PUB

Water for All: Conserve, Value, Enjoy

Please address any correspondence to Water Supply (Network) Department

Your Ref :
Our Ref : WSN 00300/57
Date : 13 Apr 09

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Dear Sir/Madam

PUBLIC UTILITIES (WATER SUPPLY) (AMENDMENT) REGULATIONS 2008

Objective

1 This circular is to inform the industry of the Public Utilities (Water Supply) (Amendment) Regulations 2008 on the new Mandatory Water Efficiency Labelling Scheme (MWELS) and mandatory installation of dual flush low capacity flushing cisterns (dual flush LCFCs).

Background & Details of Regulations

2 Our circular of 23 October 2008 (copy attached) informed that with effect from 1 July 2009, the water efficiency labelling of fittings and products such as taps and mixers, dual flush LCFCs, urinal flush valves and urinals will be made mandatory. The installation of dual flush LCFCs will also be made mandatory from 1 July 2009. Please refer to the attached circular for more details.

3 The above mandatory requirements have been incorporated into the Public Utilities (Water Supply) Regulations as the Public Utilities (Water Supply) (Amendment) Regulations 2008. The Public Utilities (Water Supply) (Amendment) Regulations 2008 was published in the Gazette on 31 December 2008 and will come into operation on 1 July 2009. A copy of the gazetted Public Utilities (Water Supply) (Amendment) Regulations 2008 is attached for your information and compliance.

Clarifications

4 A list of FAQs is enclosed as an appendix to this circular.

5 Copies of this circular, our circular of 23 October 2008 and the gazetted Public Utilities (Water Supply) (Amendment) Regulations 2008 can also be viewed and downloaded from our website at www.pub.gov.sg/wels/links.

6 If you or your members/staff have any queries concerning this circular or need any clarifications, please do not hesitate to contact the following officers:

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Informing members/staff

7 I will appreciate it very much if you can help convey the contents of this circular to members/staff of your organisation.

8 Thank you and best regards.

Yours faithfully

RAMAHAD SINGH
DEPUTY DIRECTOR
WATER DEMAND MANAGEMENT & INSPECTORATE
for DIRECTOR
WATER SUPPLY (NETWORK) DEPARTMENT

Encs

Our Ref:
Date: 23 Oct 08

Dear Sir/Madam

MANDATORY WATER EFFICIENCY LABELLING SCHEME (MWELS)
MANDATORY INSTALLATION OF DUAL FLUSH LOW CAPACITY FLUSHING CISTERNS

Objective

1 This circular is to inform the relevant professional institutes, associations, societies, statutory boards, government organisations, developers, qualified persons, professional engineers, licensed water service plumbers, suppliers, testing laboratories, etc of the new Mandatory Water Efficiency Labelling Scheme (MWELS) and mandatory installation of dual flush low capacity flushing cisterns (dual flush LCFCs).

Background

2 Launched in 2006, the 10-Litre Challenge is an umbrella programme aimed at getting each Singaporean to reduce our daily water consumption by 10 litres. As part of the 10-Litre Challenge, PUB introduced the voluntary Water Efficiency Labelling Scheme to provide consumers with information on the water consumption and water efficiency of water fittings and products to help consumers make informed choices when they make their purchases. To date, almost 800 product models have been labelled, from taps to shower heads to washing machines.

3 The use of dual flush LCFCs was another of the initiatives promoted under the 10-Litre Challenge to help Singaporeans conserve water. Compared to single flush LCFCs, dual flush LCFCs use less water as they allow users the choice of a reduced flush (not exceeding 3 litres) versus a full flush (not exceeding 4.5 litres) for liquid wastes. The use and popularity of dual flush LCFCs and its availability in the market have since been increasing.

