately stop installing, supplying, or offering, displaying or advertising to install or for supply, such water fitting in Singapore and shall, if the Board so requires, recall all such water fittings already installed or supplied at his own cost and expense.

- (5) Any person who
  - (a) fails to comply with a notice served on him under paragraph (1); or
  - (b) contravenes paragraph (3) or (4),

shall be guilty of an offence.

# Disconnection of disused water fittings

- 10.—(1) If a water fitting is disconnected and is not, within 28 days of such disconnection, reconnected or replaced, the consumer shall engage a water service worker to disconnect so much of any pipe which conveyed water supplied by the Board to that fitting and is not required to convey the water to any other fitting.
  - (2) Any consumer who fails to comply with paragraph (1)
    - (a) shall be guilty of an offence; and
    - (b) may have his water supply disconnected by the Board.

## Continuous water supply

- 11.—(1) The Board may, as it thinks fit, require an owner, a developer or a consumer to ensure that a water service installation on any premises (including a multi-storey building and a building on high elevation) is provided with adequate water storage and such ancillary equipment as may be necessary for the purpose of maintaining a continuous and steady supply of water within the premises.
- (2) Any owner, developer or consumer who fails to comply with the requirement of the Board under paragraph (1) shall be guilty of an offence.
- (3) Without prejudice to paragraph (1), a consumer who wishes to have a continuous water supply shall ensure that his water service installation is provided with adequate water storage and such ancillary equipment as may be necessary to maintain a continuous and steady supply of water within the premises.

## Interference with water supply

- 12.—(1) Where a water service installation connects a master meter to one or more sub-meters and is being used to convey water supplied by the Board to any premises through such sub-meter, any person who cuts off, disconnects, restricts, reduces or adversely affects the pressure or quality of the water supply to those premises by interfering with such water service installation shall be guilty of an offence unless he proves to the satisfaction of the Board that the interference was for the purpose of maintaining that water service installation under regulation 13 or 14.
- (2) Where any person has contravened paragraph (1), the Board may carry out such work on the water service installation as may be necessary to restore or normalise the supply of water to those premises and recover its costs and expenses reasonably incurred in carrying out such works from that person.
- (3) Any person who tampers with a water main, or any connecting pipe, water fitting or apparatus owned or maintained by the Board, shall be guilty of an offence.
- (4) Any person who, without the consent of the Board, attaches any pipe or apparatus to a water main, or any connecting pipe, water fitting or apparatus owned or maintained by the Board, shall be guilty of an offence unless he proves that he did not know or had no reason to suspect that the pipe or apparatus had been so attached.

## Maintenance of water service installation

- 13.—(1) All connecting pipes shall be maintained by the Board.
- (2) A water service installation shall be maintained
  - (a) for so long as such water service installation is connected to receive water supplied by the Board; and
  - (b) by the following persons:
    - (i) in respect of the water service installation between the master meter and the sub-meter, by the consumer who is liable to pay for the consumption registered by the master meter;

- (ii) in respect of the water service installation after the sub-meter, by the consumer who is liable to pay for the consumption registered by the sub-meter; and
- (iii) in respect of the water service installation after the meter (not being a master meter or a sub-meter), by the consumer who is liable to pay for the consumption registered by the meter.
- (3) Any person who is required under paragraph (2)(b) to maintain any part of a water service installation shall
  - (a) maintain and ensure the security of that part of the water service installation in accordance with these Regulations and any applicable requirement specified in any standard, code of practice or guidelines adopted or issued by the Board under regulation 3; and
  - (b) notify the Board immediately of any contamination of water in that part of the water service installation which comes to his knowledge.
- (4) Any person who fails to comply with paragraph (3) shall be guilty of an offence.

# Maintenance and security of water storage tank

- 14.—(1) Subject to paragraph (4), any consumer responsible for the maintenance of any part of a water service installation having a water storage tank shall engage, not less frequently than once every 12 months, a licensed water service plumber to inspect, and where necessary to clean and disinfect, the water storage tank and certify that
  - (a) the water storage tank is fit and safe for the storage of potable water;
  - (b) the water contained in the water storage tank is free from contamination or pollution and that there is no likelihood of such contamination or pollution;
  - (c) water samples taken from the water storage tank pass the appropriate chemical and bacteriological examinations;

- (d) the water storage tank is properly maintained; and
- (e) there is no leakage and no likelihood of leakage in the water service installation, including the water storage tank.
- (2) Subject to paragraph (4), any consumer responsible for the maintenance of any part of a water service installation having a storage tank from which potable water is drawn, shall ensure that
  - (a) no person, except with the authority of the consumer, has access to
    - (i) the storage tank (including any tap fitted to the storage tank) and its ancillary equipment; or
    - (ii) the premises where the storage tank and its ancillary equipment are located;
  - (b) the storage tank (including any tap fitted to the storage tank) and its ancillary equipment, and the premises where the storage tank and its ancillary equipment are located, are kept properly locked at all times;
  - (c) checks are conducted regularly for the purpose of ascertaining whether sub-paragraph (b) is being complied with:
  - (d) proper records are kept of
    - (i) persons granted access to the storage tank (including any tap fitted to the storage tank) and its ancillary equipment, or the premises where the storage tank and its ancillary equipment are located, under sub-paragraph (a); and
    - (ii) checks conducted under sub-paragraph (c), and that such records are made available for inspection by the authorised officer; and
  - (e) the Board is notified immediately of any unauthorised access to the storage tank (including any tap fitted to the storage tank) or its ancillary equipment which comes to his knowledge.

- (3) Any consumer who contravenes paragraph (1) or (2) shall be guilty of an offence.
- (4) Paragraphs (1) and (2) shall not apply to a consumer responsible for the maintenance of any water service installation having any water storage tank in residential premises which do not take their water supply through a master meter.

# Board may require consumer to clean and repair water service installation

- **15.**—(1) Where, in the opinion of the Board, the water service installation of a consumer or any part thereof
  - (a) has not been properly maintained;
  - (b) is causing or likely to cause wastage, pollution or contamination of the water supplied by the Board;
  - (c) is having or likely to have an adverse effect on the pressure or efficiency of the supply of water; or
  - (d) is leaking or likely to result in leakage of any part of the water service installation.

the Board may, by notice in writing, require the consumer to clean, repair, replace or otherwise deal with that water service installation within such period as may be specified in the notice.

- (2) All costs and expenses incurred by the consumer in complying with such notice shall be borne by the consumer.
- (3) Where a consumer fails to comply with a notice served on him under paragraph (1)
  - (a) the consumer shall be guilty of an offence; and
  - (b) the Board may, at the expiration of the period specified in the notice
    - (i) discontinue the supply of water to the consumer by severing or disconnecting the service pipe or by any other means specified in regulation 42; or
    - (ii) engage a competent person to execute the works specified in the notice and recover from the consumer

the costs and expenses reasonably incurred by the Board in so doing.

(4) Any person who prevents or obstructs the discontinuance of the supply of water or execution of work referred to in paragraph (3)(b) shall be guilty of an offence.

