Management Methods for Controlling Pollution by Electrical and Electronic Products (“China RoHS II”)

Presented by: Dorothea Blouin
Office of Health and Information Industries
December 7, 2017
Disclaimer

- The information provided is intended to be of assistance to U.S. exporters. While we make every effort to ensure its accuracy, neither the United States government nor any of its employees make any representation as to the accuracy or completeness of information. Readers are advised to independently verify any information prior to reliance thereon. The information provided does not constitute legal advice.
Overview of Presentation

• China RoHS II vs EU RoHS II
• Product Coverage
• Hazardous Substances /Maximum Concentration Values
• Labeling/Disclosure Table
• Conformity Assessment Catalog
• Q and A
“China RoHS II” Has Its Roots in EU’s RoHS II

- But China’s Administrative Methods for Controlling Pollution by Electrical and Electronic Products has unique provisions not found in the EU’S RoHS II.

- Compliance with EU RoHS II will not grant compliance with China RoHS II!
Control (China) vs. Restrict (EU)
Use of Hazardous Substances

China
• All Products in Scope Subject to **Mandatory Labeling**
• Products in Compliance Management Catalog Subject to **Restrictions (Bans) of Use of Hazardous Substances**

EU
• All Products in Scope Subject to **Restrictions (Bans) of Use of Hazardous Substances**
• Products Phased in
Product Phase-in: Timing

China
- All in-scope products manufactured July 1, 2016 onward must have label
- Catalog as added.

EU
- Products phased-into scope.
- Last set phased in July 22, 2019 ("Category 11")
Product Coverage: China RoHS I vs II

China RoHS I:
Electronic Information Products
• Communications Equipment
• Navigational Equipment
• Broadcasting Equipment
• Medical Equipment
• Audio and Video Equipment
• Computers and Peripherals
• Measuring and Test Instrument
• Manufacturing and Assembly Equipment for Electronics
• Electronic Components
• Associated parts, subassemblies, and materials

China RoHS II:
Electrical and Electronic Products
• Devices and accessory products with electrical voltages of no more than 1500 volts direct current and 1000 volts alternating current, except power generation, transmitting and distribution equipment
China RoHS II Scope: Illustrative List

1. Communications equipment
2. Radio and TV equipment
3. Computer and other office equipment
4. Household electrical and electronic equipment
5. Electronic Instrumentation
6. Industrial Electronic Equipment*
7. Electric Tools
8. Electro-Medical equipment and devices
9. Lighting Products
10. Electronic products for cultural activities, arts, sports and entertainment

- Q12 China RoHS II FAQ
Not in EU RoHS II, In Scope for China RoHS II

- Batteries/Accumulators (Q15 China RoHS FAQ)
- Active Implantable Medical Devices
- Large-Scale Stationary Industrial Tools*
- Large Scale Fixed Installations*

* Q12 FAQ China RoHS Category 6: Industrial Electronic Equipment: “Includes industrial processing, manufacturing and testing equipment...”
EU and China RoHS II
Include Products with Any Electrical Function

China RoHS II
• Product has at least one electrical function
  – [Not just the primary function]
  ➢ From China RoHS FAQ Q13 Flowchart

EU RoHS II
• Any expected electrical function of product
  – Not just the primary function (EU RoHS I)

Why is this important?
Trick question – Are teddy bears and tennis shoes in scope?
Unexpected Examples of Products in China RoHS II Scope (Slide 1)

<table>
<thead>
<tr>
<th>OUT OF SCOPE</th>
<th>IN SCOPE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Bear" /></td>
<td><img src="image2" alt="Bear" /></td>
</tr>
<tr>
<td><img src="image3" alt="Shoe" /></td>
<td><img src="image4" alt="Shoe" /></td>
</tr>
</tbody>
</table>

The answer is, it depends!
Unexpected Examples of Products in China RoHS II Scope (Slide 2)

• Gas-powered Lawn Mowers with an Electric Starter
• Gas water heaters with an electrical starter
• Automatic Doors and Gates
• Electric windows
• Safes with an electronic function
• Closet with Electrical Light
• Swimming pools with pumps included
• Pipe Organs*
• Doll house with light, bears that talk, shoes with lights

Examples from [BIO/ERA study](#) for the European Commission on EU RoHS II Category 11. *Pipe Organs were recently removed from EU RoHS II scope
Out of Scope for China RoHS II

- Power Generation, Transmitting and distribution equipment
- Defense/Military
- For special or extreme environments
- Electrical transportation equipment
- Used equipment with manufacturing date before July 1, 2016
- Temporarily entering or for repairs, but not for sale
- Research, testing, or exhibition but not for sale
- For Export, Hong Kong/Macao

Source: China RoHS II Regulation; China RoHS FAQ
Restricted Substances (the Original “RoHS 6”)

- Lead
- Mercury
- Hexavalent Chromium
- Cadmium
- Polybrominated Flame Retardants PBB and PBDE
- “Others” (right to add more later)
Hazardous Substance MCVs

✓ MCV – Maximum Concentration Values
✓ China primarily uses EU RoHS MCVs
  • Lead, Mercury, Hexavalent Chromium, PBB, PBDE MCV: 0.1% by weight in homogeneous materials
  • Cadmium MCV: 0.01% by weight in homogeneous materials
What is a Homogeneous Material?

