

Are Your Products Legal?

An overview of worldwide environmental product mandates and how to comply

EPR2 2001

By

Victor Bell

and

Jennifer McCracken

Environmental Packaging International



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Issues to be Discussed

- Issues covered by environmental product legislation
- Where do you have to comply?
- Who has to comply?
- What are the requirements?
- How to comply?
- Compliance conflicts
- How to cope?



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Issues Covered by Legislation

- Batteries (Heavy metals and others)
- Electronic and electrical appliance waste
- Product design
- Labeling



Countries with Battery Legislation

Heavy metals batteries (mercury, cadmium, lead):

- Czech Republic
- EU and Member States
- Japan
- US (federal) and certain states

All batteries:

- Austria
- Belgium
- France
- Germany
- Hungary
- Netherlands
- Switzerland
- Taiwan
- Thailand



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Countries with WEEE Take-Back Legislation

White goods

- Austria
- Italy

White and brown goods

- Belgium (July 2001)
- Netherlands
- Norway
- Switzerland
- Sweden (July 2001)
- Japan (white goods and PC's)
- Taiwan (PC's)



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Proposed WEEE Take-Back Legislation

Worldwide!



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Countries with Product Design Legislation

□ EU and Member States

- Cadmium Directive
- Lead (DK)
- Mercury (NL)

□ Some US states

- Mercury (ME, NH, VT)



Proposed Product Design Legislation

- ❑ Sweden and Norway
 - Heavy metals
- ❑ EU Restriction on Hazardous Substances would ban the following in EEE:
 - Heavy metals
 - Hexavalent chromium
 - Brominated flame retardants



Proposed Product Design Legislation

□ EU EEE Directive

- Product lifecycle environmental impact analysis
 - | Promote recyclability of product components



Legally Responsible Parties

- ❑ In-country manufacturers of electronic and electrical equipment (EEE)
- ❑ Importers of EEE
- ❑ In reality, manufacturers of EEE who wish to sell worldwide would be wise to make many of these requirements SOP!



Requirements Overview

1. Material and design restrictions

- Battery
- Product
- Packaging

2. Labeling requirements

- Battery
- Product
- Packaging
- User's manual



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Requirements Overview

(continued)

3. Take-back obligation

- Battery
- Product
- Packaging

4. Disposal tax payments

- Battery
- Product
- Packaging



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Material Restrictions-- Battery

□ Heavy metals limits

- EU Directive on Batteries and Accumulators
 - | limits mercury

- US Mercury-Containing and Rechargeable Battery Act
 - | limits mercury



Design Restrictions--Battery

- ❑ Removability by consumer for:
 - Heavy metals-containing batteries
 - All batteries (NL)
 - Exemptions for:
 - | Batteries that, if removed, pose safety hazards
 - | Batteries permanently attached to ensure continuous power and memory
 - | Reference cells in professional and medical equipment



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Material Restrictions-- Product

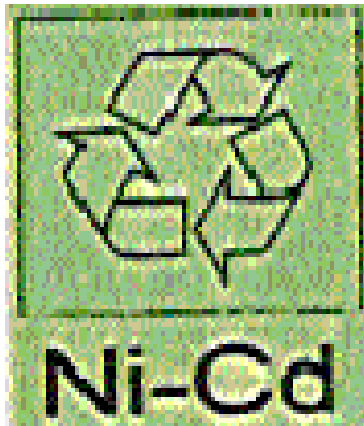
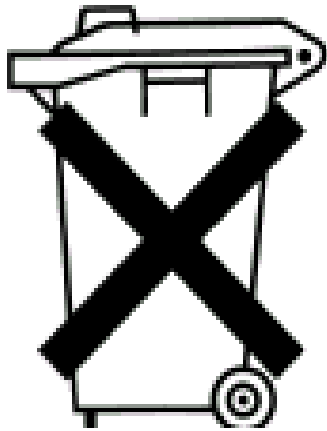
❑ Restricted use of:

- Heavy metals (lead, cadmium, mercury)
- PVC
- Brominated flame-retardants (future)
- Hexavalent chromium (future)



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Battery (sample)



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Product (sample)

□ Language (US):

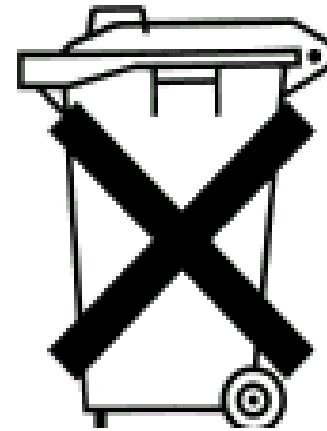
- Consumer product containing non-removable HM battery:
 - | 'CONTAINS NICKEL-CADMIUM BATTERY. BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.'
- Mercury-added products:
 - | Indicate that product contains Hg, which must be removed and disposed of properly.



