# Manual: Questionnaire on “Transmission of Information”

# FOREWORD

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in March 1989 and entered into force in May 1992. The Parties to the Basel Convention are required, in accordance with articles 13 & 16 of the Convention, to inform each other through the Secretariat of the Basel Convention on issues related to the implementation of the Convention.

In order to enable monitoring of the implementation of the Basel Convention by its Parties and to present reports on this matter to their Conferences on a regular basis, it is crucial to receive information. To facilitate such a process, the Secretariat has prepared a revised questionnaire on "Transmission of Information" and a Manual for the questionnaire on "transmission of Information." The Manual has been prepared with a view to providing assistance to Parties in completing the questionnaire. Efforts have been made to keep the text of the Manual simple and brief to enhance easy reference.

The Secretariat of the Basel Convention acknowledges and thanks the Government of Finland for its assistance in preparing this Manual and as well as Parties for their active participation in this process by providing their comments without which the publication of this Manual would not have been possible.

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# INTRODUCTION

The purpose of the Manual for the questionnaire on "Transmission of Information" is to assist Focal Points to the Basel Convention by providing some useful information in completing the questionnaire on "Transmission of Information" in accordance with Articles 13 and 16 of the Convention.

A draft Instruction Manual was prepared by the Secretariat with assistance from Government of Finland and was sent to all focal points along with the draft revised questionnaire on "Transmission of Information" in August 2000 for comments. The draft manual and the draft revised questionnaire were presented to the 17th session of the Technical Working Group (October 2000, Geneva). The Technical Working Group agreed that (a) the draft revised questionnaire should be used by Parties to report information for the year 1999; and (b) to submit the revised questionnaire and its Manual to the Working Group for the Implementation of the Basel Convention with a view for their adoption by the sixth meeting of the Conference of the Parties.

The Manual and the questionnaire on "Transmission of Information" contain two parts, namely, Part I: Status of information and Part II: Annual reporting. This is to further facilitate reporting by Parties to the Secretariat and also to make the reporting process easier to the Parties. Part I and II of the Manual contain instructions on how to answer the questions in the corresponding parts of the questionnaire.

It is essential to complete the questionnaire by providing information/data in the required format to ensure consistency and for ease of data processing.

The Manual and the revised questionnaire are available both in hard copy and electronic version (Part I and Part II: Section B of the questionnaire are in Word; and Part II: Section A of the questionnaire is in Excel. The Manual is in Word).

To facilitate easy reference annexes I, II, III, IV, V, VII, VIII and IX of the Basel Convention and a list of ISO codes are provided under appendix.

A help service is also available from the Secretariat, at the following contact address. If you have any questions concerning the questionnaire, please contact:

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The Manual aims to assist focal points of the Basel Convention to complete the questionnaire on "Transmission of Information" in accordance with Articles 13 & 16 of the Convention. The Manual consists of two parts, namely, Part I: Status of Information and Part II: Annual reporting.

# PART I: STATUS OF INFORMATION

Part I: Status of Information of the Manual contains instructions on how to answer the questions in the corresponding part of the questionnaire on "Transmission of Information."

**Complete** Part I of the questionnaire for the concerned reporting year.

**Note** that starting from the reporting year 1999, completing Part I is a one-time task. Once you have completed it for the reporting year 1999 or onwards, it is not necessary to complete this part on an annual basis for the forthcoming reporting years if the information provided during the previous reporting (i.e. from 1999 onwards) is still valid and no changes are necessary. In this case, simply **indicate** that no updating is required.

## Competent Authority and Focal Point

Questions under this heading aim to identify and record the responsible authorities for the implementation of the Convention. Designation of one or more Competent Authorities and a Focal Point to the Basel Convention by Parties is required by the Convention and is essential for effective implementation of the Convention.

**Question 1a** **Provide** the contact details of the designated Competent Authority to the Basel Convention in your country.

Basel Convention defines Competent Authority "as a governmental authority designated by a party to be responsible, within such geographical areas as the Party may think fit, for receiving the notification of a transboundary movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification."

Sometimes more than one Competent Authority could be designated depending on the area of responsibility and nature of activities. In such cases, **provide** the contact details of each one of the Competent Authorities, specifying regions and activities (i.e. import/export/transit) assigned to them. Use additional space/attachment, if required.

