IBM Product Stewardship and Experiences on China RoHS
Agenda

- IBM Product Stewardship
  - IBM and the Environment
  - IBM Product Stewardship
  - Ensuring Compliance

- IBM Experiences on China RoHS
IBM and the Environment

- **40 Years of IBM Environmental Leadership**
- **20 Years of Environmental Reporting**
  - Process Stewardship
  - Pollution Prevention
  - Water Conservation
  - **Product Stewardship**
  - Energy and Climate Programs
  - Supply Chain Programs
  - Audits and Compliance
  - Remediation
  - Awards and Recognition

<table>
<thead>
<tr>
<th>Year</th>
<th>1967</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>21th century</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IBM Product Stewardship

- IBM's Product Stewardship program was established in 1991 to bring additional focus to the corporate environmental affairs policy objectives on product environmental design and performance.

- The objectives are implemented through internal standards, product specifications, and other requirements in IBM's Integrated Product Development process.

  - PEP: Product environmental attributes such as energy efficiency, materials content, chemical emissions testing, design for recycling, end-of-life management plans, and packaging data must be documented and reviewed in IBM's Product Environmental Profile tool at various check points during the development process.

  - PCD: Compliance management tools like the Product Content Declaration for IBM's suppliers support the assessments required for a complete Product Environmental Profile prior to product release.
IBM Engineering Specification 46G3772: Baseline Environmental Requirements for Supplier Deliverables to IBM

- ES 46G3772 contains restrictions on materials in products and on certain chemicals used in manufacturing.

- It also requires suppliers to disclose information about the content of certain materials in their products.

- In addition, the specification includes requirements for batteries, marking of plastic parts, and other product labeling requirements.
Product Content Declaration for IBM Suppliers

- Suppliers of materials, parts and products to IBM must provide information to verify the compliance of their products to IBM's environmental requirements.

- The Product Content Declaration for IBM Suppliers can be used to document the environmental data necessary to establish compliance of procured materials, parts and products to IBM Engineering Specification 46G3772.
Ensuring Compliance

- Center of Excellence for Product Environmental Compliance
  – an organization IBM created having end-to-end responsibility to oversee all of IBM's product environmental compliance.

- Compliance with environmental requirements as one of Supplier Quality Requirements

- Proactive communication with suppliers

- Requirement of suppliers to have a process that will set requirements on their subcontractors.
IBM Experiences on China RoHS

- Track the development / modification of the regulation and the standards
- Provide comments/suggestion on regulation and standards with its experiences
- Communicate the regulation and standards within the company across the functions
- Take action for compliance
Action for Compliance with China RoHS under IBM Product Stewardship

- Regular interface meetings of Center of Excellence for product environmental compliance to
  - Update the development progress of the regulation and standards
  - Discuss and understand the requirements
  - Update the progress of product compliant actions

- Revise 46G3772 and include China RoHS requirements

- Product compliance action plan by each products team

- Educate the Procurement Engineers

- Communicate to the suppliers
  - Seminars in Shenzhen, Taipei and Singapore
Thanks for your time

hailiu@cn.ibm.com
http://www.ibm.com/ibm/environment/