Labeling—Product (Proposed)

❑ EU WEEE Directive:

- Crossed-out wheellie bin



❑ EU EEE Directive:

- CE symbol



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Product (Proposed)

- ❑ EU WEEE and EEE directives would:
 - Require manufacturers to label components, devices and other material to aid recovery and proper disposal
 - | ISO 11469 is used to identify component materials
- >PA66<-(GF+MD)40FR(52)<

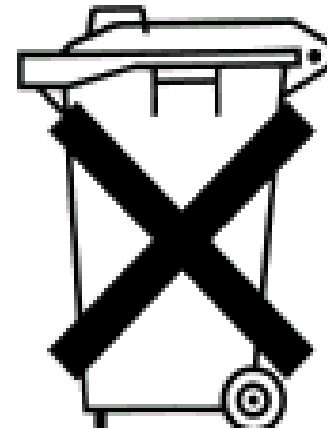
*Polyamide 66 W/40% Glass Fiber & Mineral powder+ red phosphorus(as FR)



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Package (sample)

- Crossed-out wheelie bin



- Taiwan Four chasing arrows



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Owner's Manual (sample)

❑ Method of removing installed batteries

- EU: heavy metals
- NL: all types

❑ Safety hazard

- If removing battery **poses** safety risk to consumer, indicate that it must be removed by a professional

❑ Product and/or battery return system



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Labeling—Owner's Manual (Proposed)

□ Return and collection systems:

- EU WEEE directive would require Member States to ensure that consumers are given necessary information about return and collection systems available to them. MS implementation of Packaging Directive passed this obligation on to the importer.
- EU EEE directive would require manufacturer to adequately inform final user of waste management systems.



Take-back Obligation

□ Importer/producer responsibilities:

- Collect and/or receive waste
- Take-back of own-brand or similar type product (*depends on country*)
- Do not charge consumers at moment of take-back
- Ensure sorting, recycling (where appropriate) and proper treatment



Take-back Obligation

- More importer/producer responsibilities:
 - Report to government on sales, take-back, recycling, and disposal
 - Inform government of take-back plan



Take-back Obligation

- ❑ Do it yourself, OR
- ❑ Join a third party organization (TPO)
 - Third-party recovery organizations are allowed to fulfill legal obligations of importers/manufacturers



Take-back—TPO Fees

□ TPO fees are assessed on:

- Weight (regardless of, or varying by, type)
- Per unit (regardless of, or varying by, type)
- Retail price
- **Future: ease of recyclability?**



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Disposal Tax

Batteries

- Belgium
- Denmark
- Hungary
- Ireland
- Korea
- Switzerland
- Taiwan
- Thailand

WEEE

- Taiwan



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Disposal Tax

□ Tax basis:

- Per unit (regardless of, or varying by type)
- Weight (regardless of, or varying by type)
- Excise



Sample Product

□ Laptop computer

- Heavy metals limits on battery and appliance components
- Battery and appliance take-back or tax payment
- Labeling of battery, appliance, user manual and packaging



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Compliance Summary-- Material Restrictions

- Does product comply with material restrictions?
- Is product properly labeled?



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Compliance Summary-- Battery

- Does battery contain heavy metals?
 - Does it meet limits?
 - Is it removable by consumer, or subject to exemptions?
- Are battery, product, packaging and owner's manual labeled appropriately?
- Is battery subject to take-back?
- Is battery subject to tax?



Compliance Summary-- WEEE

- Is your product covered by national WEEE take-back legislation?
- Do you have a take-back plan, or belong to a TPO?
- Have you reported this plan to the government?



This information is copyrighted and cannot be copied or distributed without prior written consent from Environmental Packaging International.

Compliance Summary-- WEEE

- Do you provide consumers with information on how to return your product?
- Is your product properly labeled?
- Do you inform treatment facilities of components that must be treated separately (hazardous waste-containing components)?



Compliance Conflicts

- ❑ Battery vs. packaging requirements
 - French battery law: If battery is too small, “crossed-out wheelie bin” logo must be labeled on sales packaging.
 - US FTC guidelines on recyclability: “It is deceptive to misrepresent, directly or by implication, that a product or package is recyclable.”



How to Cope?

- ❑ Understand the requirements in countries in which you sell
- ❑ Anticipate future requirements
- ❑ Include recovery fees in the cost of goods
- ❑ Ensure that all necessary product data is collected
 - Battery types and labeling
 - Product weight and labeling
 - Retail and wholesale price



How to Cope?

- ❑ Obtain vendor certification of heavy metals content in product materials
- ❑ Define clear responsibilities for take-back in distributor agreements
- ❑ Implement a design approval protocol
 - Inform designers of restrictions and consequences, inform Sales Dept. of take-back costs, etc.