**Question 1b** **Provide** the contact details of the designated Focal point to the Basel Convention in your country.

Basel Convention defines Focal Point as "an entity of a Party responsible for receiving and submitting information as provided for in articles 13 and 16."

**Note** that a Party may designate *only* one Focal Point.

## Wastes Controlled for the Purpose of Transboundary Movement

Questions under this heading aim to record what wastes are controlled in a Party in the context of transboundary movement of waste. Different wastes are controlled in different countries for different purposes. The information collected under this heading could assist Parties to recognize and obtain necessary information on different definitions and the scope of control for the purpose of the transboundary movement of waste applied in other Parties.

**Question 2a** **Tick** the appropriate box depending on the existence of the definition of wastes in your country. If it exists, **provide** the full text of the national definition of wastes.

**Note** that some countries apply different definitions of waste for national purposes (e.g. national waste policy, permitting of waste disposal facilities) and for the purposes of transboundary movements of waste. Question 2a specifically seeks information on the definition applied in the control of transboundary movement of wastes.

Article 2, Para 1 of Basel Convention defines AWastes@ as Asubstances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law@.

**Question 2b** **Tick** appropriate box depending on the existence of the definition of hazardous wastes in your country. If it exists, **provide** the full text of the national definition of hazardous wastes.

**Note** that some countries apply different definitions of hazardous waste for national purposes (e.g. national waste policy, permitting of waste disposal facilities) and for the purposes of transboundary movements of waste. Question 2b specifically seeks information on the definition applied in the control of transboundary movement of hazardous wastes.

According to Article 1, Para 1(a) of the Basel Convention, hazardous wastes are defined as AWastes that belong to any category contained in Annex I of the Convention, unless they do not possess any of the characteristics contained in Annex III of the Convention@. Annex I to the Convention consists of a list of 45 broad generic categories of wastes, which is divided into >waste streams: (Y1 - Y18) and >constituents of waste: (Y19 - Y45) that are to be controlled.

**Question 2c** **Tick** appropriate box indicating if there are any wastes defined as, or considered to be hazardous wastes by national legislation in accordance with Art. 1, para 1(b) of the Basel Convention. In other words, this question seeks information on wastes included in your national definition of hazardous waste that are in addition to those defined under Art 1, para 1(a) of the Convention. **Specify** these wastes as clearly as possible (e.g. by waste streams and/or

constituents).

**Question 2d** **List** any other wastes than those identified in the above questions 2b and 2c that are controlled for the purpose of transboundary movement of waste. In other words, this question seeks information on wastes that are not hazardous according to either Art. 1, para 1(a) of the Convention or according to your national legislation but are considered as wastes subject to control, for example, due to foreseen risks connected with their transboundary movements. Although not an exact information requirement under the Convention, this information if provided, could assist other Parties to access the necessary information on the scope of control in your country.

According to the Convention, wastes listed in Annex II (Y46 - Y47) require special consideration and shall be subject to control.

**Note** that Annex I, II and III are available in the appendix of this manual.

## Restrictions on Transboundary Movement of Hazardous Wastes and Other Wastes

The questions under this heading seek information on the implementation of Decision III/1 of the third meeting of the Conference of the Parties (COP-3) (Geneva, 1995) as well as on any other national provisions by which exports or imports of hazardous or other wastes from or to your country are totally or partially prohibited, in accordance with Art. 4 of the Basel Convention. This information is also to cover the measures taken to implement Decision II/12 of the COP (Geneva, 1994).

**Question 3a** **Tick** appropriate box to indicate whether Decision III/1of COP-3 (Geneva, 1995) on the amendment to the Basel Convention (Aban amendment@) has been implemented in your country. **Tick** Ayes@, if your country has ratified the ban amendment. Tick Ayes@ also in case the amendment has not officially been ratified yet but the provisions of the amendment have in practice been implemented in your national legislation. Give necessary explanations in section Aremarks@.

**Limit** your response to this question only to indicate the status of implementation and/or ratification of the ban amendment. Provide the details on different types of restrictions that exist in your country and various measures taken to implement these restrictions under questions 3b to 3e.

According to the ban amendment, all exports of hazardous wastes which are destined for disposal from States listed in Annex VII of the Convention (Parties and other States which are members of OECD, EC, Liechtenstein) to other countries shall be prohibited. Furthermore, as of 1 January 1998, all exports of hazardous wastes referred to in Art. 1, para 1(a) of the Convention which are destined for recovery operations from States listed in Annex VII to other countries shall be prohibited.

