## HAZARDOUS WASTES (MANAGEMENT AND HANDLING) AMENDMENT RULES 2003



The following is the list of hazardous waste included in the Schedule in the Hazardous Wastes (Management and Handling) Rules, 1989

**Table: 1 CATEGORIES OF HAZARDOUS WASTES** 

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Waste Categories	Type of wastes	Regulatory Quantities
Waste Category No. 4	Mercury, Arsenic, Thallium and Cadmium bearing wastes.	5 kilogrammes per year the sum of the specified substance calculated as pure metal.
Waste Category No. 5	Non-halogenated hydrocarbons including solvent.	200 kilogrammes per year calculated as non-halogenated hydrocarbons.
Waste Category No. 6	Halogenated hydro-carbon including solvents	50 kilograms per year calculated as helogenated hydrocarbons.
Waste Category No. 7	Wastes from paints, pigments, glue, varnish and printing ink.	250 kilogrammes per year calculated as oil or oil emulsions.
Waste Category No.8	Wastes from Dyes and Dye intermediate containing inorganic chemical compounds.	200 kilogrammes per year calculated as inorganic chemicals.
Waste Category No. 9	Wastes from Dyes and Dye intermediate containing organic chemical compounds.	50 kilogrammes per year calculated as organic chemicals.
Waste Category No. 10	Waste oil and oil emulsions.	1000 kilogrammes per year calculated as oil and oil emulsions.
Waste Category No. 11	Tarry wastes from refining and tar residues from distillation or prolytic treatment.	200 kilogrammes per year calculated as tar
Waste Category No. 12	Sludgesarising from treatment of waste waters containing heavy metals, toxic organics, oils emulsions and spend chemical and inceneration ash.	irrespective of any quantity.
Waste Category No. 13	Phenols.	5 kilogrammes per year calculated as phenols.
Waste Category No. 14	Asbestos.	200 kilogrammes per year calculated asbestos.
Waste Category No. 15	Wastes from manufacturing of pesticides and herbicides and residues from pesticides and, herbicides formulation units.	5 kilogrammes per year calculated as pesticides and their intermediate products.
Waste Category No. 16	Acid/Alkaline/Slurry	200 kilogrammes per year calculated as Acids/Alkalies.
Wastes Category No.17	Off-specification and discarded products.	Irrespective of any quantity.
Wastes Category No.18	Discarded containers and Containers linears of hazardous and toxic wastes.	Irrespective of any quantity.

The new 2003 Amendment rules excluded the following three categories from the list of hazardous waste:

- (a) Bio-medical wastes, covered under the Bio-Medical Wastes (Management and Handling) Rules, 1998
- (b) Wastes covered under the Municipal Solid Wastes (Management and Handling) Rules, 2000
- (c) The lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001

It is interesting to note that, currently products containing mercury are used in large scale in hospitals and clinics and still the waste generated from these units are not considered as hazardous waste.

**Schedule-1** of the Hazardous Wastes (Management and Handling) Amendment Rules 2003, lists the hazardous waste with related process/ industry. Table 2 below lists the process and corresponding wastes containing mercury included in Schedule-1.

Table 2: List of waste containing mercury

S. No.	Processes	Hazardous Waste
1.	Production of caustic soda and chlorine	1.Mercury bearing sludge Residue/sludge and filter cakes Brine sludge containing mercury

The wastes generated from industry producing products that contain mercury such as thermometer, battery, fluorescent lamp, thermostats, etc., are not included in the list, which shows that CPCB is not serious about the problem of waste containing mercury.

**Schedule-3** of the Hazardous Wastes (Management and Handling) Amendment Rules 2003, lists the waste applicable for import and export. The following are the two types of waste containing mercury, which are permitted for import and export.

- a) Waste Electrical and electronic assembles or scrap containing, compounds 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 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 constituents mentioned in Schedule 2 to the extent of concentration limits specified therein. [Schedule 2 lists wastes constituents with concentration limit; Mercury and mercury compounds are grouped in Class A with concentration limit 50 mg/kg]
- b) Waste batteries conforming to specification, excluding those made with lead, cadmium or mercury.

**Schedule-B** of the Hazardous Wastes (Management and Handling) Amendment Rules 2003, lists the hazardous waste prohibited for Import and Export

- (a) Mercury
- (b) Waste having mercury: Mercury compounds as constituents or contaminations.
- (c) Clinical and related wastes; that is wastes arising from medical, nursing, dental, veterinary or similar practices and wastes generated in hospital or other facilities during the investigation or treatment of patients, or research projects.

In Schedule B, the waste mercury and waste containing mercury compounds are included that are prohibited for import and export, thus it gives permission to industry to import recycled mercury and pure mercury.

Schedule B prohibits the import and export clinical and related wastes as they are hazardous but still within the country they are not considered as a hazardous waste. They are placed under the Bio-Medical Wastes (Management and Handling) Rules, 1998.