### PART III

### WATER SERVICE WORKERS AND WATER SERVICE WORKS

Division 1 — Water service workers

# Classes and authority of water service workers

- **16.**—(1) There shall be 2 classes of water service workers as follows:
  - (a) persons licensed under regulation 17 as water service plumbers; and
  - (b) registered professional engineers.
- (2) A licensed water service plumber shall, subject to any condition imposed on his licence under these Regulations, be entitled to carry out any water service work, except that in designing a water service installation, he may only design a water service installation which
  - (a) is to be installed downstream after the meter position; and
  - (b) does not require any pumping equipment or water storage tank.
- (3) A registered professional engineer shall be entitled to design and submit any plan of any water service installation.

# Qualifications for licensed water service plumbers

- 17.—(1) The Board may license any person as a licensed water service plumber if the Board is satisfied that the person has
  - (a) a thorough knowledge of these Regulations, including any standard, code of practice or guidelines adopted or issued by the Board under regulation 3; and

- (b) such qualifications and experience as the Board may require.
- (2) For the purpose of satisfying itself that any person has a thorough knowledge of the matters referred to in paragraph (1)(a), the Board may require any person applying to be a licensed water service plumber to sit for and pass such examination as the Board thinks necessary.

## **Application for licence**

- **18.**—(1) An application for the issue or renewal of a water service plumber licence shall be made to the Board in such form as the Board may provide.
- (2) An application for a water service plumber licence shall be accompanied by such testimonials or other evidence of qualifications and experience, competency and character as the Board may, either generally or in any particular case, require.

## Fee for examination and licence

19.—(1) An applicant who wishes to sit for an examination required by the Board under regulation 17(2) shall pay the fee specified in the Third Schedule, and such fee paid shall not be refundable to the applicant.

[S 703/2008 wef 01/07/2009]

(2) An application for the issue or renewal of a water service plumber licence under regulation 18 shall be accompanied by the fee specified in the Third Schedule.

[S 703/2008 wef 01/07/2009]

# Licence to contain certain particulars, etc.

- **20.** A water service plumber licence shall
  - (a) contain the name of the person to whom the licence is issued;
  - (b) bear the signature of the authorised officer;

- (c) be valid for such period as the Board may determine unless cancelled or suspended in accordance with these Regulations; and
- (d) be subject to such conditions as the Board may, from time to time, determine.

### **Duration of licence**

**21.**—(1) Subject to regulation 22, a water service plumber licence which is in force immediately before 1st January 2011shall be in force for the period specified in the licence and may, on its expiry, be renewed and be subject to such conditions as the Board may determine.

[S 832/2010 wef 01/01/2011]

- (1A) A water service plumber licence issued or renewed on or after 1st January 2011 shall be valid for the lifetime of the holder of the licence, unless
  - (a) it is earlier cancelled or suspended under regulation 22; or
  - (b) it ceases to be valid under paragraph (1B).

[S 832/2010 wef 01/01/2011]

(1B) A water service plumber licence shall cease to be valid on the date that the holder of the licence attains the age of 65, 68, 71, 74, 77, 80, 83, 86, 89, 92, 95, 98 or 101, unless before that date, the holder of the licence submits to the Board a copy of a medical report issued not more than 3 months before that date by a registered medical practitioner, certifying that the holder of the licence is physically and mentally fit to carry out water service works.

[S 832/2010 wef 01/01/2011]

(2) The Board may, in its discretion, refuse to issue a licence to any person, or to renew the licence of any person whose licence has expired or to reinstate a licence which has been cancelled.

[S 832/2010 wef 01/01/2011]

(3) The Board may determine, extend or alter in any manner the kind or description of water service work which the licensed water service plumber may carry out or engage in or the conditions under which he may carry out or engage in any water service work.

# Training requirements for licensed water service plumbers

**21A.** The Board may require any licensed water service plumber to —

- (a) complete such additional training or attend such refresher course as the Board may specify relating to the carrying out of any water service work; and
- (b) undergo and pass such examination or test to satisfy the Board of his fitness to continue to be licensed as a water service plumber.

[S 832/2010 wef 01/01/2011]

## Licence to be subject to cancellation or suspension by Board

- **22.**—(1) Notwithstanding any penalty which may be imposed under these Regulations or otherwise, if a licensed water service plumber
  - (a) has obtained the licence by making or producing, or causing to be made or produced, any false or fraudulent declaration, certificate or representation, whether in writing or otherwise;
  - (b) has, in the opinion of the Board, contravened any provision of the Act or any regulations made thereunder or any condition of the water service plumber licence issued to him;
  - (c) has committed an offence under any other written law of such a nature as to render it, in the opinion of the Board, undesirable that he should continue to hold the licence;
  - (d) has failed to complete such training, attend such course or pass such examination or test as required by the Board under regulation 21A;
  - (e) is, in the opinion of the Board, incapable of carrying out any water service work of the class for which the licence was issued; or
  - (f) is, for some other reason, not fit to be licensed or continue to be licensed as a water service plumber,

the Board may, after giving the licensed water service plumber a reasonable opportunity to be heard, cancel or suspend the licence for such period as the Board thinks fit.

- (2) The Board may cancel the licence of a water service plumber upon his application for the cancellation of his licence.
- (3) Upon such cancellation or during such suspension, that person shall for the purpose of the Act and these Regulations be deemed not to be a licensed water service plumber.
- (4) No compensation shall be paid by the Board to any person whose water service plumber licence is cancelled or suspended and no fee or part of the fee shall be refunded by the Board to that person in respect of the unexpired period of such licence.

[S 832/2010 wef 01/01/2011]

## Notification of cancellation or suspension of licence

- 23.—(1) Every notification of a cancellation or suspension of a licence of a water service plumber shall be given to the water service plumber by a letter signed by the authorised officer who shall send the letter by ordinary post, addressed to the water service plumber at his last known address specified in regulation 27(3).
- (2) A water service plumber shall, within 14 days from the date of the notification under paragraph (1), deliver the cancelled or suspended licence to the Board.
- (3) Any water service plumber who contravenes paragraph (2) shall be guilty of an offence.

# Replacement licence, etc.

- **24.**—(1) Where the licence of a licensed water service plumber has been lost, destroyed or defaced or becomes obliterated so that any particulars in such licence is illegible, the licensed water service plumber shall forthwith notify the Board.
- (2) Subject to paragraphs (4) and (5), the Board shall, on payment of the fee specified in the Third Schedule, if it is satisfied that the licence

of a water service plumber has been lost, destroyed or defaced or become obliterated, issue a replacement of such licence to him.

[S 703/2008 wef 01/07/2009]

- (3) A replacement of a licence shall have the same effect as the original.
- (4) In the case of a licence which has been defaced or become obliterated, no replacement of such licence shall be issued unless the original licence is returned to the Board.
- (5) In the case of a licence which has been lost or destroyed, no replacement of such licence shall be issued unless the licensed water service plumber makes a statutory declaration of the loss or destruction and furnishes it to the Board.
- (6) Where any original licence is found after any replacement thereof is issued under this regulation, the licensed water service plumber shall immediately return the replacement to the Board for cancellation.
- (7) Any licensed water service plumber who contravenes paragraph (6) shall be guilty of an offence.

# Licensee to notify Board of change of address

- **25.**—(1) Every licensed water service plumber who changes his address shall immediately notify the Board, in writing, of his new address.
- (2) Any licensed water service plumber who contravenes paragraph (1) shall be guilty of an offence.

