Proposal for amendment to the legal inspection regulation for Electric Storage Drink Water Heaters

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs (M.O.E.A.)

Introduction:
The Electric Storage Drink Water Heaters (hereinafter referred as "the commodities") has been subject to mandatory inspection under the Commodity Inspection Act by the Bureau of Standards Metrology and Inspection (BSMI) since 1 January 1992. In line with the energy policy, the BSMI proposes to require that electric storage drink water heaters be subject to Sections 10.7 “capacity of inner tank test” and 10.8 “standardized standby loss of every 24 hours $E_{st,24}$ test” of CNS 12623, where the measured value ($E_{st,24}$) shall comply with that stated in “Requirements on Minimum Energy Performance Standard (MEPS) for electric storage tank boiling water heaters.” In addition, the BSMI will revise the Description of Goods of the commodities to “Electric Storage Tank Boiling Water Heaters” according to CNS 12623.

The conformity assessment procedures for products subject to this notified measure remain the same, i.e. Registration of Products Certification (RPC) or Type-approved Batch Inspection (TABI).

Proposed date of implementation:
1 July 2021

<table>
<thead>
<tr>
<th>Description of Goods</th>
<th>Inspection Standards</th>
<th>C.C.C. Code (the first 6 digits are the same as HS Code)(Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric storage tank boiling water heaters (inspection scope: rated voltage not exceeding 250V and capacity not exceeding 500L)</td>
<td>1. CNS 60335-1 (2014) &amp; CNS 60335-2-15 (2014) 2. CNS 12623 (2014) Section 10.7 “Capacity of inner tank test” &amp; 10.8 “Standardized standby loss of every 24 hours $E_{st,24}$ test”, where the measured value ($E_{st,24}$) shall comply with that stated in “Requirements on MEPS for electric storage tank boiling water heaters” 3. CNS 13783-1 (2013) or CNS 13803 (2003) 4. CNS 15663 (2013) Section 5 “Marking of Presence”</td>
<td>8516.10.00.00.9C</td>
</tr>
</tbody>
</table>

Description of the two kinds of conformity assessment procedures

1. Registration of Product Certification (RPC) Scheme : Modules II + IV or II + V or II + VII

For product subject to Modules II+IV, II+V, or II+VII procedures, not only the products shall be type-tested in advance (Module II) by the BSMI or BSMI-recognized testing laboratories, but the quality management systems of the production premises must be in conformity with Module IV (Full Quality Management System), Module V (Production Quality Management System) or Module VII (Factory Inspection).
For Module IV and Module V, a registration certificate in accordance with the CNS 12681 (ISO 9001) series of standards is required to be obtained from the BSMI, or certification bodies recognized by the BSMI. As for Module VII, a factory inspection report issued by the BSMI or BSMI-recognized factory inspection bodies is needed in the same way.

In addition, a declaration of conformity-to-type is also required to ensure that the mass-produced commodities are in conformity with that shown in the type-test report for all the above three IV, V, VII modules.

After being certified and registered by the BSMI, products will be allowed to use the Commodity Inspection Mark with the letter ‘R’ and the identification number given by the BSMI. Additionally, these products can clear customs directly without any further inspection if not being sampled by RPC border check procedures. The application fee and annual fee for RPC are both NT$5,000 (about US$170) for each certification, and the RPC certification is valid for 3 years. If there are any serial products, an extra NT$3,000 (about US$102) of application fee will be charged for every application in each certification. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

2. Type-approved Batch Inspection (TABI) Scheme

Under this procedure, manufacturers or importers shall have their products type-tested by the BSMI or the designated testing laboratories recognized by the BSMI, and file an application for Type Approval to the BSMI or its branches.

After manufacturers or importers obtain a type approval certificate, they are required to file an application for batch inspection to the BSMI each time before their products are released from the production premises or arrive at the port of entry. The BSMI will then review the application and the related documents while additional samples may be required for further testing if it is deemed necessary.

After the products have passed the inspection, they will be allowed to use the Commodity Inspection Mark with the letter ‘T’ and the identification number given by the BSMI. The application fee for a Type Approval is NT$3,500, and a Type Approval certificate is valid for 3 years. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

*Further information on the two schemes can also be found on the BSMI web site: http://www.bsmi.gov.tw/wSite/ct?xItem=8673&ctNode=811&mp=2

Locations to apply for Registration of Product Certification:
The BSMI or its branches.

Time required for Registration of Product Certification:
14 working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples. Extra 7 working days may be required for additional tests.)

Related requirements:
1. The Electric storage tank boiling water heaters powered by USB cord/port DC 5V and without an AC to DC adaptor, only powered by and with power supply products for automotive cigar lighter, only powered by three-phase or only-batteries shall not be subject to legal inspection.

2. The revised inspection standards of the commodities listed above will come into force on the date of announcement and the current inspection standards will become invalid from 1 July 2021. The applicable inspection schemes, conformity assessment modules of RPC
and duration of certificates for the commodities above will remain unchanged.

3. The certificate holders of the commodities shall follow the content stipulated in Section 5 “Marking of presence” of CNS 15663 and clearly mark “the presence condition of the restricted substances” on the body, packages, stickers, or the instruction books of the commodities. Those who utilize website as a means to announce “the presence condition of the restricted substances” of the commodities shall also clearly mark the website address on the body, packages, stickers, or the instruction books of the commodities. In that case, the requirements of Section 5.3 of CNS 15663 are not applicable to the positions of the markings.

