Legal Inspection Requirements for Wireless Chargers

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

Introduction:

Wireless chargers are widely used to charge electronic devices, such as tablets or mobile phones. A survey of such products raised safety concerns in aspects of overheating, fire-resistance and others. In order to protect consumers from relevant hazards arising from the use of such products and to protect the environment, the Bureau of Standards, Metrology, and Inspection (BSMI) regulates the safety, EMC, and hazardous substances of wireless charger products. The inspection standards are CNS 14336-1 for safety, CNS 13438 for EMC, 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). Where the main working frequency of the wireless chargers is less than 30MHz, they shall also comply with the magnetic field radiation requirements of CNS 13803 (2003). The conformity assessment procedure shall be Registration of Product Certification (Module II Type Test + Module III Conformity to Type Declaration).

Date of implementation: 1 January 2020

Description of Goods	Inspection Standards	Conformity Assessment Procedures	C.C.C. Code (the first 6 digits are the same as HS Code)(Reference)
Wireless chargers	1. CNS 14336-1(2010) 2. CNS 13438 (2006) 3. CNS 15663 (2013) Section 5 "Marking of Presence"	RPC Scheme (Module II+III)	8504.40.20.00.3G 8504.40.99.90.0H

Registration of Product Certification (RPC) Scheme (Module II+ III)

Under this scheme, domestic manufacturers or importers shall have their products type-tested in advance (Module II) by the BSMI or BSMI-recognized testing laboratories before applying for registration of their products. Manufacturers or importers are also required to ensure by declaration (Module III) that all products made at their manufacturing facilities or imported are in conformity with the prototypes submitted for type test at Module II stage. The conformity-to-type (Module III) declaration shall be made by the manufacturer or the authorized local representative, declaring that the products comply with the prototype as described in the type-test report.

Products are 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 clear 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, an 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 will be issued and valid for 3 years.

- 2. Where the main working frequency of the wireless chargers is less than 30MHz, they shall comply with the magnetic field radiation requirements of CNS 13803 (2003).
- 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. An extra 7 working days may be required for additional tests.)
- 6. According to the "Regulations Governing the Use of Commodity Inspection Mark," the obligatory inspection applicant shall affix the Commodity Inspection Mark to the products in obvious places after the products are certified under the Registration of Product Certification Scheme.
- 7. The technical documents and accessories to be attached to the type testing shall comply with the requirements of the "Directions Governing Type Approval of Electrical and Electronic Commodities."
- 8. The type testing fees shall be charged by the designated testing laboratories.
- 9. The related fees for the Registration of Product Certification shall be charged in accordance with the relevant provisions of the "Regulations Governing Fees for Commodity Inspection."
- 10. 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.
- 11. 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.
 - (4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:





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(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.
- 12. 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.
- 13. 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
- 14. 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: Chargers for electrical bicycles, Model: XXX(*)							
	Restricted substances and its chemical symbols						
Unit	Lead	Mercury	Cadmium	Hexavalent	Polybrominated	Polybrominated	
				Chromium	Biphenyls	Diphenyl Ethers	
	(Pb)	(Hg)	(Cd)	(Cr ⁺⁶)	(PBB)	(PBDE)	
Circuit board	Exceeding 0.1 wt %	0	0	0	0	0	
Shell	ı	0	Exceeding 0.01 wt %	0	0	Exceeding 0.1 wt %	
Control panel	0	0	0	0	0	0	
Accessory	0	0	0	0	0	0	

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.

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:Chargers for electrical bicycles, Model: YYY(*)						
	Restricted substances and its chemical symbols						
Unit	Lead	Mercury	Cadmium	Hexavalent	Polybrominated	Polybrominated	
				chromium	biphenyls	diphenyl ethers	
	(Pb)	(Hg)	(Cd)	(Cr ⁺⁶)	(PBB)	(PBDE)	
Circuit board	0	0	0	0	0	0	
Shell	0	0	0	0	0	0	
Control panel	-	0	0	0	0	0	
Accessory	ı	0	0	0	0	0	

Note 1: "O" indicates that the percentage content of restricted substance does not exceed the reference percentage value.

Note 2: "O" 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.

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.