4 In view of the favourable response and to further promote water conservation and accelerate the take-up rate of water efficient fittings and products and incentivise suppliers to bring in more water efficient models:

a PUB will mandate the water efficiency labelling of fittings and products, starting with taps, dual flush LCFCs, urinals and urinal flush valves from **1 July 2009**. The provision of information is powerful in changing habits, as consumers will be empowered to make resource smart purchasing decisions.

b In addition, all new premises and existing premises undergoing renovation shall only be installed with water fittings and products, i.e. taps, dual flush LCFCs, urinals and urinal flush valves that are labeled with at least one or

more ticks under MWELS from **1 July 2009**. This shall apply to **all types of premises** including **domestic** and **non-domestic** premises.

c Furthermore, with the increasing use, popularity and availability of dual flush LCFCs, all new **domestic** premises and existing **domestic** premises undergoing renovation shall also be required to be installed with dual flush LCFCs from **1 July 2009**. Also from **1 July 2009**, only dual flush LCFCs will be allowed to be advertised, displayed, offered for sale, sold, supplied or installed for use in Singapore.

5 The above mandatory requirements will be incorporated into the Public Utilities (Water Supply) Regulations and the Singapore Standard CP 48 – Code of Practice for Water Services and shall come into effect from **1 July 2009**.

Details of requirements, implementation and effective dates

6 Since 2006, PUB has consulted and briefed the various stakeholders such as the relevant professional institutes, associations, societies, statutory boards, government organisations, developers, qualified persons, professional engineers, licensed water service plumbers, suppliers, testing laboratories, etc on MWELS and the mandatory installation of dual flush LCFCs to come up with details of the requirements, implementation and effective dates. The details are as follows:

a With effect from **1 July 2009**, only water fittings and products such as taps, dual flush LCFCs, urinals and urinal flush valves that are labeled under MWELS can be advertised, displayed, offered for sale, sold or supplied. Suppliers who wish to have their water fittings and products labeled under MWELS can submit their applications on-line to PUB to register their fittings and products after fulfilling the necessary requirements. More information on MWELS and its water efficiency ratings and details for on-line applications can be found at https://app.pub.gov.sg/wels/.

b Also with effect from **1 July 2009**, all building plan submissions for all new premises and for all existing premises undergoing renovations involving the replacement of taps, flushing cisterns, urinals or urinal flush valves must incorporate such fittings and products that are labeled with at least one or more ticks under MWELS. For plans submitted before **1 July 2009**, the premises shall also be required to be installed with such fittings and products that are labeled with at least one or more ticks under MWELS if their completion date is after **1 July 2010**. From **1 July 2010**, only water fittings and products that are labelled with at least one or more ticks under MWELS can be installed in all new and on-going building projects. The above requirements and implementation shall apply to **all types of premises** including **domestic** and **non-domestic** premises.

c In addition, from **1 July 2009**, all building plan submissions for new **domestic** premises and for existing **domestic** premises undergoing renovations which involve the replacement of water closets shall only incorporate dual flush LCFCs. For plans submitted before **1 July 2009**, the **domestic** premises shall also be required to be installed with dual flush LCFCs if their completion date is after **1 July 2010**. From **1 July 2010**, only dual flush LCFCs can be installed in all new and on-going

domestic premises projects. Also from **1 July 2009**, only dual flush LCFCs will be allowed to be advertised, displayed, offered for sale, sold, supplied or installed for use in Singapore.

Clarifications

7 If you or your members/staff have any queries concerning this circular or need any clarifications, please do not hesitate to contact the following officers:

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9 Thank you and best regards.

Yours faithfully

RAMAHAD SINGH
DEPUTY DIRECTOR
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for DIRECTOR
WATER SUPPLY (NETWORK) DEPARTMENT

First published in the Government *Gazette*, Electronic Edition, on 31st December 2008 at 5:00 pm.

No. S 703

PUBLIC UTILITIES ACT
(CHAPTER 261)

PUBLIC UTILITIES
(WATER SUPPLY) (AMENDMENT)
REGULATIONS 2008

In exercise of the powers conferred by section 72 of the Public Utilities Act, the Public Utilities Board, with the approval of the Minister for the Environment and Water Resources, hereby makes the following Regulations:

Citation and commencement

1. These Regulations may be cited as the Public Utilities (Water Supply) (Amendment) Regulations 2008 and shall come into operation on 1st July 2009.

Amendment of regulation 2

2. Regulation 2 of the Public Utilities (Water Supply) Regulations (Rg 5) (referred to in these Regulations as the principal Regulations) is amended by inserting, immediately after the definition of "warning pipe", the following definition:

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

Amendment of regulation 8

3. Regulation 8(1) of the principal Regulations is amended by deleting the words "18(1) and (3)" in sub-paragraph (i)(B) and substituting the words "18(1), (2) and (5)".

