



Treatment of Batteries within the Basel Convention
Interpretation by the EU and
Organisation for Economic Co-Operation and Development (OECD)

The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal is the most comprehensive global environmental agreement on hazardous and other wastes. The Convention has 172 Parties and aims to protect human health and the environment against the adverse effects resulting from the generation, management, trans-boundary movements and disposal of hazardous and other wastes. The Basel Convention came into force in 1992.

List A (annex viii) of the Convention itemizes wastes that are characterized as hazardous under Article 1, paragraph 1 (a), of this Convention. Batteries are covered as follows:

A1160	Waste lead-acid batteries, whole or crushed
A1170	Unsorted waste batteries excluding mixtures of only list B batteries. Waste batteries not specified on list B containing Annex I constituents to an extent to render them hazardous
A1180	Waste electrical and electronic assemblies or scrap containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B B1110)

List B (annex ix) of the Convention itemizes non-hazardous wastes that are not covered by Article 1, paragraph 1 (a), of the Convention.

B1090	Waste batteries conforming to a specification, excluding those made with lead, cadmium or mercury
B1110	Electrical and electronic assemblies: <ul style="list-style-type: none"> • Electronic assemblies consisting only of metals or alloys • Waste electrical and electronic assemblies or scrap (including printed circuit boards) not containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or not contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry on list A A1180) • Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for direct reuse, and not for recycling or final disposal
B4030	Used single-use cameras, with batteries not included on list A

Interpretation

The Convention only identifies batteries containing mercury, cadmium and lead as hazardous waste. The Convention does not recognize the presence of other Annex I constituents in alkaline manganese and zinc carbon batteries (e.g. zinc and copper compounds) as sufficient to render them hazardous; accordingly these batteries are non hazardous waste.

EU

This interpretation is endorsed by the EU. The European Waste List 2000/532/EC, which identifies hazardous and non hazardous wastes, contains the following entries for batteries:

16 06 Batteries and accumulators (* denotes hazardous waste)	
16 06 01*	Lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	Mercury-containing batteries
16 06 04	Alkaline batteries (except 16 06 03)
16 06 05	Other batteries and accumulators
16 06 06*	Electrolyte from batteries and accumulators
20 MUNICIPAL WASTES AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES INCLUDING SEPARATELY COLLECTED FRACTIONS	
20 01	Separately collected fractions
20 01 33*	Mixed batteries and accumulators containing batteries or accumulators included in 16 06 01, 16 06 02 or 16 06 03
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33

The hazardous classification of certain wastes listed in the European Waste List are derived taking into account the following hazardous characteristics of the wastes:

<ul style="list-style-type: none">• Flammability• Toxicity• Harmfulness• Corrosivity	<ul style="list-style-type: none">• Irritability• Carcinogenicity• Reproductive toxicity• Mutagenicity
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OECD

The OECD too only recognizes batteries containing mercury, cadmium and lead as hazardous waste; it considers other batteries such as alkaline manganese and zinc carbon to be non-hazardous.

In May 2002 the OECD issued the Council Decision C(2001)107/FINAL on the control of trans-boundary movements of wastes destined for recovery operations which is compatible with the Basel Convention and legally binding on all 30 member countries.

Batteries are covered under A-list, falling under the Amber control procedures for hazardous wastes:

A1160	Waste lead-acid batteries, whole or crushed
A1170	Unsorted waste batteries excluding mixtures of only Appendix 3 batteries. Waste batteries not specified in Appendix 3 containing Appendix 1 constituents to an extent to render them hazardous

Additionally batteries are covered under B-list, falling under the Green control procedures, i.e. wastes not characterized as hazardous in accordance with Article 1(1)a of the Convention.

B1090	Waste batteries conforming to a specification, excluding those made with lead, cadmium or mercury
B4030	Used single-use cameras, with batteries not included in Appendix 4

OECD member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

Accession candidate countries: Chile, Estonia, Israel, Russia, Slovenia

Enhanced engagement countries: Brazil, China, India, Indonesia, South Africa.

Conclusions

The following conclusions are made based on international regulatory standards that aim to protect human health and the environment from the harmful effects of on hazardous wastes:

1. Waste batteries containing mercury, cadmium and lead are hazardous.
2. Waste batteries that do not contain mercury, cadmium or lead such as alkaline manganese and zinc carbon are non-hazardous.
3. Consignments containing a mixture of hazardous and non-hazardous waste batteries are hazardous.
4. Electronic devices disposed with hazardous batteries are hazardous waste; this may not be the case if the batteries are non-hazardous types.

NEMA
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