**Questions 3b-3e**

**Provide** information separately on different types of restrictions that exist in your country for the block of questions from 3b to 3f, as follows:

3b concerning exports of wastes for final disposal (i.e operations listed in Annex IV A to the Convention);

3c concerning exports of wastes for recovery (i.e. operations listed in Annex IV B to the Convention);

3d concerning import of wastes for final disposal;

3e concerning import of wastes for recovery; and

3f concerning transit of wastes for recovery and final disposal.

**Tick** the appropriate box in each question depending on the existence of such restrictions in your country. If yes, **provide** details on the relevant legislation and the date when the restriction(s) entered into force. Also **specify** the countries/regions and/or the categories of wastes covered by such restriction(s), and give any other relevant information.

## Control Procedure of the Transboundary Movement of Waste

Questions under this heading seek information on certain issues related to control procedures of transboundary movements of wastes. Although reporting on these issues is not explicitly required under the Convention, this information, if provided, gives valuable feedback to Parties and the Secretariat of the Basel Convention on the functioning of the control system. This would also in turn assist Parties in getting necessary information on some requirements related to control procedures that are applied in your country.

**Question 4a** **Tick** the appropriate box to indicate whether the Notification and Movement document forms of the Basel Convention are used and/or accepted in your country in the control of transboundary movement of wastes. Since the use of these forms is not mandatory, it is useful for Parties as well as the Secretariat of the Basel Convention to get an overview on how widely the forms are used, through the responses to this question.

**Explain** if any difficulties were encountered while using these Notification and Movement document forms of the Basel Convention. Include recommendations you may wish to make for its modification and/or improvement.

**Provide** details of any forms other than those of the Basel Convention that are used or accepted in your country in the control of transboundary movement of hazardous wastes and other wastes.

The notification and movement document forms of the Basel Convention are incorporated in annexes of the AInstruction manual on control system for

transboundary movements of hazardous wastes and other wastes@ (Basel Convention Series/SBC No: 98/003). This manual also provides practical and workable guidance for all persons involved in the transboundary movements of the wastes subject to the Basel Convention. It is available upon request from the Secretariat as well as at its web site (www.basel.int).

**Question 4b** **Specify** those languages, in which the notification and movement document forms could be completed by the exporting State so that it could be acceptable to your country either as a State of import or transit.

**Question 4c** **Specify** any additional requirements for information to be provided on notification or the movement document compared to those listed in Annex VA and VB, respectively (e.g. information on insurances and financial guarantees).

**Question 4d** **Provide** information on the status of the border control of transboundary movements of waste in your country. **Tick** appropriate box to indicate whether the export, import and transit of waste across the borders of your country are controlled by customs offices; and whether the Harmonized System on customs control of the World Customs Organization is used in this control.

## Reduction and/or Elimination of the Generation of Hazardous Wastes and Other Wastes

**Question 5** **Provide** information on the measures or initiatives taken for the reduction and/or elimination of the amount of hazardous wastes generated (hazardous waste minimization).

**Specify and describe**:

(i) National strategies/policies, such as waste management plans, strategies aiming at reducing toxic releases and use of dangerous chemicals, or encouraging the use of cleaner technology/best available technology;

(ii) Legislation, regulations and guidelines, such as general obligations/branch specific/waste type provisions or guidelines aiming at hazardous waste minimization;

(iii) Economic instruments/initiatives such as: Landfill tax and other environmental taxes; financial aid programmes; subsidies; tax rebates; tax exemptions, environmental awards, etc.

(iv) Measures taken by industries/waste generators, such as voluntary environmental management programmes (e.g. ISO, EMAS), eco-labeling, voluntary agreements between industry and environmental authorities, development of cleaner technologies;

(v) other measures, which may include, for example, information campaigns, education, research programmes, etc.

## Reduction of the Amount of Hazardous Wastes and Other Wastes Subject to the transboundary movement

**Question 6** **Provide** information on measures taken for the reduction of the amount of hazardous wastes and other wastes subject to the transboundary movement.

**Note** that this question seeks information on measures specifically designed for the purpose of reducing the transboundary movements of hazardous wastes and other wastes in accordance with Art. 4, para 2 (d) of the Convention. It is **not necessary to repeat** the information given under the above question 5 on the measures taken for the reduction of the generation of hazardous wastes and other wastes.

