

Proposal for Amendments to the Legal Inspection Requirements for Electric Storage Tank Water Heaters

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs

Introduction:

The “Requirements on Minimum Energy Performance Standard and Energy Efficiency Rating Labelling and Inspection for Electric Storage Tank Water Heaters (Amendment Draft),” proposed by the Bureau of Energy (BOE), Ministry of Economic Affairs, was notified on 2 September 2022 as per G/TBT/N/TPKM/407/Rev.1. As the requirements on the capacity of inner tank are included in the notified amendment draft, the BSMI proposes to remove the requirement of Section 8.11 “Capacity of inner tank” of CNS 11010:2013 from BSMI’s testing items to avoid overlapping jurisdiction with the BOE.

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 2025

Description of Goods	Inspection Standards	C.C.C. Code (the first 6 digits are the same as HS Code)(Reference)
Electric storage tank water heater (inspection scope: solar water heaters not included; rated voltage not exceeding single-phase 250V AC)	1. CNS 60335-1: 2014 & CNS 60335-2-21: 2015 2. CNS 13738-1: 2013 3. CNS 15663: 2013 Section 5 “Marking of Presence” 4. For products covered in the scope of “Amendment to Requirements on Minimum Energy Performance Standard and Energy Efficiency Rating Labelling and Inspection for Electric Storage Tank Water Heaters”: CNS 11010: 2013, Section 8.14 “Standardized standby loss of every 24 hours, Est,24”. The measured efficiency and standby power shall comply with the Table of “MEPS for Electric Storage Tank Water Heaters.”	8516.10.00.00.9B

Conformity assessment procedures: No change.

Related requirements:

- The following electric storage tank water heaters are not subject to legal inspection:
 - (1) powered by USB cord/port, with input voltage of DC 5V and without AC to DC adaptor;
 - (2) powered by automotive power supply only and with automotive cigar lighter; and
 - (3) Powered by three-phase voltage or batteries.
- The changes made to the inspection standards listed above will come into force on the date of announcement and the current inspection standards will no longer apply from 1 July 2025.

3. National deviations:

(1) The supply cords shall comply with CNS 15767-1 “Plugs and socket-outlets for household and similar purposes – Part 1: General requirements.”

(2) Class 0 structure is not allowed.

4. 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 user manuals. Those who utilize website as a means to announce “the presence condition of the restricted substances” shall also clearly indicate the website address on the body, packages, stickers, or user manuals. In that case, the requirements of Section 5.3 of CNS 15663 are not applicable regarding the positions of the markings.

5. Processing of applications:

(1) Replacement:

The certificate holders shall ensure compliance of their products with the new Minimum Energy Performance Standard (MEPS), published by the Bureau of Energy, before 30 June 2025. The expiration dates of the original certificates remain the same. Certificates will be rescinded in accordance with Paragraph 1, Article 16 of the “Regulations Governing Type Approval of Commodities” or Paragraph 9, Article 42 of the “Commodity Inspection Act” if the products do not comply with the new MEPS beginning on 1 July 2025.

(2) New application or application for extension:

The applicants shall prepare Type-Test reports based on the inspection standards stated in the table above or the original ones, documents showing the location of the marking of presence, sample of the marking of presence (see Table 1 and Table 2), “Declaration of the Presence Condition of the Restricted Substances Marking” and demonstration of compliance with the new MEPS when making the applications. The validity period of a new certificate will be 3 years from the date of issuance, and an extended certificate will be valid for another 3 years. Where the products do not comply with the new MEPS, the expiry date of the certificate will be only valid till 30 June 2025. New applications or applications for extension shall comply with new MEPS beginning on 1 July 2025.

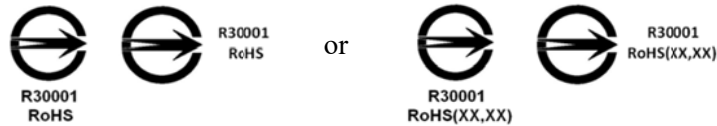
6. The Commodity Inspection Mark:

(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)).

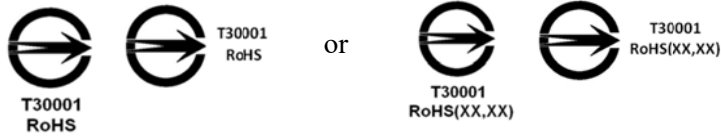
(2) The identification number shall be placed below or right next to the graphic symbol and “the presence conditions of the restricted substance” shall be indicated in the second row.

(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, Cr⁺⁶, 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, Cr⁺⁶, PBB) indicates that the percentage content of Cd, Cr⁺⁶, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.
7. 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 its C.C.C. Code is identified differently by the Customs Administration, Ministry of Finance, or Bureau of Foreign Trade, Ministry of Economic Affairs.
 8. 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.
 9. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and conformity assessment procedures of RPC scheme.

Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

Equipment name: Electric storage tank water heaters, Model : XXX(*)						
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	Exceeding 0.1 wt %	○	○	○	○	○
Heater	○	○	○	○	○	○
Power switch	—	Exceeding 0.1 wt %	○	○	○	○
Power cord	○	○	○	○	○	○
Shell	○	○	Exceeding 0.01 wt %	○	○	Exceeding 0.1 wt %
<p>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.</p> <p>Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the reference percentage value.</p> <p>Note 3: The “—” indicates that the restricted substance is exempted.</p>						

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 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	-	○	○	○	○	○
Power cable	○	○	○	○	○	○
Shell	○	○	○	○	○	○
<p>Note 1: “○” indicates that the percentage content of restricted substance does not exceed the reference percentage value.</p> <p>Note 2: The “-” indicates that the restricted substance is exempted.</p>						

(*) 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.