Amendments to the Legal Inspection Requirements for Power Supply Equipment, Including Secondary Lithium Power Banks

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

Introduction:
In view of the widespread use and higher risk associated with commodities containing lithium-ion cells and batteries, and in order to enhance product safety and protect consumers' rights and interests, the Bureau of Standards, Metrology and Inspection (BSMI) revises the inspection requirements for 9 types of listed electronic products, including secondary lithium power banks and other power supply equipment. The principal amendments include expanding the inspection scope of batteries to cover secondary lithium cell blocks, battery packs, modules or systems; adopting updated versions of the applicable inspection standards; and introducing factory inspection as part of the conformity assessment procedures.

Date of implementation: 1 January 2028 (Items 2-9)
1 July 2028 (Item 1)

Scope of covered products:

Item	Description of Goods	Inspection Standards	Conformity Assessment Procedures	C.C.C. Code (the first 6 digits are the same as HS Code)(For Reference)
1	Secondary lithium power banks (inspection scope limited to: (1) products not exceeding 18 kg, non-fixed or (2) equipped with wheels or other movable devices)	1. CNS 15598-1 (2020) 2. (1) products without wireless charger functions: CNS 15936 (2016) (2) products with wireless charger functions: CNS 15936 (2016) or CNS 13803 (2018) 3. CNS 62133-2 (2018) or CNS 62619 (2020 or 2023) 4. CNS 62133-2 (2018) Appendix G "Nail Penetration Test" or Section 7.3.9 "Forced Internal Short-circuit" (limited to products not exceeding 160 Wh) 5. CNS 15663 (2013) Section 5 "Marking of Presence"	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.10.7A 8507.80.90.11.3A

2	Non-fixed or movable secondary lithium chargers(inspection scope: limited to products not exceeding 160 Wh)	1. CNS 15598-1(2020) 2. (1) products without wireless charger functions: CNS 15936 (2016) (2) products with wireless charger functions: CNS 15936 (2016) or CNS 13803 (2018) 3. CNS 62133-2 (2018) 4. CNS 15663 (2013) Section 5 " Marking of Presence"	RPC Scheme (Modules II+III) or TABI Scheme	8507.60.00.10.7B 8507.80.90.11.3B
3	Non-fixed or movable secondary lithium jump starters for vehicles	1. CNS 15598-1(2020) 2. (1) products without wireless charger functions: CNS 15936 (2016) (2) products with wireless charger functions: CNS 15936 (2016) or CNS 13803 (2018) 3. CNS 62133-2 (2018) 4. CNS 15663 (2013) Section 5 " Marking of Presence"	RPC Scheme (Modules II+III) or TABI Scheme	8507.60.00.10.7C 8507.80.90.11.3C
4	Secondary lithium cells (inspection scope: excluding button-type cells)	CNS 62133-2 (2018) or CNS 62619 (2020 or 2023)	RPC Scheme (Modules II+III) or TABI Scheme	8507.60.00.90.0A 8507.80.90.19.5A
5	Secondary lithium cell blocks, battery packs (modules), battery systems (inspection scope: limited to battery capacity not exceeding 100 kWh)	1. less than 1 kWh: CNS 62133-2 (2018) or CNS 62619 (2020 or 2023) 2. between 1 kWh and 100 kWh, inclusive: CNS 62619 (2020 or 2023)	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.90.0H 8507.80.90.19.5H 8507.60.00.90.0I 8507.80.90.19.5I
6	Secondary lithium batteries for use in road vehicles other than for propulsion (inspection scope: limited to batteries of vehicles with two or more wheels)	CNS 63057 (2021)	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.90.0K 8507.80.90.19.5K
7	Secondary lithium batteries for electric motorcycles	1. CNS 15424-1 (2015) or CNS 15424-2 (2015) 2. CNS 15387 (2015)	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.90.0B 8507.80.90.19.5B
8	Secondary lithium batteries for electric bicycles	1. CNS 15424-1 (2015) or CNS 15424-2 (2015) 2. CNS 15387 (2015)	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.90.0C 8507.80.90.19.5C

9	Secondary lithium batteries for electric–assist bicycles	1. CNS 15424-1 (2015) or CNS 15424-2 (2015) 2. CNS 15387 (2015)	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme	8507.60.00.90.0D 8507.80.90.19.5D

Note:

1. The import regulation code for the listed products is C02.
2. For products listed under item 1, the products not exceeding 160 Wh that choose Appendix G "Nail Penetration Test" shall undergo the test in accordance with Appendix G.3.1, mode 1 for cells within the product (the nail should penetrate the cell), and comply with the risk level 0 of Appendix G.4.1 (no rupture (excluding the penetration hole), fire, combustion, or explosion shall be allowed during the test as well as the post-test observation period). However, the requirements of "no leakage" and "surface temperature shall not exceed 43°C" do not apply. For products listed under item 1, the products not exceeding 160 Wh that choose Section 7.3.9 "Forced Internal Short-circuit" shall undergo test for cells within the product, and comply with no fire shall be allowed. The test shall be done by BSMI-designated testing laboratories, and the requirement of Section 7.3.9 "A new design evaluation shall be conducted by the cell manufacturer or a third-party test house" as well as the requirement of Note (c) of Table 1 "Not applicable to lithium ion polymer cells" do not apply. The "Nail Penetration Test" applies to the cells within the power bank, and is applicable only to products not exceeding 160 Wh.
3. For products listed under items 1 to 5 that select CNS 62133-2 as the secondary lithium battery test standard, the cells (including the cells within the battery) shall comply with Appendix E of CNS 62133-2.
4. For products listed under items 1, 4 and 5, the inspection requirements of CNS 62619 (2020 or 2023) are as follows:
   (a) Propagation Test
   The products shall undergo the "Propagation Test" in accordance with Section 7.3.3. The provision in Section 7.3 allowing selection between the 7.3.2 Forced Internal Short-circuit Test at the cell level and the 7.3.3 Propagation Test at the battery system level does not apply.
   (b) Functional Safety of the Battery System (Section 8.1)
   The functional safety of the battery system shall comply with one of the following standards and corresponding requirements. Supporting documents shall be provided, including test reports or certificates issued by testing laboratories or certification bodies accredited under or participating in any of the following schemes:
   (1) International Laboratory Accreditation Association (ILAC) Mutual Recognition Agreement (MRA);
   (2) International Accreditation Forum (IAF) Multilateral Mutual Recognition Agreement (MLA);
   (3) IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)
   The applicable standards are:
   (1) IEC/UL 60730-1 (2013) Annex H (Safety integrity level (SIL) Class B or C)
   (2) IEC 61508 (Safety integrity level of at least 2)
   (3) ISO 13849-1 and ISO 13849-2 (performance level “C”)
   (4) UL 991 and UL 1998
5. For products listed under items 1 and 4 that have obtained Voluntary Product Certification (VPC) certificates to CNS 62619 (2020 or 2023) issued by the BSMI, and for products listed under items 1 to 5 that have obtained test reports to CNS 15364 (2013) issued by the BSMI, if there are differences between the applicable testing standards, type testing reports may be obtained by asking the originally designated testing laboratory to perform tests with respect to differing items. Upon completion, the testing report may be converted into type testing reports to CNS 62619 (2020 or 2023) or CNS 62133-2 (2018).
6. For products listed under items 7 to 9, Section 4.1.1 of CNS 15387 (2015) does not apply.

Description of the two types of conformity assessment procedures:

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

Under the RPC scheme, a combination of modules is applied to ensure that products comply with the applicable inspection standards at both the design and product stages. Module II requires products to undergo type testing by testing laboratories designated by the BSMI. In addition, the production premises must undergo assessment to ensure that products

manufactured at those premises conform to the type-tested prototypes submitted under Module II. Depending on the applicable procedure, the assessment may cover the full quality management system under Module IV, the production quality management system under Module V, or factory inspection under Module VII.

For Module IV and Module V, a registration certificate issued in accordance with CNS 12681, which is equivalent to ISO 9001, must be obtained from a certification body recognized by the BSMI. For Module VII, a factory inspection report issued by the BSMI or a BSMI-recognized factory inspection body is required.
In addition, a declaration of conformity-to-type is also required to ensure that mass-produced commodities conform to the types specified in the type-test report.

Once a product has been certified and registered by the BSMI, it will be allowed to use the Commodity Inspection Mark, which is comprised of a graphic symbol with an identification number. The identification number shall consist of the Roman letter 'R' and a designated code (five digits) given by the BSMI. Unless selected by RPC border checks, such products can clear customs directly without any further inspection. The application fee and annual fee for RPC are both NT$5,000 per product type, and an RPC certificate is valid for three years. If there are any serial products, an extra NT$3,000 is charged for each type in a series. The fees for type testing vary by products and are determined in accordance with the fee schedule of the relevant testing laboratories.