## Effect on Human Health and the Environment

**Question 7** **Provide** information on any available statistics, studies, monitoring reports, etc. that have been compiled on the effects of the generation, transportation and disposal of hazardous wastes and other wastes on human health and the environment, for example:

- **S** statistics/studies on occupational health effects on people who work in factories, landfills or other waste disposal facilities or factories where they come into contact with hazardous wastes;
- **S** epidemiological studies on population living close to landfills or other waste disposal facilities where the health of the population is being followed during a longer period of time; and
- **S** monitoring reports on the environmental effects of landfills or other waste disposal facilities or waste producing factories, e.g. effects on animals, vegetation, surface waters, ground water, air quality, soil quality, etc.

**Specify** the activities, effects, regions, and period covered by the statistics, studies or monitoring reports concerned. Indicate also appropriate references and contact details for the sources of this information/data.

## Bilateral, Multilateral or Regional Agreements or Arrangements

**Table 1** **Provide** the requested information on bilateral, multilateral or regional agreements or arrangements regarding transboundary movements of wastes or other wastes concluded with other Parties or non-Parties, in accordance with Article 11 of the Convention.

## Disposal Facilities Operated within the National Jurisdiction

**Table 2** This question seeks information on disposal facilities authorized, permitted or registered to operate within the boundaries of your country. The purpose of this information is to give an overview on the availability of disposal facilities for hazardous wastes and other wastes in your country.

Table 2 refers to the disposal operations listed in Annex IV A of the Basel Convention. Annex IV A lists operations (Afinal disposal operations@) that do not lead to the possibility of resource recovery, recycling, reclamation, direct re-use or alternative uses.

**Provide** the requested information on disposal facilities operating in your country.

ACapacity@ means the annual amount of waste that the facility is designed to treat. **Provide** the annual amount in metric tonnes. For landfills (disposal sites), the capacity means the remaining capacity, i.e. the amount of waste that still can be received and disposed of in the landfill. **Provide** the remaining capacity in metric tonnes.

**Indicate** whether the facility imports wastes from other countries, or whether the facility is solely used for the treatment of wastes generated within your country. **Note** that this question asks only general information on the availability of facilities for imported wastes and is not focused on any particular year.

In case the number of disposal facilities is so high that it is not possible or convenient to list them all under this table, **provide** the source from where the respective information could be obtained.

## Recovery Facilities Operated within the National Jurisdiction

**Table 3** This question seeks information on recovery facilities authorized, permitted or registered to operate within the boundaries of your country. The purpose of this information is to give an overview on the availability of recovery facilities for hazardous wastes and other wastes in your country.

Table 3 refers to the recovery operations listed in Annex IV B of the Basel Convention. Annex IV B lists operations which may lead to resource recovery, recycling, reclamation, direct re-use or alternative uses.

**Provide** the requested information on recovery facilities operating in your country.

**Indicate** whether the facility imports wastes from other countries, or whether the facility is solely used for the treatment of wastes generated within your country. **Note** that this question asks only general information on the availability of facilities for imported wastes and is not focused on any particular year.

In case the number of recovery facilities is so high that it is not possible or convenient to list them all under this table, **provide** the source from where the respective information could be obtained.

### Sources of Technical Assistance

**Table 4** **List** institutions (e.g. governmental bodies, universities, research centers, etc.) to contact within your country for technical assistance and training; technical and scientific know-how; and for advice and expertise in such areas as:

- handling of the notification system of this Convention;
- management of hazardous wastes and other wastes;
- environmentally sound technologies relating to hazardous wastes and other wastes such as low and non-waste technology;
- assessment of disposal capabilities and sites;
- monitoring of hazardous wastes and other wastes;
- emergency responses; and
- assistance in identification of cases of illegal traffic.

### Sources of Financial Assistance

**Table 5** **List** institutions (e.g. governmental bodies, universities, research centers, etc.) within your country that could be contacted by other Parties for financial assistance in such areas as mentioned under table 4.

## PART II: ANNUAL REPORTING

Part II: Annual Reporting of the manual contains instructions on how to fill the questions in the corresponding part of the questionnaire on ATransmission of Information@. Part II is divided into two sections namely, Section A and Section B.