- **Homogeneous material**: a material that cannot be mechanically disjointed into different materials (European Commission)

- The MCV is applied to each homogenous material
China MCV Guidelines

- MCV by Homogenous material
- MCV in Small product (less than 4.0 mm³) that can no longer be disassembled
- Metal plating material in parts of EEP: Hazardous substances should not be “intentionally added”
China RoHS:
Labeling and Disclosure Requirements

- Date of Manufacture
- One of two Labels
- “Environmental Protection Use Period” (EPUP)
- Location of Hazardous Substances above the MCV identified in the Disclosure Table
China RoHS Labeling: Product Markings (SJ/T 11364-2014)

- Symbol 1
- No restricted substances above MCV

- Symbol 2
- Use if EEP contains restricted substance above MCVs
- EPUP Year in center
Environmental Protection Use Period (EPUP)

• “The time limit [in years] within which hazardous/toxic substances or elements in the electrical electronic product, under conditions of normal use, will not leak out or deteriorate”

• Time limit begins at the date of manufacture
EPUP Guidelines
(SJ/Z 11388-2009)

- In practice, it’s the typical use-life
- Single year increments up to 10 years
- 5 year increments after 10 to max 95
- Determined by Manufacturers
- MIIT encourages industries to come up with guidelines
- Replaceable parts can have a separate EPUP
### China RoHS Hazardous Substance Disclosure Table (translated)

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lead (Pb)</td>
</tr>
<tr>
<td></td>
<td>Mercury (Hg)</td>
</tr>
<tr>
<td></td>
<td>Cadmium (Cd)</td>
</tr>
<tr>
<td></td>
<td>Hexavalent Chromium (Cr (VI))</td>
</tr>
<tr>
<td></td>
<td>Polybrominated biphenyls (PBB)</td>
</tr>
<tr>
<td></td>
<td>Polybrominated diphenyl ethers (PBDE)</td>
</tr>
</tbody>
</table>

This table is prepared in accordance with the provisions of SJ/T 11364.

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of **GB/T 26572**.

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of **GB/T 26572**.

(Enterprises may further provide in this box technical explanation for marking “X” based on their actual circumstances.)
Hazardous Substance Disclosure Table Guidelines (SJ/T 11364-2014)

- Must be in Chinese
- List part and location in first column
- Insert X (exceeds) or O (less than or none) in table to identify which hazardous substance(s) exceeds restricted limits in the appropriate column
- List should be short, but clear,
- Only list parts where there are restricted substances.
- Do not use “Other” as a location for restricted substances
- Do not identify location by material, i.e. “All Soldered parts” is not an acceptable location for lead
**Compliance Management Catalog for Restriction of Hazardous Substances**

- Catalog Products are a subset of Labeling Scope and are phased into the Catalog by MIIT.
- Catalog Products are subject to hazardous substance restrictions (ban) similar to EU RoHS – with exemptions
- A conformity assessment system for the products in the Catalog will be established by the State
Draft Compliance Management Catalog

- Printers
- Copiers
- Fax Machines
- Monitors
- Microcomputers
- Cell Phones
- Telephones
- TV Sets

- Refrigerators
- Air Conditioners
- Washing Machines
- Water Heaters

Notify US: G/TBT/N/CHN/1219: Product list
G/TBT/N/CHN/1220: Exempted uses of substances
Compliance Management Catalog: Questions Remain

Draft Catalog has no Conformity Assessment procedure information

- Difficult to comment on product list with no known conformity assessment procedure.

Length of phase-in period (mentioned in Faq Q50) is unknown
Thank you for your attention

Dorothea Blouin
Dorothea.blouin@trade.gov
Office of Health and Information Technologies

Jing Liu
Jing.Liu@trade.gov
Office of China and Mongolia
Resources

China RoHS 2 Official Chinese measure as promulgated by MIIT
http://www.miit.gov.cn/newweb/n1146290/n4388791/c4609768/content.html

China RoHS 2 Unofficial English Translation provided by Foley and Lardner, LLP

Unofficial Translation of labeling standard SJ/T 11364-2014 provided by Foley and Lardner, LLP
Resources

China RoHS 2 FAQ Official Chinese version as published by MIIT

Unofficial Translation of China RoHS 2 FAQ by Assent Compliance
(must register to receive – see bottom of page for link).
http://www.assentcompliance.com/china-rohs/