# Production of licence and giving of information to authorised officer of Board

- **26.**—(1) Any person who is carrying out or who reasonably appears to the authorised officer to be engaged in or to have been engaged in the carrying out of any water service work shall, on demand of the authorised officer
  - (a) produce for inspection by the authorised officer any licence held by him under these Regulations;

- (b) inform the authorised officer whether he does or does not hold a licence issued under these Regulations;
- (c) inform the authorised officer whether he is carrying out or has carried out any water service work; and
- (d) attend at such office of the Board as the authorised officer may specify
  - (i) to give any information or evidence which the Board may require of him for the purposes of these Regulations; or
  - (ii) to produce to the Board for inspection and verification any licence which he has informed the authorised officer that he holds but which he did not produce to the authorised officer on demand being made for it.
- (2) Any person who contravenes paragraph (1) shall be guilty of an offence.

## Register of water service plumbers

- **27.**—(1) The Board shall keep a register of water service plumbers known as the Water Service Plumbers Register.
  - (2) The Water Service Plumbers Register shall contain
    - (a) the full name and address of every licensed water service plumber as set out in his application form for the licence issued to him;
    - (b) the date of issue and the number of any licence so issued to him;
    - (c) the particulars of his qualifications to hold the licence; and
    - (d) such other particulars as the Board thinks fit.
- (3) For the purposes of regulations 23 and 46, the last known address of a licensed water service plumber shall be his latest address appearing in the Register kept under this regulation.

## Division 2 — Water service works

#### Notice of water service works

- **28.**—(1) Any person who wishes to have any water service work carried out shall engage a water service worker of the appropriate class specified in regulation 16 entitled to carry out the water service work.
- (2) No water service worker shall carry out any water service work which he is engaged to carry out under paragraph (1) without first notifying the Board of such work in such form as may be specified by the authorised officer.
- (3) Any person who fails to comply with paragraph (1) or (2) shall be guilty of an offence.

## **Duties and responsibilities of water service workers**

- **29.**—(1) A water service worker shall
  - (a) inspect and ensure that any water service work which he carries out or engages in (including the design of a water service installation) complies with the relevant requirements; and
  - (b) in the case of a registered professional engineer, properly supervise any water service work undertaken on his behalf by a licensed water service plumber and ensure that the licensed water service plumber does not do or omit to do anything in contravention of the Act or any regulations made thereunder.
- (2) Any water service worker who contravenes paragraph (1) shall be guilty of an offence.
  - (3) In paragraph (1), "relevant requirements" means
    - (a) these Regulations; and
    - (b) any other requirements imposed by any other statutory authority.

## Certification of water service works

**30.**—(1) A licensed water service plumber shall, on completion of the water service work, submit to the authorised officer, within such

time as the Board may require, a Certificate of Satisfactory Completion certifying that —

- (a) the water service work has been completed and complies with the relevant requirements referred to in regulation 29; and
- (b) the water service installation to which the water service work relates has been tested to be watertight and is fit to convey potable water.
- (2) A registered professional engineer shall, on completion of the water service work, carry out inspection of the water service work and submit to the authorised officer, within such time as the Board may require, a Certificate of Satisfactory Completion certifying
  - (a) that the water service work was carried out by the licensed water service plumber, has been completed and complies with the relevant requirements referred to in regulation 29;
  - (b) that the water service installation to which the water service work relates, and its associated electrical devices and equipment, have been tested and are safe and acceptable for operation; and
  - (c) that the water service installation to which the water service work relates has been tested to be watertight and is fit to convey potable water.
- (3) Any person who fails to comply with paragraph (1) or (2) shall be guilty of an offence.

# Notification to Board of wastage, pollution or contamination of water supplied by Board

- **31.**—(1) In carrying out any water service work or the inspection of any water service installation, the water service worker shall notify the Board of any water service installation that is causing or is likely to cause wastage, pollution or contamination of the water supplied by the Board.
- (2) Any water service worker who contravenes paragraph (1) shall be guilty of an offence.

## Failure to carry out duties

- **32.**—(1) Where a water service worker engaged by any person under regulation 28 becomes unwilling or unable, whether by reason of the termination of his appointment or for any other reason, to carry out his duties under these Regulations, he shall, within 14 days of his ceasing to carry out his duties, notify the Board of that fact in writing.
- (2) Any water service worker who contravenes paragraph (1) shall be guilty of an offence.

## **Board may give directions**

- **33.**—(1) Where any water service work which is being or has been carried out or any water service installation does not comply with any requirement set out in these Regulations, the Board may give a direction, verbally or in writing, to any of the following persons requiring that person to comply with such requirements within such time as may be specified in the direction:
  - (a) the water service worker responsible for the water service work or the water service installation;
  - (b) the owner or developer of the building or premises in or on which the water service works is being or has been carried out or water service installation is installed; or
  - (c) the consumer.
- (2) The Board shall not be liable for any cost or expense incurred by any of the persons referred to in paragraph (1) in complying with any direction given by the Board under that paragraph.
- (3) Where a water service worker receives a direction from the Board under paragraph (1), the water service worker shall notify the consumer, owner or developer referred to in paragraph (1) of the direction and that the Board may disconnect or refuse to supply water through the water service installation until such time as the requirements of the Board specified in the direction have been complied with.
- (4) Any water service worker who contravenes paragraph (3) shall be guilty of an offence.

## Board may discontinue supply of or refuse to supply water

### **34.** Where —

- (a) any water service work was carried out without prior notification given to the Board under regulation 28;
- (b) any water service work which is being or has been carried out or any water service installation contravenes any provision of these Regulations; or
- (c) any direction issued by the Board under regulation 33 is not complied with,

the Board may, if it thinks fit —

- (i) in the case of a new water service installation or any water service work relating thereto, refuse to connect its supply to that water service installation; or
- (ii) in the case of an existing water service installation or any water service work relating thereto, disconnect its supply from that water service installation,

until such time as the water service work or water service installation has been altered, repaired, rectified or replaced so that it complies with these Regulations or the requirements specified in the direction (as the case may be).

### **PART IV**

# METERED WATER CONSUMPTION AND WATER CONSERVATION

# Supplies through meter

**35.** No supply of water shall, except with the consent of the Board, be given otherwise than through a meter.

# Responsibility for meters, etc.

- **36.**—(1) Every meter shall
  - (a) be fixed and maintained by the Board; and
  - (b) remain the property of the Board.

- (2) The Board may determine the number of meters and sub-meters and the sizes thereof which shall be installed in any premises, and where the premises comprises 2 or more separate units, the Board may require the owner or occupier of each unit to construct or alter the plumbing in such a manner as to enable the Board to install a separate meter in each unit.
  - (3) The Board may, in its discretion, change a meter at any time.
  - (4) No person shall
    - (a) construct, or permit or suffer to be constructed, any building over any meter;
    - (b) place, stack or store, or permit or suffer to be placed, stacked or stored, any material upon or over any meter; or
    - (c) do or permit or suffer to be done any act, matter or thing whereby inspection of any meter shall be interfered with, prevented, obstructed or in any way rendered difficult.
- (5) Any person who contravenes paragraph (4) shall be guilty of an offence.
- (6) The consumer shall pay to the Board the value of any loss or damage if a meter installed within his premises is
  - (a) wrongfully opened up;
  - (b) damaged or broken in whole or in part;
  - (c) interfered with in such a way as to falsify its registration or impair its efficiency; or
  - (d) removed.
- (7) The consumer shall immediately notify the Board if the meter is stolen or damaged.
- (8) If the consumer disputes the accuracy of the meter which measures his water supply, the meter shall, on a written request by the consumer to the Board, be removed and tested.
- (9) The consumer or any person appointed by him may be present when the meter is tested.