**Complete** Part II of the questionnaire for the concerned reporting year.

**Note** that it is necessary to complete Part II of the questionnaire on an annual basis.

## SECTION A
### Export/Import of Hazardous Wastes and Other Wastes

Tables 6 and 7 seek listing of *all* the transboundary movement of hazardous wastes and other wastes that were subject to control in accordance with the Basel Convention and that took place during the period of the concerned reporting year. Reporting should contain accurate and complete information of the Parties involved with the movement(s), i.e. country/countries of transit and country of origin/country of destination; on the waste type;

hazardous characteristics of the waste; quantities of waste exported/imported; and finally on the type of final disposal or recovery operation to which the waste is destined.

**Tables 6 and 7**

**Total amounts exported/imported**

**Provide** the total amount of wastes exported/imported for both article, para 1(a) wastes as well as article 1, para 1(b) wastes; and other wastes (Annex II), separately.

**Provide** the amount in metric tonnes.

**Use** the mathematical symbol A . @ to indicate *only* decimal fractions. **Avoid** using any other mathematical symbols, such as A , @ or A ′ @ to indicate thousands while entering the figures under this column (For example, enter ten thousand as 10000). This avoids ambiguity while processing the data.

**Category of waste**

**Specify** the Y code for each waste type that was imported/exported. **Enter** each Y code in separate entries. If waste is a mixture of different Y types, enter each waste only under one Y type, that corresponds most closely to the waste composition.

It is crucial to **fill in** Y code. If not possible/or if none is applicable, then it is required to fill in at least, corresponding waste streams/wastes having as constituents. It is optional to fill in Annex VIII. However, if the information is available, it is desirable to fill it.

Annex VIII, together with Annex IX, was added to the Convention on 6 November 1998, in order to facilitate implementation of the Convention. Annex VIII is a list of hazardous wastes (generally known as AList A@) which contains a list of wastes characterized as hazardous under Article 1, para 1(a) of the Convention. However, this list is not exhaustive and does not affect the implementation of Article 1, para 1(a) of the Convention for the purpose of characterization of wastes.

**Note** that Annex I and II containing Y codes and Waste streams/wastes having as constituents and Annex VIII are available in the appendix of this manual.

**Hazardous characteristics**

It is optional to fill in information on the hazardous characteristics of the waste concerned. However, if the information is available, it is desirable to fill it. The requested information refers to the codes and descriptions included in Annex III of the Convention. AUN class@ corresponds to the hazard classification system included in the United Nations Recommendations on the Transport of Dangerous Goods.

**Note** that Annex III containing UN class, code and characteristics is

available in the appendix of this manual.

**Amount exported/ Amount imported**

**Provide** the amount in metric tonnes. Provide for each amount exported/imported the corresponding "Y code" and "country of import/country of origin."

**Use** the mathematical symbol A . @ to indicate *only* decimal fractions. **Avoid** using any other mathematical symbols, such as " , "or A ′ " to indicate thousands while entering the figures under this column (For example, enter ten thousand as 10000). This avoids ambiguity while processing the data.

**Country/countries of transit**

**Use** ISO codes to indicate the transit country/countries through which the transboundary movement of waste took place.

**Note** that a list of ISO codes is available in the appendix of this manual.

**Country of import/ country of origin**

**Use** ISO codes to indicate Acountry of import@ and Acountry of origin@. ACountry of import@ refers to that country *to* which waste was exported. ACountry of origin@ refers to that country *from* where the waste was imported.

**Enter** information on each importing country and/or exporting country in a separate row.

**Note** that a list of ISO codes is available in the appendix of this manual.

**Final disposal operation**

**Enter** appropriate D code indicating to which final disposal operation the waste was destined.

**Enter** information on each D code in a separate row.

**Note** that disposal operations and the respective D codes are listed in Annex IV A of the Basel Convention and the Annex is available in the appendix of this manual.

**Recovery operation**

**Enter** appropriate R code indicating to which recovery operation the waste was destined.

**Enter** information on each R code in a separate row.

Note that recovery operations and the respective R codes are listed in

Annex IV B of the Basel Convention and the Annex is available in the appendix of this manual.

## Generation of Hazardous Wastes and Other Wastes

The issue of national data on waste generation is directly linked with the control of transboundary movement of wastes. National data on waste generation provides a basis for decision-makers to prioritize issues concerning waste management. Moreover, the waste minimization and reduction and/or elimination of the generation and the amount of wastes subject to the transboundary movement could be dealt more efficiently, if a clearer picture of national data on waste generation exists.