Further information about this scheme is available on the BSMI website at
https://www.bsmi.gov.tw/wSite/ct?xItem=102868&ctNode=9846&mp=2

2. Type-approved Batch Inspection (TABI) Scheme

Under this scheme, manufacturers or importers are required to have their products undergo type testing by the BSMI or by designated testing laboratories recognized by the BSMI, and to submit an application for Type Approval to the BSMI or its branches.

After obtaining a Type Approval Certificate, manufacturers or importers are required to apply to the BSMI for batch inspection each time before the products are released from the production premises or arrive at the port of entry. The BSMI will then review the application and supporting documents, and may require additional samples for further testing where necessary.

Once the products have passed the inspection, they will be allowed to use the Commodity Inspection Mark, which is comprised of a graphic symbol with an identification number. The identification number shall consist of the Roman letter 'T' and a designated code (five digits) assigned by the BSMI. The application fee for a Type Approval Certificate is NT$3,500, and the certificate remains valid for three years. The fees for type testing vary by products and are determined in accordance with the fee schedule of the relevant testing laboratories.

Further information about this scheme is available on the BSMI website at
https://www.bsmi.gov.tw/wSite/ct?xItem=102867&ctNode=9846&mp=2

Locations to apply for Type Testing:
The BSMI-designated testing laboratories.

Locations to apply for Factory Inspection:
The BSMI, its branches, or the BSMI-recognized factory inspection bodies.

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

Locations to apply for Batch Inspection:
1. Domestic manufacturers or commissioned manufacturers: Applications for inspection shall be submitted to the BSMI or its branches having jurisdiction over the place of production. Where necessary, applications may be submitted across jurisdictions.
2. Importers or commissioned importers: Applications for inspection shall be submitted to the BSMI or its branches having jurisdiction over the port of entry. Where necessary, applications may be submitted across jurisdictions.

Time required for Type Approval / Registration of Product Certification:
Fourteen working days. (The period pending submission of supplementary documents or samples shall not be included in the calculation. In cases where samples are selected for testing, an additional seven working days shall be added after the samples and ancillary testing equipment have been delivered.)

Related requirements:
1. For products listed under item 2, equipment or devices with built-in rechargeable lithium battery capable of charging other products, including but not limited to Bluetooth headsets, hearing aids, smart rings, smart watches, smart glasses, head-mounted monitors, wireless microphones, styluses, etc., and without output interfaces of generic USB related interfaces, including but not limited to Type A, Type B, Type C or next generation interfaces such as USB PD, Lightning or DC Jack, are covered.

2. For products listed under item 3, equipment or devices with built-in rechargeable lithium batteries and capable of providing jump-start functions for vehicles are covered.

3. For products listed under item 5, the scope does not cover products intended for road vehicles for propulsion, for road vehicles for non-propulsion, electric motorcycles, electric bicycles, electric–assist bicycles, energy storage systems, railway vehicles, marine vessels, and manned aircraft.

4. The revised inspection standards and conformity assessment procedures for all listed products shall take effect from the date of announcement. The pre-amendment inspection standards and conformity assessment procedures for products listed under Item 1 shall cease to apply from 1 July 2028; the pre-amendment standards and conformity assessment procedures for the listed products under Items 2 to 6, as well as the pre-amendment conformity assessment procedures for products listed under Items 7 to 9, shall cease to apply from 1 January 2028.

5. For products listed under Items 2 to 6 that are newly brought within the scope of mandatory inspection by this amendment:

   (a) The mandatory inspection requirements, whether the products are imported or domestically produced, shall take effect from 1 January 2028.

   (b) From the date of announcement, the BSMI will begin accepting applications for Type Approval or Registration of Product Certification for all listed products. The applicable conformity assessment procedures shall be Registration of Product Certification or Type-Approved Batch Inspection, which are available in parallel for business operators to choose from. If Type-Approved Batch Inspection is chosen, a Type Approval Certificate shall first be obtained, and applications for inspection shall then be submitted before the products are imported or released from the production premises. If RPC is chosen, an RPC Certificate shall be obtained before the products are released from the production premises or arrive at the port of entry. Where an application is reviewed and approved, a certificate will be issued with a validity period of three years from the date of issuance. For certificates issued on or before 31 December 2027, the three-year validity period shall commence on 1 January 2028.