- (10) The results of the test shall be binding on the Board and the consumer.
  - (11) [Deleted by S 97/2005 wef 01/03/2005]
  - (12) [Deleted by S 97/2005 wef 01/03/2005]
- (13) A meter shall be considered to be correct when its inaccuracy does not exceed 3%.
- (14) Where a meter is found to register inaccurately, the Board shall charge the consumer on the basis of the average consumption registered by the meter during the 3 months preceding the month when the meter was found to be inaccurate or on such other basis as the Board or the agent of the Board may determine to be representative of the usual consumption of the consumer.
- (15) The Board shall charge the fee specified in the Third Schedule for fixing a meter and turning on a supply, or for turning on a supply for an existing service reconnection due to a default in the payment of bills issued under an agreement for the supply of water by the Board.

[S 703/2008 wef 01/07/2009]

- (16) On receiving at least 4 days written notice from a consumer that he desires to have his supply terminated or his liability transferred, the water service installation shall be disconnected and the meter removed.
- (17) The consumer shall pay all rates and charges incurred until the expiration of the 4 days notice to the Board of his wish to have his supply terminated or his liability transferred.

# Metered water consumption

- **37.**—(1) Where premises are supplied with metered water which is paid for by an owner or landlord, whether or not the payment is recoverable by him, in whole or in part, from the occupier, then for so long as he remains the owner or landlord thereof the following conditions shall apply:
  - (a) the owner or landlord shall be deemed to be the consumer until such time as he has made arrangements satisfactory to the Board for any occupier to become the consumer in his place; and

- (b) notwithstanding any notice which he may have given either to the Board or to any such occupier, the owner or landlord shall still be liable for payment of any money due in respect of such consumption.
- (2) Where the Board supplies water through a master meter and one or more sub-meters, notwithstanding any notice which the consumer who is liable to pay for his consumption registered by the master meter may have given to the Board, he shall be deemed to remain the consumer until he has made arrangements satisfactory to the Board for another person to become the consumer in his place.
- (3) Where the amount of water registered by the master meter is less than the amount registered by one or more sub-meters, the consumer liable to pay for the consumption registered by the master meter shall pay such amount as the Board or the agent of the Board may determine to be representative of the usual consumption of the consumer.

## Water meter reading

- **38.**—(1) Meters shall be read at such times as the Board may direct.
- (2) Where a meter reader in the course of his duties is unable to read any meter in the premises of the consumer by reason of
  - (a) the door of the premises being locked;
  - (b) the presence of any ferocious dog or other wild or dangerous animal; or
  - (c) any other obstruction or hindrance,

the Board or the agent of the Board shall make a fair and reasonable estimate of the bill to be paid by the consumer for the month, and such estimated bill shall be paid by the consumer.

- (3) [Deleted by S 97/2005 wef 01/03/2005]
- (4) The Board or the agent of the Board shall make adjustments to any estimated bill as soon as the meter of the consumer has been read by the meter reader.

[S 97/2005 wef 01/03/2005]

(5) A reminder fee specified in the Third Schedule shall be payable to the Board or the agent of the Board on every reminder issued by the

Board or the agent of the Board to a consumer who has failed to make payment in accordance with a bill sent to him.

[S 703/2008 wef 01/07/2009]

(6) Where a reminder has been sent by the Board or the agent of the Board to a consumer to make payment in accordance with a bill sent to him and any amount stated in that bill remains unpaid by the consumer upon the issue of the next bill to him, a late payment charge of 1% of that amount remaining unpaid shall be payable by the consumer.

## Hoses or sprinklers not to be used except in certain instances

- **39.**—(1) Except with the written permission of the Board, which may be withdrawn in its discretion, no person shall
  - (a) use water supplied by the Board to water any garden, lawn or other land including commercial market gardens, commercial nurseries, sports grounds, golf courses, race courses, public and club tennis courts by means of a hose, or a fixed or movable sprinkler;
  - (b) use water supplied by the Board to wash any vehicle by means of a hose, pipe or any other appliance attached to a water tap or a draw-off point; or
  - (c) install draw-off points connected to any water service installation in any garden, lawn or any place where the use of water from the Board is not meant strictly for domestic or other approved purposes.
- (2) Nothing in this regulation shall be construed as preventing any person from using any water supplied by the Board for any of the purposes mentioned in paragraph (1)(a) or (b) if such person uses a bucket, can or other similar container or a hose fitted with a controlling device specified by the Board for this purpose.
- (3) Any person who uses or permits or suffers water supplied by the Board to be used contrary to this regulation shall be considered to be wasting water and shall be guilty of an offence and may be liable to have his supply of water disconnected by the Board.

## Conservation of water and installation of water saving devices

- **40.**—(1) No person shall install, or cause or permit to be or to remain installed
  - (a) any water fitting in any premises which is not fitted with such water saving devices as may be stipulated by the authorised officer;
  - (b) any water fitting or shower where the flow rate, water pressure or timing from that water fitting or shower exceeds the limits specified by the authorised officer;
  - (c) any cooling tower in any premises (including residential, commercial and industrial premises and hotels) where the amount of water used for cooling purposes does not comply with the water usage standards and requirements specified by the Board;
  - (d) any boiler used for industrial or commercial purposes which is not fitted with such water pre-treatment facilities as may be required by the Board;
  - (e) any cooling system which is of once-through design;
  - (f) any cooling system in which the cooling water is not recycled; or
  - (g) any bath having a capacity, measured to the overflow level of the bath, exceeding 250 litres which does not incorporate recycling facilities or has a drain plug for direct discharge of water.
- (2) No person shall use water supplied by the Board to dilute industrial waste water so that it may be discharged into the public sewer.
- (3) The Board may give such directions on water conservation to any consumer as it thinks fit, and the consumer shall comply with such directions.
- (4) Any person who contravenes this regulation shall be guilty of an offence.

# Water Efficiency Label

**40A.**—(1) Every water fitting, apparatus, appliance and product of the type specified in Part I of the Second Schedule shall bear a Water Efficiency Label indicating its rating of water efficiency in accordance with the requirements specified in such standard, code of practice or guidelines as may be adopted or issued by the Board under regulation 3.

[S 616/2013 wef 01/04/2014]

- (2) Without prejudice to regulation 5, every water fitting, apparatus, appliance and product referred to in paragraph (1) shall conform to
  - (a) such requirements relating to water efficiency as may be specified in Part II of the Second Schedule; and
  - (b) such standard, code of practice or guidelines adopted or issued by the Board under regulation 3, as the Board may specify.