**Table 8A**

**Provide** the total quantity of waste generated in your country, separately for both article 1, para 1(a) wastes and article 1, para 1 (b) wastes as well as for other wastes (Annex II: Y46-Y47).

**Provide** the amount in metric tonnes.

**Use** the mathematical symbol A . @ to indicate *only* decimal fractions. **Avoid** using any other mathematical symbols, such as A , @ or A ′ @ to indicate thousands while entering the figures under this column (For example, enter ten thousand as 10000). This avoids ambiguity while processing the data.

**Provide** data for the previous years, if available, and has not been reported already.

**Provide** updates/corrections, if any, for the data already reported for the previous years.

**Table 8B**

**Fill** in the quantities for the categories Y1 - Y47. It is optional to fill in these quantities. If not possible for all waste types, then fill in the quantity, at least for the main waste types that are generated in your country.

In case of a waste that is a mixture of different Y types, please enter each waste only under one Y type, which corresponds most closely to the waste composition.

**Provide** the amount in metric tonnes.

**Use** the mathematical symbol A . @ to indicate *only* decimal fractions. **Avoid** using any other mathematical symbols, such as A , @ or A ′ @ to indicate thousands while entering the figures under this column (For example, enter ten thousand as 10000). This avoids ambiguity while processing the data.

**Provide** data for the previous years, if available, and has not been reported already.

**Provide** updates/corrections, if any, for the data already reported for the previous years.

# SECTION B
## Disposals Which Did Not Proceed As Intended

This table seeks information on transboundary movement of hazardous wastes and/or other wastes during the period of the concerned reporting year that may not have been completed in accordance with the notification, authorizations of the Competent Authorities and the terms of the contract. This could be due to various reasons such as violation of the conditions laid down at the time of consents given by the respective Competent Authorities; wastes requiring repackaging/reconditioning, etc. This table aims to find out details of such an incident.

**Table 9** **Provide** date of such incident, country/countries involved, type and amount of waste involved in such a transboundary movement, reason for the incident, and whether an alternative arrangement was made to dispose the hazardous wastes in an environmentally sound manner and if yes, also include details of such a measure.

## Accidents Occurring During the Transboundary Movement and Disposal of Hazardous Wastes and Other Wastes

Table 10 seeks information on any accident occurred in course of the transboundary movement or disposal of hazardous wastes and other wastes during the period of the concerned reporting year.

**Table 10** **Provide** date of such accident, country/countries involved, type and amount of waste involved in such an accident, nature of the accident, and whether any measures were taken to deal with the accident and if yes, include details of such a measure.

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# Appendixes

## Annex I

### 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 congenor of polychlorinated dibenzo-furan
**Y44** Any congenor 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

## CATEGORIES OF WASTES REQUIRING SPECIAL CONSIDERATION

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

## Annex III

## LIST OF HAZARDOUS CHARACTERISTICS

| UN Class[1] | Code | Characteristics |
|---|---|---|
| 1 | H1 | Explosive<br>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. |
| 3 | H3 | Flammable liquids<br>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.) |
| 4.1 | H4.1 | Flammable solids<br>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. |
| 4.2 | H4.2 | Substances or wastes liable to spontaneous combustion<br>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. |
| 4.3 | H4.3 | Substances or wastes which, in contact with water emit flammable gases<br>Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities. |

[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 | Oxidizing<br>Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause, or contribute to, the combustion of other materials. |
| 5.2 | H5.2 | Organic Peroxides<br>Organic substances or wastes which contain the bivalent-O-O- structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition. |
| 6.1 | H6.1 | Poisonous (Acute)<br>Substances or wastes liable either to cause death or serious injury or to harm health if swallowed or inhaled or by skin contact. |
| 6.2 | H6.2 | Infectious substances<br>Substances or wastes containing viable micro organisms or their toxins which are known or suspected to cause disease in animals or humans. |
| 8 | H8 | Corrosives<br>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. |
| 9 | H10 | Liberation of toxic gases in contact with air or water<br>Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities. |
| 9 | H11 | Toxic (Delayed or chronic)<br>Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity. |
| 9 | H12 | Ecotoxic<br>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. |
| 9 | H13 | Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above. |

