

Annex I of the Basel Convention

CATEGORIES OF WASTES TO BE CONTROLLED

Waste Streams

- Y1** Clinical wastes from medical care in hospitals, medical centers and clinics
- Y2** Wastes from the production and preparation of pharmaceutical products
- Y3** Waste pharmaceuticals, drugs and medicines
- Y4** Wastes from the production, formulation and use of biocides and phytopharmaceuticals
- Y5** Wastes from the manufacture, formulation and use of wood preserving chemicals
- Y6** Wastes from the production, formulation and use of organic solvents
- Y7** Wastes from heat treatment and tempering operations containing cyanides
- Y8** Waste mineral oils unfit for their originally intended use
- Y9** Waste oils/water, hydrocarbons/water mixtures, emulsions
- Y10** Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)
- Y11** Waste tarry residues arising from refining, distillation and any pyrolytic treatment
- Y12** Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish
- Y13** Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives
- Y14** Waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not known
- Y15** Wastes of an explosive nature not subject to other legislation
- Y16** Wastes from production, formulation and use of photographic chemicals and processing materials
- Y17** Wastes resulting from surface treatment of metals and plastics
- Y18** Residues arising from industrial waste disposal operations

Wastes having as constituents:

- Y19** Metal carbonyls
- Y20** Beryllium; beryllium compounds
- Y21** Hexavalent chromium compounds
- Y22** Copper compounds
- Y23** Zinc compounds
- Y24** Arsenic; arsenic compounds
- Y25** Selenium; selenium compounds
- Y26** Cadmium; cadmium compounds
- Y27** Antimony; antimony compounds
- Y28** Tellurium; tellurium compounds
- Y29** Mercury; mercury compounds
- Y30** Thallium; thallium compounds
- Y31** Lead; lead compounds
- Y32** Inorganic fluorine compounds excluding calcium fluoride
- Y33** Inorganic cyanides

- Y34** Acidic solutions or acids in solid form
- Y35** Basic solutions or bases in solid form
- Y36** Asbestos (dust and fibres)
- Y37** Organic phosphorus compounds
- Y38** Organic cyanides
- Y39** Phenols; phenol compounds including chlorophenols
- Y40** Ethers
- Y41** Halogenated organic solvents
- Y42** Organic solvents excluding halogenated solvents
- Y43** Any congener of polychlorinated dibenzo-furan
- Y44** Any congener of polychlorinated dibenzo-p-dioxin
- Y45** Organohalogen compounds other than substances referred to in this Annex (e.g. Y39, Y41, Y42, Y43, Y44)

Decision IV/9 adopted by the fourth meeting of the Conference of the Parties amended Annex I by adding the following paragraphs (a, b, c and d) to it:

- (a) To facilitate the application of this Convention, and subject to paragraphs (b), (c) and (d), wastes listed in Annex VIII are characterized as hazardous pursuant to Article 1, paragraph 1 (a), of this Convention, and wastes listed in Annex IX are not covered by Article 1, paragraph 1 (a), of this Convention.
- (b) Designation of a waste on Annex VIII does not preclude, in a particular case, the use of Annex III to demonstrate that a waste is not hazardous pursuant to Article 1, paragraph 1 (a), of this Convention.
- (c) Designation of a waste on Annex IX does not preclude, in a particular case, characterization of such a waste as hazardous pursuant to Article 1, paragraph 1 (a), of this Convention if it contains Annex I material to an extent causing it to exhibit an Annex III characteristic.
- (d) Annexes VIII and IX do not affect the application of Article 1, paragraph 1 (a), of this Convention for the purpose of characterization of wastes.