[S 616/2013 wef 01/04/2014]

- (3) No person shall
  - (a) supply; or
  - (b) offer, display or advertise for supply,

any water fitting, apparatus, appliance or product that is in contravention of paragraph (1) or (2).

- (4) Any person who contravenes paragraph (3) shall be guilty of an offence.
  - (5) The Board may, by notice in writing, require any person who
    - (a) supplies; or
    - (b) offers, displays or advertises for supply,

any water fitting, apparatus, appliance or product that the Board knows or has reason to believe is in contravention of paragraph (1) or (2) to, at his own cost and expense —

(i) immediately remove and cease the use of the Water Efficiency Label;

- (ii) immediately stop supplying or offering, displaying or advertising for supply all such water fittings, apparatus, appliances or products;
- (iii) within the time specified in the notice, have any particular water fitting, apparatus, appliance or product or type thereof tested or examined in accordance with the procedure specified in such standard, code of practice or guidelines adopted or issued by the Board under regulation 3; and
- (iv) in the manner and within the time specified in the notice, recall all such water fittings, apparatus, appliances or products previously supplied by him in contravention of paragraph (1) or (2) during such reasonable period preceding the date the notice was issued.
- (6) Any person who fails to comply with a notice served on him under paragraph (5) shall, unless he satisfies the court that he has used all due diligence to comply with the notice, be guilty of an offence.
  - (7) Any person who, without reasonable excuse
    - (a) defaces, obstructs, removes or misuses; or
    - (b) forges or alters,
- a Water Efficiency Label shall be guilty of an offence.

[S 703/2008 wef 01/07/2009]

### PART IVA

# WATER EFFICIENCY MANAGEMENT PRACTICES

[S 826/2014 wef 01/01/2015]

#### **Definitions for this Part**

**40B.** In this Part, unless the context otherwise requires —

"business activity" means an activity, or a series of activities (including ancillary activities), that involves the use of water in the course of business operations;

- "business activity indicator" means a measure of business activity that takes into account the business operations of a qualifying consumer;
- "chief executive" means any person, however described, who is in the direct employment of, or acting for or by arrangement with, a qualifying consumer, and is principally responsible for the management and conduct of the business operations of the qualifying consumer;
- "former qualifying consumer" means a consumer which has ceased to be a qualifying consumer;
- "private meter" means any appliance or device, whether or not supplied by the Board, which is used to measure, ascertain or regulate the amount of water taken or used from a supply of water, but is not used for the purposes of calculating any water rates or charges payable to the Board;
- "qualifying consumer" means a consumer which satisfies the requirements specified in regulation 40C(1);
- "regulatory period", in relation to a qualifying consumer, means a period of 3 years starting on 1 January of any calendar year;
- "representative" means any person who
  - (a) is in the direct employment of, or acting for or by arrangement with, a qualifying consumer; and
  - (b) is appointed by the qualifying consumer to assist the qualifying consumer in submitting a water efficiency management plan in accordance with regulation 40H;
- "water balance chart" means a chart showing
  - (a) the amount of water entering a site at which a business activity is carried out;
  - (b) the amount of water used for each business activity at the site; and
  - (c) the amount of water leaving the site;

"water usage area" means any area within a site at which a business activity is carried out, and includes an area specified in the Fourth Schedule;

"water use threshold" means the level of water use specified in regulation 40C(2).

[S 826/2014 wef 01/01/2015]

## Qualifying consumer

- **40C.**—(1) A consumer is a qualifying consumer in respect of a regulatory period if any business activity of the consumer has attained the water use threshold specified in paragraph (2) in the calendar year immediately preceding the start of the regulatory period.
- (2) The water use threshold referred to in paragraph (1) is 60,000 cubic metres of water use per calendar year.
- (3) The water use mentioned in paragraph (2) does not include the supply of water to ships and water boats, whether or not that water is supplied by the Board.

[S 826/2014 wef 01/01/2015]

# Notification by qualifying consumer

- **40D.**—(1) A consumer (including a former qualifying consumer) must, within the period of 3 months after the consumer first becomes a qualifying consumer, notify the Board, in accordance with paragraph (2), of the fact that the consumer is a qualifying consumer.
  - (2) A notification under paragraph (1) must
    - (a) be given
      - (i) using the relevant form provided in the electronic service at the Board's Internet website at http://www.pub.gov.sg; and
      - (ii) in the manner specified by the Board; and
    - (b) be accompanied by the following information and documents:
      - (i) registered name of the consumer;

- (ii) Singapore unique entity number of the consumer;
- (iii) principal place of business of the consumer;
- (iv) name, designation, contact details and identification number of the chief executive of the consumer;
- (v) name, designation, contact details and identification number of each representative of the consumer;
- (vi) address of the site of each business activity of the consumer, and the water account number for that site;
- (vii) bills and other records (if any) showing the water usage and the amount of each type of water used at each site of business activity of the consumer;
- (viii) the business profile of the consumer (if any);
  - (ix) a signed statement, from the chief executive of the consumer, that the information submitted is accurate and complete;
  - (x) such other information or documents as may be specified in the form provided or as may be required by the Board.
- (3) A consumer which contravenes paragraph (1) shall be guilty of an offence.

## Notification of ceasing to be qualifying consumer

- **40E.**—(1) A consumer ceases to be a qualifying consumer on the first happening of either of the following events:
  - (a) the consumer continuously during the regulatory period never attains the water use threshold:
  - (b) the consumer ceases the consumer's business operations.
- (2) A consumer which ceases to be a qualifying consumer must notify the Board, in accordance with paragraphs (3) and (4), of the fact that the consumer ceases to be a qualifying consumer.

- (3) A notification under paragraph (2) must
  - (a) be given
    - (i) using the relevant form provided in the electronic service at the Board's Internet website at http://www.pub.gov.sg; and
    - (ii) in the manner specified by the Board;
  - (b) be accompanied by the following information and documents:
    - (i) in the case of a consumer which continuously during the regulatory period never attains the water use threshold, bills and other records (if any) showing the water usage and the amount of each type of water used at each site of business activity of the consumer;
    - (ii) in the case of a consumer which has ceased its business operations, documentary proof that the consumer has ceased its business operations; and
    - (iii) such other information or documents as may be specified in the form provided or as may be required by the Board; and

## (*c*) be made —

- (i) in the case of a consumer which continuously during the regulatory period never attains the water use threshold, within the period of 3 months after the consumer ceases to be a qualifying consumer; or
- (ii) in the case of a consumer which has ceased its business operations, within the period of 3 months after the date on which the consumer ceased its business operations.
- (4) The relevant form referred to in paragraph (3)(a)(i) must be endorsed by the chief executive of the consumer.

- (5) Without prejudice to paragraph (2)
  - (a) a consumer which intends to cease its business operations may notify the Board in writing of the consumer's intention to do so; and
  - (b) the notification must be accompanied by documentary proof that the consumer intends to cease its business operations.
- (6) A consumer which contravenes paragraph (2) shall be guilty of an offence.

## Register of qualifying consumers, etc.

**40F.** The Board may maintain a register in such form and containing such particulars as the Board may determine of every qualifying consumer and every former qualifying consumer.

