RULE OF THE CENTRAL BUREAU OF WEIGHTS AND MEASURES

ON RULES, PROCEDURES AND CRITERIA FOR TESTING A MODEL OF WATER METER

B.E. 2551 (2009)

In order to ensure that a water meter produced or imported into the Kingdom is durable and is not conveniently a tool for fraud, it is thereby appropriate and necessary to test a model for water meter to be in accordance with the rules, procedures and criteria as prescribed by the Central Bureau of Weights and Measures:

By virtue of section 6(5) of the Weights and Measures Act B.E. 2542 and clause 9 of the Ministerial Regulation prescribing the weighing and measuring instruments which is under the Weights and Measures Act B.E. 2542, types, characteristics, details of the materials used in the production, maximum permissible error and verification of the weighing and measuring instruments and procedure and criteria for registration of personal mark B.E. 2546 which is the Act containing certain provisions in relation to the restriction of rights and liberties of a person, in respect of which section 29 in conjunction with section 32, section 33, section 41 and section 43 of the Constitution of the Kingdom of Thailand so permit by the virtue of law, the Director-General of the Department of Internal Trade shall hereby issues the rules as follows:

Clause 1. This Rule is called the "Rule of the Central Bureau of Weights and Measures on rules, procedures and criteria for testing a model of water meter B.E. 2551 (2009)".

Clause 2. This Rule shall come into force as from the day following the date of its publication in the Government Gazette.

Clause 3. In this Rule:

"model of water meter" means a sample or model of water meter produced or imported into the Kingdom in accordance with the model, specified flow rate, accuracy class.

Clause 4. In the case where it appears necessary, a competent official shall carry out the testing of a model of water meter ready for inspection in accordance with a model,

specified flow rate, accuracy class for 4 each. In the case of production or importing of water meter for the amount of less than 4 machines, it shall be wholly inspected.

Clause 5. Testing of a model for water meter shall be in accordcane with the rules, procedures and conditions as prescribed together with the test for general characteristics, accuracy and durability.

Clause 6. General characteristics of water meter in the part of scale mark display, unique mark, name or trademark, model, serial number, specified flow rate, accuracy class, production year, flow sensor, maximum pressure.

Clause 7. Testing of the accuracy standard of a water meter:

The accuracy of water flow of water meter in accordance with its size, specified flow rate, transitional flow rate and minimum flow rate shall be tested with the minimum volume as specified in the table for accuracy class A, class B or class C annexed to this Rule.

Accuracy of flow of water meter when tested in comparison with water tank, the water volume shall not deviate more than the maximum permissible error specified in the table of accuracy.

Clause 8. Testing for durability:

(1) testing for durability against pressure:

The pressure used for testing shall be at least 1,000 Kilopascal and shall continuously resist the pressure for no less than 1 minute. The water meter must not be less than 1 minute. The water meter must not leak neither must it change the form of water meter;

(2) testing for pressure loss:

Finding of the pressure loss of water flowing through a water meter shall be made under the following steps:

a. installing 2 pressure measuring devices with the distance between them equals the length of water meter;

b. during he time when pressure measuring device is not installed, pressure loss of water flowing through pipeline with the distance equal to the distance under a. at the minimum flow rate and maximum flow rate of a water meter of a water meter tested;

c. upon an installation of water meter, the pressure loss of water flowing through at the minimum flow rate and maximum flow rate;

d. finding the difference between the pressure loss under b and c.

e. the difference of pressure loss shall not exceed 25 kilopascal at the minimum flow rate and the difference of the pressure loss shall not exceed 100 kilopascal at the maximum flow rate;

(3) the test for electromagnetic susceptibility, in the case where a water meter is operated by electromagnetic:

This shall be tested by installing the field with the strength of electronic magnetic field of 500 MHz per square centimeter. In this regard, each shall be installed with magnetic only in one position from left or right or up or down in alternate manner. After that, accuracy of water flow shall be tested in accordance with the size, flow rate, transitional flow rate, and minimum flow rate by using the minimum tested volume as prescribed in the table for accuracy class A, class B or class C as annexed to this Rule.

The accuracy of water meter when compared with a water tank for testing the water volume shall not deviate exceeding the maximum permissible error as prescribed in the table for accuracy class.

Clause 9. A water meter which passes the test for general characteristics under clause 6, accuracy under clause 7 and durability test under clause 8 shall be the water meter which passes the test.

Clause 10. A competent official shall report the result of the test for model for water meter in accordance with the specified flow rate, accuracy class to a business operation producing or importing such water meter within fifteen days as from the date of completion of such test.

Clause 11. The Director-General of the Department of Internal Trade shall have charge and control of the execution of this Rule.

Given on the 18th of September B.E. 2551 Mr. Yanyong Puangraj Director-General of the Department of Internal Trade