Your Ref : PLEASE ADDRESS ANY CORRESPONDENCE TO WATER SUPPLY (NETWORK) DEPARTMENT

Our Ref : WSN 92802/49 Tel : 67313556 Fax : 67313023

Date : 13 Oct 14 E-mail: wong\_waicheng@pub.gov.sg

To Relevant Professional Institutes, Associations, Societies, Statutory Boards, Government Organisations, Developers, Qualified Persons, Professional Engineers, Licensed Water Service Plumbers

Dear Sir/Madam

# REQUIREMENTS FOR INSTALLATION OF PRIVATE WATER METERS FOR NEW NON-DOMESTIC DEVELOPMENTS WITH ESTIMATED AVERAGE MONTHLY TOTAL WATER CONSUMPTION OF AT LEAST 5,000 CUBIC METERS

#### Objective

This circular is to inform the relevant professional institutes, associations, societies, statutory boards, government organisations, developers, qualified persons, professional engineers, licensed water service plumbers, etc. of new requirements for installation of private water meters at various water usage areas in new non-domestic developments with an estimated average monthly total water consumption of at least 5,000 cubic meters.

### **Background**

- The Water Efficiency Management Plan (WEMP) was introduced in 2010 as a voluntary initiative to help non-domestic consumers better understand their water use and better manage and improve the efficiency of their water use, thus helping them to reduce operational costs. Participating companies submit a plan which includes an analysis of current water use, identification of potential water-savings measures and an implementation timeline for these measures.
- PUB will be including requirements on water efficiency management practices under the Public Utilities (Water Supply) Regulations which will require large non-domestic water users (with total water use threshold of 60,000 cubic meters of water used per calendar year) to submit WEMP annually to PUB. The purpose of the mandatory submission of WEMP is to promote the establishment of water management systems across large non-domestic water users, which is a key step for them to better understand and take ownership of their water usage. As part of the mandatory requirements, these large water users will also be required to install private water meters to measure and monitor their water consumption at the various water usage areas within the development in order to account for the breakdown of water use at these areas.

## Installation of Private Water Meters for New Non-Domestic Developments - Details of Requirements, Implementation and Effective Date

To prepare new non-domestic developments for the mandatory submission of WEMP, PUB will be amending the Public Utilities (Water Supply) Regulations to require all such developments with estimated average monthly total water consumption of at least 5,000 cubic meters to install private water meters to measure and monitor the amount of water used at various water usage areas within the development. The private water meters must minimally be installed at the water usage areas listed in the Annex. They shall be installed before the Certificate of Satisfactory Completion of water service works is submitted to PUB for the turning on of water supply.

The above requirements will come into effect from **1 January 2015**. All submissions to PUB from **1 January 2015** for new non-domestic developments with estimated average monthly total water consumption of at least 5,000 cubic meters will have to comply with the requirements for private water meter installation outlined in paragraph 4 above. The private water meters installed shall be painted grey in colour with a colour code of BS4800:00A09 or RAL 7037 or equivalent. The private water meters shall also be clearly labelled to indicate the water usage area monitored. Labels used shall be durable and clearly legible. PUB will also be following-up to amend the Singapore Standard CP 48 – Code of Practice for Water Services to reflect the new requirements.

### Clarifications

6 Should you or your members/staff have any queries on the contents of this circular or need any clarification or assistance, please do not hesitate to contact my colleague Ms Wong Wai Cheng at wong\_waicheng@pub.gov.sg or 67313556.

### Informing members/staff

- 7 I will appreciate it very much if you can help convey the contents of this circular to the relevant members/staff within your organisation.
- 8 Thank you and best regards.

Yours faithfully

RAMAHAD SINGH CHIEF ENGINEER

WATER DEMAND MANAGEMENT & INSPECTORATE

for DIRECTOR

WATER SUPPLY (NETWORK) DEPARTMENT

PUB

Private water meters to be installed to measure and monitor amount of water used at each of the following water usage areas

	Sector	Private water meters to be installed to monitor amount of water used at each of the following water usage areas
1.	Industries	<ul> <li>(a) Process</li> <li>(b) Cooling tower</li> <li>(c) Boiler</li> <li>(d) Scrubber</li> <li>(e) Cooking area or kitchen</li> <li>(f) Toilet</li> </ul>
2.	Hotels	<ul> <li>(a) Guestroom</li> <li>(b) Cooling tower</li> <li>(c) Food and beverage outlet</li> <li>(d) Production kitchen</li> <li>(e) Laundry</li> <li>(f) Cold water inlet to hot water supply or boiler</li> <li>(g) Swimming pool</li> </ul>
3.	Tertiary institution, prison, or military or defence installation	<ul><li>(a) Cooling tower</li><li>(b) Toilets for each block</li><li>(c) Washing area</li><li>(d) Swimming pool</li></ul>
4.	Hospitals	<ul> <li>(a) Cooling tower</li> <li>(b) Toilets, wards and operating theatres for each block</li> <li>(c) Kitchen</li> <li>(d) Cold water inlet to hot water supply or boiler</li> </ul>
5.	Workers' Dormitories	<ul><li>(a) Toilets for each block</li><li>(b) Cooking area</li><li>(c) Laundry</li><li>(d) Washing area</li></ul>
6.	Construction Sites and Concrete Batching Plants	<ul> <li>(a) Construction activity</li> <li>(b) Recharge well</li> <li>(c) Concrete production</li> <li>(d) Toilet</li> <li>(e) Vehicle washing area</li> </ul>
7.	Sports and Recreational Facilities and Tourist Attractions	<ul> <li>(a) Cooling tower</li> <li>(b) Exhibit or enclosure</li> <li>(c) Washing area</li> <li>(d) Toilet</li> <li>(e) Food and beverage outlet</li> <li>(f) Irrigation</li> <li>(g) Swimming pool</li> </ul>
8.	Office or retail building, or any other building not mentioned in items 1 to 7	(a) Cooling tower (b) Toilet