New regulation 40A

4. The principal Regulations are amended by inserting, immediately after regulation 40, the following regulation:

"**Water Efficiency Label**

40A.—(1) Every water fitting, apparatus, appliance and product of the type specified in 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.

(2) Without prejudice to regulation 5, every water fitting, apparatus, appliance and product referred to in paragraph (1) shall conform to such standard, code of practice or guidelines adopted or issued by the Board under regulation 3, as the Board may specify.

(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.".

Amendment of First Schedule

5. The First Schedule to the principal Regulations is amended by deleting paragraph 18 and substituting the following paragraph:

"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.".

New Second Schedule

6. The principal Regulations are amended by inserting, immediately after the First Schedule, the following Schedule:

"SECOND SCHEDULE

Regulation 40A

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; and

(*d*) Waterless urinals.".

Renaming of Second Schedule

7. The existing Second Schedule to the principal Regulations is amended by renaming the Second Schedule as the Third Schedule.

Miscellaneous amendments

8. The principal Regulations are amended by deleting the words "Second Schedule" wherever they appear in the following regulations and substituting in each case the words "Third Schedule":

Regulations 19(1) and (2), 24(2), 36(15) and 38(5).

[G.N. No. S 97/2005]

Made this 24th day of December 2008.

TAN GEE PAW
Chairman,
Public Utilities Board,
Singapore.

[AD/00301/1; AG/LEG/SL/261/2002/1 Vol. 6]

(To be presented to Parliament under section 72(4) of the Public Utilities Act).

FREQUENTLY ASKED QUESTIONS (FAQs)

What are PUB's compliance requirements for all types of water fittings? Do water fittings covered under the Mandatory and Voluntary Water Efficiency Labelling Schemes need to comply with these requirements?

PUB would like to remind all suppliers and retailers that only water fittings complying with the requirements and standards stipulated by PUB are allowed to be advertised, displayed or offered for sale, supply or installation in Singapore. These water fittings must also be supported with valid test reports showing compliance with PUB's stipulated requirements and standards. Suppliers/retailers must produce these test reports for verification upon request by PUB. More information on PUB's compliance requirements for water fittings including PUB's stipulated requirements and standards for specific water fittings can be found at PUB's website at www.pub.gov.sg/general/Pages/FittingsandStandards.aspx. Maximum allowable flow rates and flush volumes at water fittings can be found in the Singapore Standard CP 48 - Code of Practice for Water Services. If requirements and standards for a water fitting are not stipulated, the supplier, retailer or installer must approach PUB to stipulate the necessary requirements and standards for compliance.

Water fittings that are covered under the Mandatory Water Efficiency Labelling Scheme (MWELS) such as taps and mixers (sink/bib/shower/basin), dual flush low capacity flushing cisterns (LCFCs), urinal flush valves and urinals and the Voluntary Water Efficiency Labelling Scheme such as showerheads and clothes washing machines must also comply with the above compliance requirements before they can qualify and be considered for labelling.

PUB urges all suppliers and retailers to comply with the above PUB requirements. PUB will be more vigilant and will be stepping up its checks and enforcement to ensure that suppliers and retailers do not violate PUB's requirements. PUB will not hesitate to take punitive and prosecution action against any supplier or retailer found violating PUB's requirements.

What are the water fittings and products covered under the Mandatory Water Efficiency Labelling Scheme (MWELS)?

The water fittings and products covered under the Mandatory Water Efficiency Labelling Scheme (MWELS) include the following:

- Basin Taps and Mixers
- Sink/Bib Taps and Mixers
- Shower Taps and Mixers (except concealed shower taps and mixers & concealed bath/shower taps and mixers)
- Dual Flush Low Capacity Flushing Cisterns

- Urinal Flush Valves
- Waterless Urinals

Concealed shower taps and mixers and concealed bath/shower taps and mixers will not be covered under MWELS for the time being. They can continue to be installed in new and existing developments and premises. However, they must be installed with constant flow regulators to ensure that the flow rates from the showers comply with the mandatory maximum allowable flow rates stipulated in the Singapore Standard CP 48 – Code of Practice for Water Services. The Code of Practice specifies that the maximum allowable flow rate for showers shall not exceed 9 litres/min except for hotels. The maximum allowable flow rate for showers in hotels shall not exceed 12 litres/min.

