Unofficial Translation

Notification of the Central Bureau of Weights and Measures

Regarding Prescription on Checklist for Testing Prototype of Meter for Fuel Oil at Petrol Stations [1]

Whereas the Minister of Commerce, upon the recommendation of the Committee on Weights and Measures, already issued the Notification of the Ministry of Commerce regarding Rules, Procedures and Conditions Relating to Submission of Prototype and Approval for Prototype of Measuring Instrument by Competent Official, dated 11th July B.E. 2566 (2023), prescribing that the Central Bureau of Weights and Measures shall prescribe a checklist for testing a prototype of a measuring instrument in order that a test unit is capable of testing the prototype pursuant to the prescribed checklist.

By virtue of the definition of the word "checklist" as provided in Article 2 of the Notification of the Ministry of Commerce regarding Rules, Procedures and Conditions Relating to Submission of Prototype and Approval for Prototype of Measuring Instrument by Competent Official, dated 11th July B.E. 2566 (2023), the Director-General of the Department of Internal Trade, therefore issues this Notification, as follows.

Article 1 This Notification shall come into force as from the date of its publication onwards.

Article 2 In this Notification,

"Prototype of Meter for Fuel Oil at Petrol Stations" (type or pattern) means the pattern or drawing of the meter for fuel oil at petrol stations which an applicant wishes to manufacture or import.

Article 3 As for testing the prototype of the meter for fuel oil at petrol stations, the test unit is required to carry out the test pursuant to the checklist and the following rules and procedures in order that the prototype of the meter for fuel oil at petrol stations shall be accurate, precise and in compliance with the Notification of the Ministry of Commerce

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[1] Published in the Government Gazette, Volume 141, Special Part 258 d, Page 4, dated 17th September B.E. 2567 (2024).

regarding the prescription on the type and characteristic of the meter for liquid, the detail of materials used for manufacture, maximum permissible error and a term of verification, including the stipulation of other relevant notifications and regulations.

(1) Visual Inspection. It is the inspection of the general characteristics of the prototype of the meter for fuel oil at petrol stations prior to the technical test under (2), by inspecting safety because of being a job relevant to a highly inflammable and exploded liquid and inspecting the external appearance of every part in order to check that it is accurate, complete and neither defective nor abnormal. Indicating devices, zero setting devices and an associated device, e.g. a vapor eliminator, a filter, a pump, a valve or a pipe shall be in ready condition for the operation in order to increase confidence in the result of accurate and precise measurement. In this regard, the visual inspection shall be conducted pursuant to the checklist as provided in Table 1 as attached to this Notification.

(2) Technical Test. It is the test on the accuracy and precision of the prototype of the meter for fuel oil at petrol stations, whereby the test shall be done according to the following rules and procedures:

(a) Test of Accuracy of Minimum Measured Quantity of System, Maximum Flowrate and Minimum Flowrate (Accuracy Test). It is the test on the accuracy and precision of the prototype of the meter for fuel oil at petrol stations by using the standard of measuring buckets with capacity ranges of 1 litre, 2 litres, 5 litres, 20 litres and 50 litres, whereby the prototype of the meter for fuel oil at petrol stations shall indicate the result in an accurate and complete manner. In this regard, the test on the accuracy of minimum measured quantity of the system, the maximum flowrate and the minimum flowrate of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 2 as attached to this Notification.

(b) Test of Setting Zero for Quantity and Price Indicating Devices (Zero Setting Device Test). It is the test at the time of the beginning of setting zero for the quantity and price indicating devices. The “zero” value shall be indicated upon the completion of setting zero. In this regard, the test of setting zero for the quantity and price indicating devices of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 3 as attached to this Notification.

(c) Test of Price Computing Device. It is the test on the calculation of the price per the unit of a product with a quantity as discharged. In indicating the total purchase price according to any discharged quantity, the device shall indicate the value precisely. And

the device shall accurately calculate the total price according to the price per the unit of trading in each time while measuring corresponding with the product type every time. In this regard, the test on the price computing device of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 4 as attached to this Notification.

(d) Test of Nozzle Cut-off Device. It is the test on a device for cutting a discharge of oil automatically, whereby when a tip of the nozzle comes into contact with liquid or bubbles, the nozzle shall cut the discharge of the oil automatically. In this regard, the test on the nozzle cut-off device of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 5 as attached to this Notification.

(e) Test of Interlock for Hoses Sharing a Common Indicator. In the case where there are the multi-systems of the meter for fuel oil at petrol stations that share the common indicator, the systems shall be unable to operate concurrently, and the price per unit as chosen shall be indicated on the indicator prior to the fuel oil being discharged. In this regard, the test on the interlock for the hoses sharing the common indicator of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 6 as attached to this Notification.

(f) Test of Interlock for Hoses Sharing a Pumping Unit. It is the test on the operation of nozzles sharing the pumping unit, both nozzles shall be unable to operate concurrently and suddenly. In this regard, the test on the interlock for the hoses sharing the pumping unit of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 7 as attached to this Notification.

(g) Test on Mechanism for Cutting Discharge According to Pre-set Indication (Pre-set Indication Test). It is the test on indicating the values of quantity or price at the time of cutting the discharge. An indicating device shall indicate the quantity of discharge or the total purchase price corresponding with the pre-set values. In this regard, the test on the mechanism for cutting the discharge according to the pre-set indications of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 8 as attached to this Notification.

(h) Test on Achievable Maximum Flowrate. It is the test on the achievable maximum flowrate that shall be in the range of the minimum flowrate to the maximum flowrate as certified, which is indicated in an information plate. In this regard, the test on the achievable

maximum flowrate of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 9 as attached to this Notification.

(i) Repeatability Test. It is the test on the accuracy of measurement of the meter, whereby the accuracy value of the meter shall fall within maximum permissible error. And the result of measurement of the meter that has the quantity of not less than five times of the minimum quantity as measured by the system of the meter shall have the capability of repeatability not exceeding two fifth of maximum permissible error. In this regard, the repeatability test on the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 10 as attached to this Notification.

(j) Test on Error in the Same Side or Range of Error of the Meter System (Range of Error Test). It is the test on the maximum value of difference of the value of error as measured. The range of error of the system of the meter for fuel oil at petrol stations shall not exceed half of the range of maximum permissible error. And as for the value of error of the meter in every flowrate that is error in the same side, there shall be at least one value not exceeding half of maximum permissible error. In this regard, the test on error in the same side or the range of error of the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 11 as attached to this Notification.

(k) Test on Accuracy and Precision of the Meter by Presetting Values (Accuracy of Pre-set Test). It is the test on accuracy of the meter in the case of using a preset device. In this regard, the accuracy and precision test on the prototype of the meter for fuel oil at petrol stations shall be done pursuant to the checklist as provided in Table 12 as attached to this Notification.

Article 4. When the test unit has already carried out the test on the prototype of the meter for fuel oil at petrol stations under Article 3, it is required to make a test report pursuant to Form ThorSor. 3053 as attached to this Notification. And the test unit shall send the report in writing to a competent official by a registered and replied mail or an electronic mail (E-mail: cbwmtype@gmail.com) within seven days as from the date of completion of the test in order that the competent official shall further consider the report for approving the prototype of the meter for fuel oil at petrol stations.

Given on the 16th Day of August B.E. 2567 (2024)

Wattanasak Sur-iam

Director-General of the Department of Internal Trade