[S 826/2014 wef 01/01/2015]

### Board may ascertain whether consumer is qualifying consumer

- **40G.**—(1) The Board may, for the purposes of ascertaining whether any consumer is a qualifying consumer, do all or any of the following:
  - (a) by notice in writing, require that consumer
    - (i) to carry out such inspections within such time as the Board may specify in the notice; or
    - (ii) to furnish to the Board, in respect of any business activity of that consumer, such reports, information or documents within such time as the Board may specify in the notice;
  - (b) by its employees, agents or contractors enter the premises of that consumer at reasonable hours and carry out such inspections to ascertain the source of water and the amount of each type of water used at each water usage area, as the Board may think necessary.

(2) A consumer which, without reasonable excuse, fails to comply with a requirement under paragraph (1)(a) shall be guilty of an offence.

[S 826/2014 wef 01/01/2015]

## Submission of water efficiency management plan

- **40H.**—(1) A qualifying consumer must prepare and, through a representative, submit to the Board, in accordance with this regulation, a water efficiency management plan in respect of each business activity of the consumer not later than 30 June of each year.
  - (2) The water efficiency management plan must be submitted
    - (a) using the relevant form provided in the electronic service at the Board's Internet website at http://www.pub.gov.sg; and
    - (b) in the manner specified by the Board.
- (3) The water efficiency management plan must be endorsed by the chief executive of the qualifying consumer.
- (4) The water efficiency management plan must include, in respect of each business activity, the following information for the year immediately preceding the year it is submitted to the Board:
  - (a) the number of days in that year during which the business activity was carried out;
  - (b) the plant recycling rate and process recycling rate, if applicable;
  - (c) the total amount of each type of water supplied by the Board that is used;
  - (d) the total amount of each type of water not supplied by the Board that is used;
  - (e) the amount of each type of water (whether or not supplied by the Board) used at each water usage area, including the amount recorded by any private meter;
  - (f) for each reused or recycled stream, the type and amount of that stream, the type of treatment used for recycling, and the water usage area that uses that stream;

- (g) every business activity indicator;
- (h) a water efficiency plan describing
  - (i) the water conservation measures;
  - (ii) the date for the implementation of those measures;
  - (iii) the implementation status of those measures; and
  - (iv) the projected annual water savings for each type of water;
- (i) a water balance chart;
- (j) such other information as the Board may require.
- (5) A qualifying consumer which contravenes paragraph (1) shall be guilty of an offence.

# Board may give directions in relation to water efficiency management plan

- **40I.**—(1) Where a qualifying consumer submits a water efficiency management plan that does not conform to the requirements under regulation 40H, the Board may, by notice in writing, direct the qualifying consumer to carry out such rectifications or re-computations, and to resubmit the water efficiency management plan to the Board, within such time as the Board may specify in the notice.
- (2) A qualifying consumer which fails to comply with a direction under paragraph (1) shall be guilty of an offence.

[S 826/2014 wef 01/01/2015]

## Records to be kept by qualifying consumer

- **40J.**—(1) A qualifying consumer must keep and maintain complete and accurate records of the information specified in paragraph (2).
  - (2) The information referred to in paragraph (1) is as follows:
    - (a) information on
      - (i) the total amount of each type of water supplied by the Board that is used; and

- (ii) the total amount of each type of water not supplied by the Board that is used:
- (b) information used for computing plant recycling rates and process recycling rates, if applicable;
- (c) water balance charts;
- (d) information on the amount of each type of water (whether or not supplied by the Board) used at each water usage area, including the amount recorded by any private meter;
- (e) for each reused or recycled stream, the type and amount of that stream, the type of treatment used for recycling, and the water usage area that uses that stream; and
- (f) any other information relied on by the qualifying consumer for the purposes of preparing a water efficiency management plan in accordance with regulation 40H.
- (3) A qualifying consumer must
  - (a) retain each record referred to in paragraph (1) for at least 5 years after the date of creation or receipt of that record; and
  - (b) during that period, make that record available for inspection by the Board or an authorised officer, or furnish that record to the Board, whenever required by the Board to do so.
- (4) The records referred to in paragraph (1) may be kept and maintained in electronic form.
- (5) A qualifying consumer which contravenes paragraph (1) or (3) shall be guilty of an offence.

# Installation of private meter and measurement of water consumption

- **40K.**—(1) This regulation shall apply to a consumer (referred to in this regulation as a relevant consumer) if
  - (a) the consumer is a qualifying consumer; or

- (b) at the time the consumer applies to be supplied with water by the Board, the consumer estimates, in consultation with the Board, the consumer's average monthly amount of water use (whether or not the water is supplied by the Board) for any business activity to be at least 5,000 cubic metres.
- (2) If paragraph (1)(a) applies, a relevant consumer must install, within a period of 6 months after the consumer becomes a qualifying consumer, one or more private meters to measure and monitor the amount of water use at each water usage area specified in the second column of the Fourth Schedule within each site of any business activity carried out by the consumer which has attained the water use threshold.
- (3) Despite paragraph (2), where a relevant consumer belongs to a sector specified in the first column of item 5 or 6 of the Fourth Schedule, and the supply of water to that consumer by the Board immediately before 1 January 2015 is intended to be temporary, that consumer is not required to install any private meter to measure and monitor the amount of water use at any water usage area specified opposite in the second column of that Schedule.
- (4) If paragraph (1)(b) applies, a relevant consumer must install, before the Certificate of Satisfactory Completion referred to in regulation 30(1) is submitted on the completion of the water service works for the supply of water by the Board, one or more private meters to measure and monitor the amount of water use at each water usage area specified in the second column of the Fourth Schedule within each site of any business activity to be carried out by the consumer which the consumer estimates will attain the monthly amount of water use specified in paragraph (1)(b).
- (5) The Board may, by notice in writing, require a relevant consumer to install, within such time as the Board may specify in the notice, one or more private meters to measure and monitor the amount of water use at any water usage area (not being a water usage area specified in the second column of the Fourth Schedule) if the Board is satisfied that there are good reasons to do so.

(6) A relevant consumer which contravenes paragraph (2) or (4), or fails to comply with a requirement under paragraph (5), shall be guilty of an offence.

[S 826/2014 wef 01/01/2015]

#### PART V

#### **MISCELLANEOUS**

### **Board may waive requirements**

41. The Board or the authorised officer may, either generally or in any particular case, waive any requirements specified in these Regulations or any standard, code of practice or guidelines referred to in regulation 3 to such extent as it or he thinks fit in all the circumstances of the case.

#### Manner of disconnection

- **42.** Where the Board is entitled under these Regulations to disconnect any supply of water provided by it, the Board may do so by
  - (a) removing the meter;
  - (b) disconnecting the connecting pipe; or
  - (c) immobilising the controlling stop-valve at the meter or sub-meter position with a locking device or other suitable means whether or not such stop-valve is the property of the Board.

## Board not liable for loss or damage

- **43.**—(1) Where the Board issues any notice or direction under these Regulations, the Board shall not be liable for any loss, damage or contamination of water suffered by any person
  - (a) in complying with the requirements of such notice or direction;
  - (b) arising out of or in consequence of the person having complied with the requirements of such notice or direction; or

- (c) notwithstanding compliance by that person with the requirements of such notice or direction.
- (2) Where the Board, whether by itself or through any person
  - (a) executes any work under these Regulations; or
  - (b) disconnects any water supply or refuses to supply any water to any person under these Regulations,

the Board shall not be liable for any loss, damage or contamination of water suffered by any person arising out of or in consequence of the execution of works, disconnection of supply or refusal to supply.