Bathtub taps and mixers will also not be covered under MWELS. Bath/shower taps and mixers (except concealed bath/shower taps and mixers) will be covered under MWELS. For bath/shower taps and mixers, MWELS will only be applicable to the shower flow rates. MWELS will not be applicable to the bath flow rate from bath/shower taps and mixers for filling of bathtubs.

Labelling of showerheads and clothes washing machines will continue to remain voluntary under the Voluntary Water Efficiency Labelling Scheme.

What standards and requirements do Mandatory WELS & Voluntary WELS water fittings and products have to meet?

The water fitting or product must first meet the mandatory standards and requirements stipulated by PUB for the particular water fitting/product before it can qualify and be considered for water efficiency labelling. In addition, to qualify and be considered for a WELS Water Efficiency Rating label, the water fitting/product must also be tested to comply and meet with the test standards and requirements for water efficiency stipulated for the particular water efficiency rating for the fitting/product. Details of the standards and requirements including testing standards and requirements for the various water fittings/products under the Mandatory and Voluntary Water Efficiency Labelling Schemes can be found in the Guidebook on Water Efficiency Labelling Scheme. The Guidebook on Water Efficiency Labelling Scheme can be viewed and downloaded from PUB's website at www.pub.gov.sg/wels/links.

Where can I find the list and details of product models labelled under the Mandatory and Voluntary Water Efficiency Labelling Schemes?

The list and details of product models labelled under the Mandatory and Voluntary Water Efficiency Labelling Schemes can be found at PUB's website at www.pub.gov.sg/wels/products.

Will it be mandatory to install only showerheads that are labelled under the Voluntary Water Efficiency Labelling Scheme?

As the labelling of showerheads will continue to be voluntary, it will not be mandatory to install showerheads labelled under the Voluntary Water Efficiency Labelling Scheme. However, the flow rates from showers must continue to comply with the mandatory maximum allowable flow rates stipulated in the Singapore Standard CP 48 – Code of Practice for Water Services. The Code of Practice specifies that the maximum allowable flow rate for showers shall not exceed 9 litres/min except for hotels. The maximum allowable flow rate for showers in hotels shall not exceed 12 litres/min.

PUB is only implementing MWELS for taps and mixers, dual flush low capacity flushing cisterns (LCFCs), urinal flush valves and urinals from July 2009. Why is PUB not implementing MWELS for showerheads and clothes washing machines?

PUB recognises that it is important to have more water efficient showerheads and washing machines. However, at present, many of the clothes washing machines sold here are unable to meet even the "1-tick" rating level. Moreover, those that are of at least "1-tick" rating and above are more expensive. If MWELS is implemented for clothes washing machines too early, it would not necessarily give consumers the ability to choose a more water-efficient machine within their price range.

Similarly, in the showerhead market, only a small percentage of all showerheads have been rated "2-ticks" and above. Hence, even if MWELS is implemented for showerheads, consumers would not have many options for switching to more efficient showerheads.

Are there plans to mandate MWELS for showerheads and clothes washing machines in the future?

PUB will continue to study and work with suppliers and manufacturers on the mandatory water efficiency labelling of washing machines and low flow showerheads, and will consider implementing MWELS for them once more affordable water-efficient models are available in the market. PUB is already working with the Singapore Environment Council (SEC) to approach suppliers of washing machines to voluntarily label their product.

Will stores still be allowed to sell "0-tick" taps and mixers, dual flush LCFCs, urinal flush valves and urinals after July 2009?

For urinals, urinal flush valves and LCFCs, "0-tick" labels will no longer be applicable after July 2009. The sale and installation of dual flush LCFCs will be mandatory and these meet the "1-tick" requirement. For urinals and urinal flush valves, it is already

mandatory that these product and fittings that are brought into Singapore must fulfill the "1-tick" and above requirements.