## 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

### 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

## Annex V A

## INFORMATION TO BE PROVIDED ON NOTIFICATION

1. Reason for waste export

2. Exporter of the waste 1/

3. Generator(s) of the waste and site of generation 1/

4. Disposer of the waste and actual site of disposal 1/

5. Intended carrier(s) of the waste or their agents, if known 1/

6. Country of export of the waste
   Competent authority 2/

7. Expected countries of transit
   Competent authority 2/

8. Country of import of the waste
   Competent authority 2/

9. General or single notification

10. Projected date(s) of shipment(s) and period of time over which waste is to be exported and proposed itinerary (including point of entry and exit) 3/

11. Means of transport envisaged (road, rail, sea, air, inland waters)

12. Information relating to insurance 4/

13. Designation and physical description of the waste including Y number and UN number and its composition 5/ and information on any special handling requirements including emergency provisions in case of accidents

14. Type of packaging envisaged (e.g. bulk, drummed, tanker)

15. Estimated quantity in weight/volume 6/

16. Process by which the waste is generated 7/

17. For wastes listed in Annex I, classifications from Annex III: hazardous characteristic, H number, and UN class

18. Method of disposal as per Annex IV

19. Declaration by the generator and exporter that the information is correct

20. Information transmitted (including technical description of the plant) to the exporter or generator from the disposer of the waste upon which the latter has based his assessment that there was no reason to believe that the wastes will not be managed in an environmentally sound manner in accordance with the laws and regulations of the country of import.

21. Information concerning the contract between the exporter and disposer.

Notes

1/ Full name and address, telephone or telefax number and the name, address, telephone, telex or telefax number of the person to be contacted.

2/ Full name and address, telephone, telex or telefax number.

3/ In the case of a general notification covering several shipments, either the expected dates of each shipment or, if this is not known, the expected frequency of the shipments will be required.

4/ Information to be provided on relevant insurance requirements and how they are met by exporter, carrier and disposer.

5/ The nature and the concentration of the most hazardous components, in terms of toxicity and other dangers presented by the waste both in handling and in relation to the proposed disposal method.

6/ In the case of a general notification covering several shipments, both the estimated total quantity and the estimated quantities for each individual shipment will be required.

7/ Insofar as this is necessary to assess the hazard and determine the appropriateness of the proposed disposal operation.

## Annex V B

## INFORMATION TO BE PROVIDED ON THE MOVEMENT DOCUMENT

1. Exporter of the waste 1/

2. Generator(s) of the waste and site of generation 1/

3. Disposer of the waste and actual site of disposal 1/

4. Carrier(s) of the waste 1/ or his agent(s)

5. Subject of general or single notification

6. The date the transboundary movement started and date(s) and signature on receipt by each person who takes charge of the waste

7. Means of transport (road, rail, inland waterway, sea, air) including countries of export, transit and import, also point of entry and exit where these have been designated

8. General description of the waste (physical state, proper UN shipping name and class, UN number, Y number and H number as applicable)

9. Information on special handling requirements including emergency provision in case of accidents

10. Type and number of packages

11. Quantity in weight/volume

12. Declaration by the generator or exporter that the information is correct

13. Declaration by the generator or exporter indicating no objection from the competent authorities of all States concerned which are Parties

14. Certification by disposer of receipt at designated disposal facility and indication of method of disposal and of the approximate date of disposal.

Notes

The information required on the movement document shall where possible be integrated in one document with that required under transport rules. Where this is not possible the information should complement rather than duplicate that required under the transport rules. The movement document shall carry instructions as to who is to provide information and fill-out any form.

1/ Full name and address, telephone or telefax number and the name, address, telephone, telex or telefax number of the person to be contacted in case of emergency.

## Annex VII

[not yet entered into force][2]

Parties and other States which are members of OECD, EC, Liechtenstein.

## Annex VIII

LIST A

Wastes contained in this Annex are characterized as hazardous under Article 1, paragraph 1 (a), of this Convention, and their designation on this Annex does not preclude the use of Annex III to demonstrate that a waste is not hazardous.

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[2] Annex VII is an integral part of the Amendment adopted by the third meeting of the Conference of Parties in 1995 in its Decision III/1. The Amendment is not yet in force. The text of the Decision III/1 is the following:

The Conference

Decides to adopt the following amendment to the Convention:

"Insert new preambular paragraph 7 bis:

Recognizing that transboundary movements of hazardous wastes, especially to developing countries, have a high risk of not constituting an environmentally sound management of hazardous wastes as required by this Convention;
Insert new Article 4A:

1. Each Party listed in Annex VII shall prohibit all transboundary movements of hazardous wastes which are destined for operations according to Annex IV A, to States not listed in Annex VII.