6. For products listed under item 1, the following procedures for Type Approval and Registration of Product Certification (RPC) shall apply from the date of announcement:

   (a) From the date of announcement, the BSMI may accept applications for Type Approval or RPC. If Type-Approved Batch Inspection scheme is adopted, a Type Approval Certificate shall first be obtained, and applications for inspection shall then be submitted before the products are imported or released from the production premises; if RPC scheme is adopted, an RPC Certificate shall be obtained before the products are released from the production premises or arrive at the port of entry.

   (b) Existing holders of TABI and RPC certificates shall provide relevant documents complying with the revised conformity assessment procedures and inspection standards in order to apply for replacement certificates on or before 30 June 2028. The validity period of the replacement certificates shall remain unchanged. The standards field of the replacement certificates shall be annotated to indicate compliance with the revised inspection standards for identification purposes. Certificates that are not replaced within the prescribed period shall be rescinded in accordance with Subparagraph 6 or 9, Paragraph 1, Article 42 of the Commodity Inspection Act, or, in the case of type approval, rescinded in accordance with Subparagraph 1, Article 16 of the Regulations Governing Type Approval of Commodities.

   (c) Applications submitted before 1 July 2028

      For extension applications and new applications submitted, under the pre-amendment conformity assessment procedures and inspection standards, such procedures and standards may continue to apply. Where an application is reviewed and approved, the validity period of the certificate shall expire on 30 June 2028. For certificates obtained under the revised conformity assessment procedures and inspection standards, the validity period shall be three years from the date of issuance.

   (d) Applications submitted on or after 1 July 2028

      Applicants shall provide relevant documents complying with the revised conformity assessment procedures and inspection standards when submitting applications. Where an application is reviewed and approved, a certificate shall be issued with a validity period of three years from the date of issuance.

7. For products listed under Items 2 to 9, except for products newly brought within the scope of mandatory inspection, the following procedures under the TABI and RPC schemes shall apply from the date of announcement:

   (a) From the date of announcement, the BSMI may accept applications for Type Approval or RPC. If Type-Approved Batch Inspection scheme is adopted, a Type Approval Certificate shall first be obtained, and applications for inspection shall then be submitted before the products are imported or released from the production premises; if RPC scheme is adopted, an RPC Certificate shall be obtained before the products are released from the production premises or arrive at the port of entry.

   (b) Existing TABI and RPC certificates issued under the pre-amendment conformity assessment procedures and inspection standards may continue to be used until their expiry. Provided that the main model remains unchanged, applications for the addition of series of products or for approval may continue to be filed in accordance with the pre-amendment conformity assessment procedures and inspection standards during the validity period of the certificates.

   (c) Applications submitted before 1 January 2028

      For extension applications and new applications, the pre-amendment conformity

assessment procedures and inspection standards may continue to apply. Where an application is reviewed and approved, the certificate issued on that basis shall remain valid for three years from the date of issuance.

(d) Applications submitted on or after 1 January 2028

For extension applications and new applications, applicants shall provide relevant documents complying with the revised conformity assessment procedures and inspection standards. Where an application is reviewed and approved, a certificate shall be issued with a validity period of three years from the date of issuance.

8. For products listed under items 1 to 3, in accordance with Section 5 "Marking of Presence" of CNS 15663 (2013), shall indicate the presence of restricted substances in the format prescribed in Table 1 and Table 2, on the body, package, label, or instruction manuals of the products. Where the information on the presence of restricted substances is provided by way of a webpage, the relevant URL shall be clearly indicated on the body, package, label, or instruction manuals of the products. The requirements of Section 5.3 of CNS 15663 (2013) regarding the marking location shall not apply.

9. For all listed products, the labeling requirements for the Commodity Inspection Mark are as follows:

(a) In accordance with the “Regulations Governing the Use of Commodity Inspection Mark”, the obligatory inspection applicant shall print the Commodity Inspection Mark, which is comprised of a graphic symbol with an identification number, on its own. The identification number shall consists of a Roman letter, a designated code (five digits), and for those subject to Section 5 "Marking of Presence" of CNS 15663 (2013), the indication of “presence condition of the restricted substance (e.g., RoHS or RoHS (XX,XX)). From the date of issuance of the RPC certificate, the obligatory inspection applicant may, in accordance with the relevant regulations, print the Commodity Inspection Mark and affix it in a conspicuous place on the product itself.

(b) The identification number shall be placed just below or to the right of the graphic symbol, and for those subject to Section 5 "Marking of Presence" of CNS 15663 (2013), the “presence conditions of the restricted substance” shall be indicated in the second row.