"0-tick" labelled taps and mixers under MWELS can still be sold in stores after July 2009 because there are few models of taps and mixers in the market which meet MWELS "1-tick" and above requirements. Hence, if PUB mandates the use of "1-tick" and above taps and mixers, consumers would not have many options to choose from.

Why allow "0-tick" taps and mixers to be sold and installed after July 2009?

It must be emphasised that the intent of MWELS is to help consumers make informed choices at the point of purchase.

There will be no change to PUB's existing mandatory regulations for performance standards such as flow rate for taps and mixers and flush volumes for flushing cisterns and flush valves to ensure that all water fittings in the market (even "0-tick" taps and mixers) meet a minimum acceptable level of efficiency when installed.

Presently, PUB limits the maximum allowable flow rates at water fittings through the Singapore Standard CP 48 - Code of Practice for Water Services and "0-tick" taps and mixers are installed with constant flow regulators to meet the maximum allowable flow rates. This will not change and consumers will continue to be able to buy "0-tick" taps and mixers, if they so choose, to be installed with constant flow regulators. However, to hasten the take-up of water efficient fittings and encourage suppliers to bring in more water efficient water fittings, "0-tick" taps and mixers will only be allowed for installation/replacement in existing premises. All new developments and existing premises undergoing renovation must only be installed with water fittings that are labelled with at least a "1-tick" or higher water efficiency rating. "1-tick" and higher water efficiency rating taps and mixers meet the maximum allowable flow rates stipulated in the Singapore Standard CP 48 and hence need not be installed with constant flow regulators.

There are few models of tap and mixers currently in the market which meet MWELS "1-tick" and higher rating. Hence, if the sale and use of "0-tick" taps and mixers are to be disallowed, consumers may not have many options to choose from. PUB will monitor the sales of water efficient taps and mixers to assess the impact of MWELS and will consider disallowing the sale and use of "0-tick" taps and mixers once there are sufficient "1-tick" and higher rating taps and mixers in the market. PUB will continue with its public communications plan to inform and educate the public on MWELS and to encourage the use of water efficient fittings. PUB will also be more vigilant and will step up its spot checks and enforcement to ensure that suppliers and installers do not violate the MWELS and other PUB requirements.

Will the display of water fittings for export purposes be allowed when the mandatory water efficiency labelling of water fittings comes into effect from 1 July 2009?

The display of water fittings for export purposes is only allowed till 1 July 2009 when the mandatory water efficiency labelling of water fittings comes into effect. From 1 July 2009, display of water fittings for export purposes will no longer be allowed and suppliers/retailers shall stop all display of water fittings if they do not comply with PUB's stipulated standards and requirements and are not supported with test reports showing compliance with PUB's stipulated requirements and standards. Additionally, water fittings that are covered under MWELS such as taps and mixers (sink/bib/shower/basin), dual flush low capacity flushing cisterns (LCFCs), urinal flush valves and urinals can only be displayed if they have been registered and given the water efficiency label. They must also be displayed with their water efficiency labels.

PUB urges all suppliers and retailers to comply with the above PUB requirements. PUB will be more vigilant and will be stepping up its checks and enforcement to ensure that suppliers and retailers do not violate PUB's requirements. PUB will not hesitate to take punitive and prosecution action against any supplier or retailer found violating PUB's requirements.

How will PUB ensure that suppliers and retailers comply with MWELS?

To ensure that only labelled water fittings and products are offered for supply and sale and the water fittings/products labelled correctly so that consumers receive the right information, PUB will step up its spot checks on suppliers and retailers, and take action against those who advertise, display, offer for supply or sale or supply or sell unlabelled or inappropriately labelled water fittings/products. PUB will also respond to public feedback and will investigate these feedbacks accordingly.

What actions can be taken against suppliers and retailers who do not comply with the provisions in the Public Utilities (Water Supply) Regulations for mandatory water efficiency labelling?

The Public Utilities (Water Supply) (Amendment) Regulations 2008 on mandatory water efficiency labelling holds suppliers and retailers accountable for advertising, displaying, offering for sale and supplying properly labelled water fittings and products. PUB will be able to stop the supply of water fittings and products that are in contravention of the regulations (for example, water fittings or products that are fraudulently labelled). In addition, PUB can also require suppliers and retailers to send such water fittings/products for testing, and even recall such fittings/products which were supplied within a specified period of time.