#### Fire services

- **44.**—(1) The Board may grant any consumer permission to construct a fire service in any premises where such a service is necessary or expedient to enable water to be drawn from the supply by the Board for the purpose of abating fire in such premises.
- (2) Such fire service shall include the provision of adequate storage tanks, together with the necessary ancillary equipment, pipes and fittings to meet the flow and other requirements as specified by the relevant authorities.
  - (3) [Deleted by S 97/2005 wef 01/03/2005]
- (4) The cost of the fire service including all connections to the water main of the Board shall be borne by the consumer.

[S 97/2005 wef 01/03/2005]

- (5) These Regulations shall, with the necessary modifications, also apply to fire services.
- (6) The Board shall not be responsible for damage or loss caused by disconnection, diminution or failure of the supply due to water restriction or to any other cause.

## Inspection

**45.** Any officer of the Board may, in compliance with the provisions of the Act, inspect any water service installation or apparatus belonging to the consumer.

#### Service of notices

**46.** Unless otherwise provided in these Regulations, any notice or direction required to be served by the Board under these Regulations shall be signed by an authorised officer and the notice or direction shall be deemed to be correctly served if sent by post to the person or left at his last known address.

### **Penalty**

47. Any person guilty of an offence under any provision of these Regulations for which no penalty is expressly provided shall be liable on conviction to a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 12 months or to both and, in the case of a continuing offence, to a further fine not exceeding \$250 for every day or part thereof during which the offence continues after conviction.

#### FIRST SCHEDULE

Regulations 4(1) and (2) and 8(1)

#### REQUIREMENTS FOR WATER FITTINGS

#### Water fittings

- 1.—(1) Subject to paragraph (2), no material or substance which, either alone or in combination with any other water fitting, material or substance or with the contents of any water fitting of which it forms a part, causes or is likely to cause contamination of water shall be used in the construction, installation, renewal, repair or replacement of any water fitting which conveys or receives, or may convey or receive, or is intended to convey or receive potable water supplied by the Board.
- (2) Paragraph (1) shall not apply to a water fitting downstream of a terminal fitting supplying potable water where
  - (a) the use to which the water fitting downstream is put does not require potable water; and
  - (b) a suitable arrangement or an adequate device to prevent backflow is installed.
- 2.—(1) Water fittings shall be made of material which is corrosion-resistant or shall be effectively protected from corrosion and deterioration.
- (2) No water fitting shall be made of material susceptible to permeation by any gas or any other substance which could cause contamination of the water in the pipe.

- (3) No water fitting shall be made of lead or lead alloy.
- 3. No water fitting shall be installed in such a position or to pass through such surroundings or substances that
  - (a) cause contamination of water supplied by the Board or contamination or damage to the water fitting; or
  - (b) is likely to cause contamination of water supplied by the Board or contamination or damage to the water fitting unless it is impracticable for the water fitting to be installed elsewhere and all necessary measures are taken to avoid any risk of contamination of the water supplied by the Board and contamination or damage to the water fitting.
- 4. Pipes and pipe fittings which convey any fluid other than potable water shall be clearly identified so as to be easily distinguished from any service pipe or distributing pipe which conveys potable water.
- 5. Every concealed pipe shall be watertight and suitable for the default pressure and temperature likely to be encountered by the pipe in the place where it is concealed.
  - 6. No service pipe shall be connected to
    - (a) a distributing pipe;
    - (b) a pump delivery pipe drawing water either from a distributing pipe or from a storage tank; or
    - (c) the suction pipe of any pump.

#### Water storage tanks

- 7. Every storage tank for storing water supplied by the Board for potable purposes shall be watertight, of adequate strength, properly supported and shall be constructed of copper, glass reinforced polyester, concrete or other corrosion-resisting materials and shall not have any adverse effect on the quality of water contained therein.
- 8. Every storage tank and any water fitting connected directly to it shall be free from distortion or damage.
- 9. All potable water pumps and other associated appliances and devices of a storage tank shall be protected against contamination.
- 10. A storage tank receiving potable water supplied by the Board shall be fitted with an adequate device or so constructed as to prevent any backflow from the storage tank to any water fitting or water main or other pipe of the Board conveying such water.

- 11.—(1) Every storage tank shall be fitted with
  - (a) an overflow pipe which has a suitable means of warning of an impending overflow; and
  - (b) a float-operated valve, an effective adjustable valve or any other effective device for controlling the inflow of water which
    - (i) is capable of shutting off the inflow of water at a suitable level below the overflowing level of the tank; and
    - (ii) which can be readily installed, repaired, renewed or adjusted.
- (2) Every storage tank shall be fitted with a servicing valve on the inlet pipe adjacent to the tank and a servicing valve on the outlet pipe.
- (3) Where 2 or more water storage tanks at the same level are connected together, the pipe used to connect one tank to another shall be fitted with a stop-valve.
- (4) Every inlet pipe to a water storage tank, whether fitted with a float-operated valve or not shall be fitted in such a position that it discharges at a level higher than the overflowing level of the overflow pipe or, if there is more than one overflow pipe, the highest overflow pipe, by not less than the diameter of that overflow pipe, unless there is an effective means of preventing the siphonage of water back through the inlet.
- 12. A storage tank which receives potable water supplied by the Board and any other water shall have an air-gap of not less than 150 millimetres between the inlet of the potable water supplied by the Board and the top edge of the storage tank.
- 13.—(1) The inspection manhole covers of a storage tank shall be close-fitted and hinged or chained to the tank.
- (2) The inspection manhole covers of a storage tank shall be properly closed, secured and locked.
- (3) The air vents and warning and overflow pipes of a storage tank shall be
  - (a) made of corrosion-resisting material;
  - (b) integrated with the tank or otherwise fastened onto the tank with corrosion-resisting fasteners;
  - (c) properly screened to prevent ingress of any animal or foreign material; and
  - (d) easily visible and noticeable.
- 14. Every isolated compartment of a storage tank shall be fitted with a tap for sampling purposes located midway between the top operating water level and the floor of the tank or on the outlet pipe from the compartment of the storage tank.

- 15. Every storage tank shall be so equipped as to be secured against unauthorised access and contamination and pollution of the water contained therein.
  - 16.—(1) No storage tank shall be installed in such a position that
    - (a) it is directly below any sanitary pipe, floor trap, sewer pipe, reclaimed water pipe or waste pipe;
    - (b) it is in danger of being flooded;
    - (c) the water contained in it is contaminated or liable to contamination;
    - (d) it is not readily accessible for the purposes of inspection, cleaning and maintenance;
    - (e) it is unsightly if exposed to public view, unless it is not practicable to position or place the tank in any other place;
    - (f) it is buried or sunk in the ground unless
      - (i) there is sufficient space around and beneath the storage tank for the purposes of maintenance and detection of leakage; and
      - (ii) the storage tank satisfies either of the following requirements:
        - (A) it is a closed vessel with a tightly fitting access cover bolted or screwed in position, and with any air inlet and overflow pipe suitably screened; or
        - (B) its inlet pipe discharges into the air no less than 150 millimetres above its top edge.
- (2) Sub-paragraph (1)(f)(i) shall not apply in relation to a concrete water storage tank designed and constructed in accordance with Singapore Standard CP 48 Code of Practice for Water Services and any other requirements of the Board.