(c) No fixed dimensions are prescribed for the Commodity Inspection Mark. However, it shall be affixed, in an appropriately proportioned size, at a conspicuous place on the product body. The mark shall be made of material not liable to deterioration, and its content shall be clear and legible, not easily effaced, and permanently affixed.

(d) For products listed under items 4 to 9, examples of the Commodity Inspection Mark under the RPC scheme are shown below:



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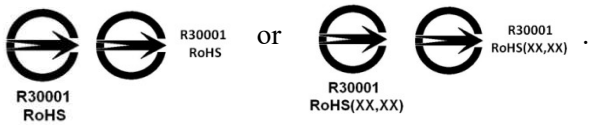
For products listed under items 1 to 3, which are subject to the requirements of Section 5 “Marking of Presence” of CNS 15663, examples of the Commodity Inspection Mark under the RPC scheme are shown below:



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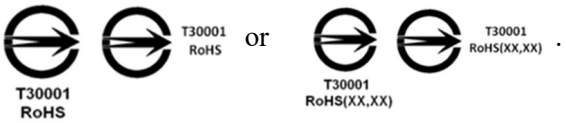
(e) For products listed under items 4 to 9, examples of the Commodity Inspection Mark under the TABI scheme are shown below:



or ;

For products listed under items 1 to 3, which are subject to the requirements of Section 5 “Marking of Presence” of CNS 15663, examples of the Commodity Inspection Mark under the TABI scheme are shown below:



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(f) RoHS indicates that, except for the exemptions specified in CNS 15663, the content of restricted substances in the product does not exceed the reference percentage value.

RoHS(XX,XX): indicates that the content of restricted substance(s) (element XX, element XX, …), except for the exemptions specified in CNS 15663, exceeds the reference percentage value for the presence condition.

Restricted substances: Pb, Cd, Hg, Cr^{+6}, PBB, and PBDE, as set out in Annex A to CNS 15663.

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 values specified in Annex A to CNS 15663.

10. The technical documents required for type testing shall be submitted in accordance with the “Directions Governing Type Approval of Electrical and Electronic Commodities.”

11. Fees for product type testing are charged in accordance with the fee schedule of the BSMI-designated testing laboratories.

12. Fees for Type Approval / Registration of Product Certification are charged in accordance with the “Regulations Governing Fees for Commodity Inspection.”

13. The C.C.C. Codes listed in the table are for reference only. Where a listed product is determined by the Customs Administration of the Ministry of Finance or the International Trade Administration of the Ministry of Economic Affairs not to fall within the listed reference C.C.C. Code, the product shall nevertheless complete the applicable inspection procedures before being placed on the market.

14. The inspection standards for all listed products shall be based on the version specified in this announcement. Where a new or updated version is issued, the BSMI shall announce its implementation date in a separate notice.

15. Where a listed product is a combined-function or multifunction product and falls within the scope of mandatory inspection, it shall comply with the requirements of the relevant inspection standards. Where such product is accompanied by accessories that fall within the scope of mandatory inspection, these accessories shall also comply with the requirements of the applicable inspection standards.

16. All listed products that have obtained any of the following documents shall not be included within the scope of products subject to mandatory inspection by the BSMI: a test report issued by the Ministry of Health and Welfare or its authorized institutions; a vehicle safety test report issued by a certification body commissioned by the Ministry of Transportation

and Communications (MOTC); or a certificate issued by testing laboratories designated by the Civil Aviation Administration of the MOTC.

Table 1. Example of markings where the presence conditions of the restricted substances exceed the reference percentage value

Equipment name: Secondary lithium power banks, Type designation：XXX (Note)						
Unit	Restricted substances and their 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 %	○	○	○	○	○
Case	○	○	Exceeding 0.1 wt %	○	○	Exceeding 0.1 wt %
Control Board	—	○	○	○	○	○
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 of presence condition.

Note 2: "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

Note 3: The "–" indicates that the restricted substance is exempted.

Table 2. Example of markings where, except for the exempted substance, the content of the restricted substances does not exceed the reference percentage value

Equipment name: Secondary lithium power banks, Type designation：YYY (Note)						
Unit	Restricted substances and their chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr^{+6})	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Circuit Board	○	○	○	○	○	○
Case	○	○	○	○	○	○
Control Board	—	○	○	○	○	○
Accessory	—	○	○	○	○	○

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

Note 2: The "–" indicates that the restricted substance is exempted.

Note: Where the location of the marking in the sample label is sufficient to clearly indicate its correspondence to the product, the field for equipment name and type designation may be omitted. Where the same sample label applies to multiple type designations, their designations can be indicated in the same field.