4. Processing of applications:

(1) Replacement:

Before 1 July 2021, the certificate holders shall apply to the BSMI or its branches for replacement of their certificates by preparing type-test reports and technical documents based on CNS 12623. The expiration date of the replaced certificates will be the same as that of the original certificates. Certificates that are not replaced before 1 July 2021 will be rescinded based on Paragraph 1, Article 16 of the “Regulations Governing Type Approval of Commodities” or Paragraph 9, Article 42 of the “Commodity Inspection Act.”

(2) New application or Extension:

From the date of announcement, applicants shall apply for certificate(s) according to the revised inspection standards by preparing the required type-test reports, technical documents as well as documents indicating the location of the “marking of presence,” samples of the “Marking of Presence” (see Tables 1 and 2), and the “Declaration of the Presence Condition of the Restricted Substances Marking.” The validity period of certificate will be 3 years. The certificates will be valid till 30 June 2021 if the application is made based on the old inspection standards.

5. The Commodity Inspection Mark:

(1) The Commodity Inspection Mark shall be printed by the certificate holders. The identification number of the Commodity Inspection Mark consists of “A Letter (R or T),” “Designated Code (5 digits)” and “the presence conditions of the restricted substance” (e.g., RoHS or RoHS(XX,XX)).

(2) The identification number shall be placed below or right next to the graphic symbol and “the presence conditions of the restricted substance” shall be indicated in the second row.

(3) The size of the Mark can be applied proportionally on a prominent location of the commodities. The Mark shall use materials that are not easily altered, and the content shall be in a clearly identifiable and indelible form affixed permanently to the commodity.

(4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:
(5) For TABI scheme, the examples of the Commodity Inspection Mark are listed below:

(6) “RoHS” indicates “the content of restricted substance(s), other than exemptions stated in CNS 15663, does not exceed the reference percentage value of presence condition.

“RoHS(XX,XX)” indicates the content of restricted substance(s) (element XX, element XX, …), other than exemptions stated in CNS 15663, exceeds the reference percentage value of presence condition.

Restricted substances: Pb, Cd, Hg, Cr⁶⁺, PBB, and PBDE.

Examples:

- RoHS (Pb) indicates that the percentage content of Pb in certain parts of the commodity exceeds the reference percentage value specified in Annex A to CNS 15663.

- RoHS (Cd, Cr⁶⁺, PBB) indicates that the percentage content of Cd, Cr⁶⁺, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.

6. The C.C.C. Code listed in the table is used for reference only. The commodity listed in the table shall still complete the inspection procedures before entering into the market even though their C.C.C. Code is identified differently by the Customs Administration, Ministry of Finance or Bureau of Foreign Trade, Ministry of Economic Affairs.

7. The inspection standards of the products listed in the table shall be the version published in this announcement. If any updated version is available, the BSMI shall publish the implementation date of the updated version in further announcement.

8. The addition of national deviation in Taiwan: The supply cords shall at least comply with the standard of CNS 15767-1[Plugs and socket-outlets for household and similar purposes – Part 1: General requirements] at section 25.7, CNS 60335-1.

9. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and conformity assessment procedures of RPC scheme.

10. The EMC inspection standard for the electro-thermal heating appliances is CNS 13783-1, and that for electro-magnetic induction heating appliances is CNS 13803.
Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

<table>
<thead>
<tr>
<th>Unit</th>
<th>Restricted substances and its chemical symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lead (Pb)</td>
</tr>
<tr>
<td>Circuit board</td>
<td>Exceeding 0.1 wt %</td>
</tr>
<tr>
<td>Heater</td>
<td>○</td>
</tr>
<tr>
<td>Power switch</td>
<td>Exceeding 0.1 wt %</td>
</tr>
<tr>
<td>Water tank</td>
<td>○</td>
</tr>
<tr>
<td>Power cord</td>
<td>○</td>
</tr>
<tr>
<td>Shell</td>
<td>Exceeding 0.01 wt %</td>
</tr>
</tbody>
</table>

**Note 1:** “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value.

**Note 2:** “○” indicates that the percentage content of the restricted substance does not exceed the reference percentage value.

**Note 3:** The “−” indicates that the restricted substance is exempted.

Equipment name: Electric Storage Tank Boiling Water Heaters, Model : XXX(*)
Table 2. Example of markings for the content of the restricted substances other than exemption do not exceed the reference percentage value of presence condition

| Equipment name: Electric Storage Tank Boiling Water Heaters, Model : YYY(*) |
|---------------------------------|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Unit                            | Restricted substances and its chemical symbols |
|                                 | Lead (Pb) | Mercury (Hg) | Cadmium (Cd) | Hexavalent chromium (Cr^{6+}) | Polybrominated biphenyls (PBB) | Polybrominated diphenyl ethers (PBDE) |
| Circuit board                   | ○          | ○              | ○              | ○                             | ○                             | ○                             |
| Heater                          | ○          | ○              | ○              | ○                             | ○                             | ○                             |
| Power switch                    | –          | ○              | ○              | ○                             | ○                             | ○                             |
| Water tank                      | ○          | ○              | ○              | ○                             | ○                             | ○                             |
| Power cable                     | ○          | ○              | ○              | ○                             | ○                             | ○                             |
| Shell                           | ○          | ○              | ○              | ○                             | ○                             | ○                             |

**Note 1:** “○” indicates that the percentage content of restricted substance does not exceed the reference percentage value.

**Note 2:** The “−” indicates that the restricted substance is exempted.

(*) The “name and model” can be omitted if the position of the “markings for the presence conditions” clearly identifies the corresponding commodity. Multiple types could be shown together if the “markings for the presence conditions” are applicable.