

**Singapore Standards for water efficiency management systems
– Requirements with guidance for use**

AMENDMENT NO. 1

February 2014

1. Page 15, 5.2 Water efficiency management policy

Delete items (c) to (f).

2. Page 16 and 17, 6.2.3 Water usage review

- a) *Replace* item a) with “a) identify the areas that consume water”.
- b) Last sentence, *replace* “should” with “shall”.

3. Page 20, 8.2 Design

- a) *Replace* Paragraph 1 with the following:

“When designing new, modified and renovated facilities, equipment, systems and processes that may have a significant impact on its water efficiency performance, the organisation shall consider the water efficiency performance improvement opportunities and operational control of the new design.”

- b) Paragraph 3, *replace* “any necessary action” with “any necessary action, as applicable”.

4. Page 22, 9.1 Monitoring, measurement, analysis and evaluation

Paragraph 3, *replace* with the following:

The organisation shall define and periodically review its measurement needs. The organisation shall ensure that the equipment used in monitoring and measuring of key characteristics provide data which are accurate and repeatable. Records of establishing accuracy and repeatability, where applicable, shall be maintained.

5. Page 27, A.7.5 Baseline water efficiency index

Replace Paragraph 1, last sentence with “All types of water (excluding seawater) should be used in the computation of the WEI”.

6. Page 28, A.12 Monitoring, measurement, analysis and evaluation

Insert the following new paragraphs:

For private water meters, the organisation shall ensure that verification tests are carried out at least once every 5 years or as per frequency recommended by the meter manufacturer or supplier, whichever is more stringent, to ensure that the accuracy of private water meters is within $\pm 3\%$. Full records of the measurements (at least two per verification tests) shall be maintained, including the following:

- a) Details of the numerical results;

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- b) Accuracy levels;
- c) Date of installation of private water meters / Date of last verification tests;
- d) Other relevant observations.

Some possible verification tests to confirm accuracy level of private water meters are given in PUB's website (http://www.pub.gov.sg/conserves/Pages/SgStdSS5772012_WEMS.aspx) for reference.

7. Page 29, A.13 Internal audit of WEMS

Replace the reference "A.4.3" with "A.7.3".

8. Page 32, Annex C Development of a water balance chart

Replace Paragraphs 4 and 5 with the following:

Besides information on the above streams, the water balance chart shall also indicate:

- a) Recycling rate if recycling is carried out;
- b) Water balance equation where Total Water Input = Total Water Output.