Annex II of the Basel Convention

CATEGORIES OF WASTES REQUIRING SPECIAL CONSIDERATION

- Y46** Wastes collected from households
- Y47** Residues arising from the incineration of household wastes

Annex III of the Basel Convention

LIST OF HAZARDOUS CHARACTERISTICS

<u>UN Class</u> ¹	<u>Code</u>	<u>Characteristics</u>
1	H1	<p>Explosive</p> <p>An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such speed as to cause damage to the surroundings.</p>
3	H3	<p>Flammable liquids</p> <p>The word "flammable" has the same meaning as "inflammable." Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5E C, closed-cup test, or not more than 65.6EC, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such differences would be within the spirit of this definition.)</p>
4.1	H4.1	<p>Flammable solids</p> <p>Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.</p>
4.2	H4.2	<p>Substances or wastes liable to spontaneous combustion</p> <p>Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.</p>
4.3	H4.3	<p>Substances or wastes which, in contact with water emit flammable gases</p> <p>Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.</p>

¹ Corresponds to the hazard classification system included in the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1Rev.5, United Nations, New York, 1988).

5.1	H5.1	<p>Oxidizing</p> <p>Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause, or contribute to, the combustion of other materials.</p>
5.2	H5.2	<p>Organic Peroxides</p> <p>Organic substances or wastes which contain the bivalent-O-O- structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.</p>
6.1	H6.1	<p>Poisonous (Acute)</p> <p>Substances or wastes liable either to cause death or serious injury or to harm health if swallowed or inhaled or by skin contact.</p>
6.2	H6.2	<p>Infectious substances</p> <p>Substances or wastes containing viable micro organisms or their toxins which are known or suspected to cause disease in animals or humans.</p>
8	H8	<p>Corrosives</p> <p>Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards.</p>
9	H10	<p>Liberation of toxic gases in contact with air or water</p> <p>Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.</p>
9	H11	<p>Toxic (Delayed or chronic)</p> <p>Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.</p>
9	H12	<p>Ecotoxic</p> <p>Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems.</p>
9	H13	<p>Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.</p>

Tests

The potential hazards posed by certain types of wastes are not yet fully

documented; tests to define quantitatively these hazards do not exist. Further research is necessary in order to develop means to characterize potential hazards posed to man and/or the environment by these wastes. Standardized tests have been derived with respect to pure substances and materials. Many countries have developed national tests which can be applied to materials listed in Annex I, in order to decide if these materials exhibit any of the characteristics listed in this Annex.

Annex IV of the Basel Convention

DISPOSAL OPERATIONS

A. OPERATIONS WHICH DO NOT LEAD TO THE POSSIBILITY OF RESOURCE RECOVERY, RECYCLING, RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES

Section A encompasses all such disposal operations which occur in practice.

- D1 Deposit into or onto land, (e.g., landfill, etc.)
- D2 Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.)
- D3 Deep injection, (e.g., injection of pumpable discards into wells, salt domes of naturally occurring repositories, etc.)
- D4 Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.)
- D5 Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)
- D6 Release into a water body except seas/oceans
- D7 Release into seas/oceans including sea-bed insertion
- D8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A
- D9 Physico chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations in Section A, (e.g., evaporation, drying, calcination, neutralization, precipitation, etc.)
- D10 Incineration on land
- D11 Incineration at sea
- D12 Permanent storage (e.g., emplacement of containers in a mine, etc.)
- D13 Blending or mixing prior to submission to any of the operations in Section A
- D14 Repackaging prior to submission to any of the operations in Section A
- D15 Storage pending any of the operations in Section A

**B. OPERATIONS WHICH MAY LEAD TO RESOURCE RECOVERY, RECYCLING
RECLAMATION, DIRECT RE-USE OR ALTERNATIVE USES**

Section B encompasses all such operations with respect to materials
legally defined as or considered to be hazardous wastes and which
otherwise would have been destined for operations included in Section A

- R1 Use as a fuel (other than in direct incineration) or other means to generate energy
- R2 Solvent reclamation/regeneration
- R3 Recycling/reclamation of organic substances which are not used as solvents
- R4 Recycling/reclamation of metals and metal compounds
- R5 Recycling/reclamation of other inorganic materials
- R6 Regeneration of acids or bases
- R7 Recovery of components used for pollution abatement
- R8 Recovery of components from catalysts
- R9 Used oil re-refining or other reuses of previously used oil
- R10 Land treatment resulting in benefit to agriculture or ecological improvement
- R11 Uses of residual materials obtained from any of the operations numbered R1-R10
- R12 Exchange of wastes for submission to any of the operations numbered R1-R11
- R13 Accumulation of material intended for any operation in Section B