Legal inspection requirements for electric motorcycle charging system equipment and battery swap system equipment

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

Introduction:
In order to implement the policy of energy efficiency and carbon reduction, the government subsidizes electric motorcycle purchase of citizens and energy supplement establishment of industries. Furthermore, with the rise of environmental awareness, electric motorcycles are popular in these years. However, there were few accidents of explosion and catching fire caused by malfunction in the battery swap station in Taiwan. For preventing similar issues, the BSMI intends to regulate the inspection requirements for electric motorcycle charging station and battery swap station.

For electric motorcycle charging system equipment, the inspection standards are CNS 16125, CNS 16127, CNS 16128 for safety and Section 5 of CNS 15663 for marking of the presence of six hazardous substances, including Lead(Pb), Mercury(Hg), Cadmium(Cd), Hexavalent Chromium(Cr^{+6}), Polybrominated Biphenyls(PBB), and Polybrominated Diphenyl Ethers(PBDE).
For electric motorcycle battery swap system equipment, the inspection standards are CNS 16125, CNS 16126 for safety and Section 5 of CNS 15663 for marking of the presence of six hazardous substances, including Lead(Pb), Mercury(Hg), Cadmium(Cd), Hexavalent Chromium(Cr^{+6}), Polybrominated Biphenyls(PBB), and Polybrominated Diphenyl Ethers(PBDE).
The conformity assessment procedure for all such products will be under the Registration of Product Certification (RPC) Scheme (Module II+VII).

Date of implementation: May 1st, 2021

Description of Goods	Inspection Standards	Conformity Assessment Procedures	C.C.C. Code (the first 6 digits are the same as HS Code)(Reference)
Electric motorcycle charging system equipment (Inspection scope: only for stationary and conductive power supply system)	1.CNS 16125 (2020) 2.CNS 16127 (2020) 3.CNS 16128 (2020) 4.CNS 15663 (2013) Section 5 "Marking of Presence"	RPC Scheme (Module II+VII)	8504.40.99.90.0I
Electric motorcycle battery swap system equipment (Inspection scope: only for stationary and conductive power supply system)	1.CNS 16125 (2020) 2.CNS 16126 (2020) 3.CNS 15663 (2013) Section 5"Marking of Presence"	RPC Scheme (Module II+VII)	8504.40.99.90.0J

Registration of Product Certification (RPC) Scheme (Module II+VII)
Under this procedure, domestic manufacturers or importers must have their products type-tested in advance (Module II) before applying for registration of their products. In addition, the quality management systems of the production premises must be in conformity with Module VII (factory inspection). For Module VII, it is required to obtain a factory inspection report issued by the BSMI or BSMI-recognized factory inspection bodies. A declaration of conformity is also required to ensure the quality of the mass-produced commodities is in conformity with that shown in the type-test report at Module II stage.

Products will be allowed to use the Commodity Inspection Mark with the letter "R" and the identification number given by the BSMI, after they are certified and registered with the BSMI. These products can then pass through customs directly without any further inspection. The application fee and annual fee for RPC are both NT$5,000(about US$170) for each certification, and the RPC certifications are valid for three years. If there are any serial products, the extra NT$3,000(about US$102) of application fee is needed for every application in each certification.

Related requirements:

1. Upon the date of announcement of this measure, applications can be made to the BSMI for RPC certification. When the BSMI completes the review procedure and approves the application, a certificate shall be issued and valid for 3 years. Obligatory Inspection Applicant does not need any certified document of BSMI for import declaration but the applications for RPC certification should be completed before the commodities are placed on the market in Taiwan.

2. The Obligatory Inspection Applicants who have type testing reports of listed products approved by Industrial Development Bureau (IDB) for financial subsidies can transfer the reports to type testing reports of BSMI by adding additional testing, which complete the test items differ between the original reports and inspection standards, at the original laboratory which should be a BSMI-designated testing laboratory upon the date of announcement.

3. Locations to apply for type testing：the BSMI-designated testing laboratories.

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

5. 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.)

6. The relevant technical documents to be attached to the type testing shall be complied with the requirement of the "Directions Governing Type Approval of Electrical and Electronic Commodities".

7. The type testing fee for listed products: it shall be charged according to laboratory charges.

8. The related charges to the Registration of Product Certification of the listed commodities shall be charged in accordance with the relevant provisions of the "Regulations Governing Fees for Commodity Inspection".

9. For the requirement of Section 5 "Marking of presence" of CNS 15663, the certificate holders of the commodities shall 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 an alternative means to announce the presence condition of the restricted substances of the commodities shall clearly mark the website address on the body, packages, stickers, or the instruction books of the commodities.

10. 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 to the right of 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. If RPC certification is completed before the date of implementation, May 1st, 2021, the Mark can still be applied proportionally on a prominent location of the commodities from the issuance date of certificate.

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

(5) "RoHS" indicates that 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 that 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.

11. The inspection standards of the commodities 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 announcements.

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

13. Commodities with combined features, multifunctional products and its accessories 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 motorcycle charging system equipment, 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 %	○	○	○	○	○
Shell	–	○	Exceeding 0.01 wt %	○	○	Exceeding 0.1 wt %
Control panel	○	○	○	○	○	○
Accessory	○	○	○	○	○	○

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.

* 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.

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 motorcycle battery swap system equipment, 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	○	○	○	○	○	○
Shell	○	○	○	○	○	○
Control panel	–	○	○	○	○	○
Accessory	–	○	○	○	○	○

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.