Notwithstanding the above, suppliers and retailers who are guilty of an offence under the regulations shall also 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.

If only "1-tick" and above taps and mixers, dual flush low capacity flushing cisterns (LCFCs), urinal flush valves and urinals under MWELS can be installed for new developments and existing premises undergoing renovations from July 2009, under what circumstances/situations can "0-tick" taps and mixers be allowed to be installed?

From 1 July 2009, "0-tick" taps and mixers shall only be allowed for installation/replacement in existing premises (both domestic as well as non-domestic). The "0-tick" taps and mixers must be installed with constant flow regulators to meet the relevant maximum allowable flow rates stipulated in the Singapore Standard CP 48 – Code of Practice for Water Services. All new developments and existing premises undergoing renovation must only be installed with water fittings that are labelled with at least a "1-tick" or higher water efficiency rating. This shall apply to all types (i.e. both domestic as well as non-domestic) of new developments and existing premises undergoing renovation. "0-tick" taps and mixers shall not be installed in such new developments and existing premises undergoing renovation. "1-tick" and higher water efficiency rating taps and mixers meet the maximum allowable flow rates stipulated in the CP 48 and hence need not be installed with constant flow regulators.

How will PUB ensure that only "1-tick" and above taps and mixers, dual flush low capacity flushing cisterns (LCFCs), urinal flush valves and urinals under MWELS are installed for new developments and existing premises undergoing renovations come July 2009?

In terms of implementation, with effect from July 2009, PUB will inform all developers who have submitted building plans, for all new developments and for existing premises undergoing renovations which involve replacement of taps and mixers, water closets, urinal flush valves or urinals to incorporate only "1-tick" and above taps and mixers, dual flush LCFCs, urinal flush valves and urinals. While the building plan does not require the specification of the types of water fittings, PUB will inform the developer during the approval process, that it is mandatory to use "1-tick" and above taps and mixers, dual flush LCFCs, urinal flush valves and urinals.

Taking into consideration that most buildings require about a year to be developed, with effect from July 2010, all new and on-going building projects will have installed only "1-tick" and above taps and mixers, dual flush LCFCs, urinal flush valves and urinals. For buildings plans which were submitted before July 2009 but are built after July 2010, the developer will have to seek waiver from PUB regarding the use of "0-tick" or unlabelled fittings/products.

Besides the building plan submissions, PUB will also be mandating the use of "1-tick" and above taps and mixers, dual flush LCFCs, urinal flush valves and urinals through the Singapore Standard CP 48 - Code of Practice for Water Services. Currently, upon completion of water service works, Licensed Plumbers (LPs) and Professional Engineers (PEs) are required to submit a Certificate of Satisfactory Completion of Water Service Work certifying that the water service installation has been completed in accordance to the Public Utilities (Water Supply) Regulations, Singapore Standard CP 48 - Code of Practice for Water Services, all other relevant statutory requirements and other PUB requirements. The LP or PE also undertakes that all the water fittings installed in the water service installation are of the types that comply with standards and requirements prescribed/stipulated by PUB.

PUB will include an additional undertaking that only water efficient labelled fittings and products of "1-tick" and above are used for taps and mixers, dual flush LCFCs, urinal flush valves and urinals when MWELS is implemented in July 2009. PUB will check for compliance during their spot checks on completed projects. Spot checks will be stepped up when MWELS is implemented to ensure compliance.

With effect from 1 July 2009, all new domestic premises and existing domestic premises undergoing renovation involving the replacement of water closets shall only be installed with dual flush LCFCs. Does this requirement also apply to non-domestic premises?

The above requirement is not mandatory for non-domestic premises. Non-domestic premises may be installed with flush valves instead of flushing cisterns. However, if it is to be installed with flushing cisterns, only dual flush LCFCs are allowed. Owners of non-domestic premises are encouraged to install dual flush LCFCs in order to reduce water consumption and cut down on their water costs. Dual flush LCFCs offer consumers a choice of a reduced flush for liquid wastes hence conserving water. Water closets in public toilets shall however continue to be installed with only sensor-operated flush valves which use no more than 4.5 litres of water per flush.

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