#### Flushing cisterns and flush valves

- 17.—(1) Subject to paragraph (2), every water-closet pan and every urinal shall be provided with a flushing cistern or flush valve.
  - (2) Flush valves shall not be used in residential dwelling units.
- 18.—(1) Every flushing cistern serving a water-closet pan shall be of such a design as to give a dual flush of 2 different volumes such that the volume of the full flush does not exceed 4.5 litres and the volume of the reduced flush does not exceed 3.0 litres.
- (2) Every flush valve serving a water-closet pan shall be of such a design as to give a single flush of not more than 4.5 litres.

- (3) Every flushing cistern serving a water-closet pan shall be arranged so as to give a dual flush of 2 different volumes such that the volume of the full flush does not exceed 4.5 litres and the volume of the reduced flush does not exceed 3.0 litres.
- (4) Every flush valve serving a water-closet pan shall be arranged so as to give a single flush of not more than 4.5 litres.
- (5) Every flush valve serving a urinal shall be of such a design as to give a single flush of not more than 1.5 litres.
- (6) Every flush valve serving a urinal shall be arranged so as to give a single flush of not more than 1.5 litres.

[S 703/2008 wef 01/07/2009]

19. Every flushing cistern or flush valve shall be fitted with an adequate device or so constructed to prevent the backflow of water to any pipe conveying water supplied by the Board, and shall be of such a design as not to cause wastage of water.

#### SECOND SCHEDULE

Regulation 40A

#### PART I

## TYPES OF WATER FITTINGS, ETC., REQUIRING WATER EFFICIENCY LABEL

The following types of water fittings, apparatus, appliances and products are required to bear a Water Efficiency Label:

- (a) Taps and mixers;
- (b) Flushing cisterns;
- (c) Flush valves;
- (d) Waterless urinals; and
- (e) Clothes washing machines intended for household use.

#### PART II

#### REQUIREMENTS RELATING TO WATER EFFICIENCY

1. Every flushing cistern or flush valve shall be of such a design as to use not more than the amount of water specified in paragraph 18(1), (2) or (5) of the First Schedule, as the case may be.

#### SECOND SCHEDULE — continued

2. Every clothes washing machine intended for household use shall be of such a design as to use not more than 15 litres of water per kilogram of wash load for the washing programme recommended by the manufacturer for a normally soiled load at the rated capacity of the washing machine.

[S 616/2013 wef 01/04/2014]

#### THIRD SCHEDULE

Regulations 19, 24(2), 36(15) and 38(5)

#### **FEES**

- 1.—(1) Fee for examination to be licensed as water \$20 service plumber (2) Fee for licence as water service plumber \$90 (3) Fee for a replacement of a licence as water \$21.40 service plumber (4) [Deleted by S 97/2005 wef 01/03/2005] (5) Fee for fixing meter and turning on supply, or 17.655 for turning on supply for an existing service reconnection due to default in payment of the bills from the Board (6) [Deleted by S 97/2005 wef 01/03/2005] (7) Fee for reminder issued by the Board or its \$0.535 agent to consumer who fails to make payment in accordance with his bill
  - (8) [Deleted by S 97/2005 wef 01/03/2005]
- 2. The fees for item 1(3), (5) and (7) are inclusive of the goods and services tax chargeable under the Goods and Services Tax Act (Cap. 117A) on the supply of goods or services in respect of which the fees are payable.

[S 721/2014 wef 01/11/2014] [S 832/2010 wef 01/01/2011] [S 703/2008 wef 01/07/2009] [S 97/2005 wef 01/03/2005]

## FOURTH SCHEDULE

Regulations 40B and 40K(2), (3), (4) and (5)

## WATER USAGE AREAS AT WHICH AMOUNT OF WATER USE IS TO BE MONITORED

First column	Second column
Sector to which consumer belongs	Water usage areas at which amount of water use is to be monitored
1. Industries	(a) Process
	(b) Cooling tower
	(c) Boiler
	(d) Scrubber
	(e) Cooking area or kitchen
	(f) Toilet
2. Hotels	(a) Guestroom
	(b) Cooling tower
	(c) Food and beverage outlet
	(d) Production kitchen
	(e) Laundry
	(f) Cold water inlet to hot water supply or boiler
	(g) Swimming pool
3. Tertiary institution, prison, or military or defence installation	(a) Cooling tower
	(b) Toilets for each block
	(c) Washing area
	(d) Swimming pool
4. Hospitals	(a) Cooling tower
	(b) Toilets, wards and operating theatres for each block
	(c) Kitchen
	(d) Cold water inlet to hot water supply or boiler

First column	Second column
Sector to which consumer belongs	Water usage areas at which amount of water use is to be monitored
5. Workers' dormitories	(a) Toilets for each block
	(b) Cooking area
	(c) Laundry
	(d) Washing area
6. Construction sites and concrete batching plants	(a) Construction activity
	(b) Recharge well
	(c) Concrete production
	(d) Toilet
	(e) Vehicle washing area
7. Sports and recreational facilities and tourist attractions	(a) Cooling tower
	(b) Exhibit or enclosure
	(c) Washing area
	(d) Toilet
	(e) Food and beverage outlet
	(f) Irrigation
	(g) Swimming pool
8. Office or retail building, or any other building not mentioned in items 1 to 7	(a) Cooling tower
	(b) Toilet

[S 826/2014 wef 01/01/2015] [G.N. No. S 584/2002]

#### LEGISLATIVE HISTORY

## PUBLIC UTILITIES (WATER SUPPLY) REGULATIONS (CHAPTER 261, RG 5)

This Legislative History is provided for the convenience of users of the Public Utilities (Water Supply) Regulations. It is not part of these Regulations.

1. G.N. No. S 584/2002 — Public Utilities (Water Supply) Regulations 2002

Date of commencement : 22 November 2002

2. 2004 Revised Edition — Public Utilities (Water Supply) Regulations

Date of operation : 30 September 2004

3. G. N. No. S 97/2005 — Public Utilities (Water Supply) (Amendment) Regulations 2005

Date of commencement : 1 March 2005

4. G. N. No. S 703/2008 — Public Utilities (Water Supply) (Amendment) Regulations 2008

Date of commencement : 1 July 2009

5. G. N. No. S 832/2010 — Public Utilities (Water Supply) (Amendment) Regulations 2010

Date of commencement : 1 January 2011

6. G. N. No. S 161/2011 — Public Utilities (Water Supply) (Amendment) Regulations 2011

Date of commencement : 1 October 2011

7. G.N. No. S 616/2013 — Public Utilities (Water Supply) (Amendment) Regulations 2013

Date of commencement : 1 April 2014

8. G.N. No. S 721/2014 — Public Utilities (Water Supply) (Amendment) Regulations 2014

Date of commencement : 1 November 2014

9. G.N. No. S 826/2014 — Public Utilities (Water Supply) (Amendment No. 2) Regulations 2014

Date of commencement : 1 January 2015