2. Each Party listed in Annex VII shall phase out by 31 December 1997, and prohibit as of that date, all transboundary movements of hazardous wastes under Article 1(I)(a) of the Convention which are destined for operations according to Annex IV B to States not listed in Annex VII. Such transboundary movement shall not be prohibited unless the wastes in question are characterised as hazardous under the Convention.

## A1 Metal and metal-bearing wastes

A1010 Metal wastes and waste consisting of alloys of any of the following:

- Antimony
- Arsenic
- Beryllium
- Cadmium
- Lead
- Mercury
- Selenium
- Tellurium
- Thallium

but excluding such wastes specifically listed on list B.

A1020 Waste having as constituents or contaminants, excluding metal waste in massive form, any of the following:

- Antimony; antimony compounds
- Beryllium; beryllium compounds
- Cadmium; cadmium compounds
- Lead; lead compounds
- Selenium; selenium compounds
- Tellurium; tellurium compounds

A1030 Wastes having as constituents or contaminants any of the following:

- Arsenic; arsenic compounds
- Mercury; mercury compounds
- Thallium; thallium compounds

A1040 Wastes having as constituents any of the following:

- Metal carbonyls
- Hexavalent chromium compounds

A1050 Galvanic sludges

A1060 Waste liquors from the pickling of metals

A1070 Leaching residues from zinc processing, dust and sludges such as jarosite, hematite, etc.

A1080 Waste zinc residues not included on list B, containing lead and cadmium in concentrations sufficient to exhibit Annex III characteristics

A1090 Ashes from the incineration of insulated copper wire

| | |
|---|---|
| A1100 | Dusts and residues from gas cleaning systems of copper smelters |
| A1110 | Spent electrolytic solutions from copper electrorefining and electrowinning operations |
| A1120 | Waste sludges, excluding anode slimes, from electrolyte purification systems in copper electrorefining and electrowinning operations |
| A1130 | Spent etching solutions containing dissolved copper |
| A1140 | Waste cupric chloride and copper cyanide catalysts |
| A1150 | Precious metal ash from incineration of printed circuit boards not included on list B[3] |
| 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[4] 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)[5] |

A2 Wastes containing principally inorganic constituents, which may contain metals and organic materials

| | |
|---|---|
| A2010 | Glass waste from cathode-ray tubes and other activated glasses |
| A2020 | Waste inorganic fluorine compounds in the form of liquids or sludges but excluding such wastes specified on list B |
| A2030 | Waste catalysts but excluding such wastes specified on list B |
| A2040 | Waste gypsum arising from chemical industry processes, when containing Annex I constituents to the extent that it exhibits an Annex III hazardous |

[3] Note that mirror entry on list B (B1160) does not specify exceptions.

[4] This entry does not include scrap assemblies from electric power generation.

[5] PCBs are at a concentration level of 50 mg/kg or more.

characteristic (note the related entry on list B B2080)

A2050 Waste asbestos (dusts and fibres)

A2060 Coal-fired power plant fly-ash containing Annex I substances in concentrations sufficient to exhibit Annex III characteristics (note the related entry on list B B2050)

A3 Wastes containing principally organic constituents, which may contain metals and inorganic materials

A3010 Waste from the production or processing of petroleum coke and bitumen

A3020 Waste mineral oils unfit for their originally intended use

A3030 Wastes that contain, consist of or are contaminated with leaded anti-knock compound sludges

A3040 Waste thermal (heat transfer) fluids

A3050 Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives excluding such wastes specified on list B (note the related entry on list B B4020)

A3060 Waste nitrocellulose

A3070 Waste phenols, phenol compounds including chlorophenol in the form of liquids or sludges

A3080 Waste ethers not including those specified on list B

A3090 Waste leather dust, ash, sludges and flours when containing hexavalent chromium compounds or biocides (note the related entry on list B B3100)

A3100 Waste paring and other waste of leather or of composition leather not suitable for the manufacture of leather articles containing hexavalent chromium compounds or biocides (note the related entry on list B B3090)

A3110 Fellmongery wastes containing hexavalent chromium compounds or biocides or infectious substances (note the related entry on list B B3110)

A3120 Fluff - light fraction from shredding

A3130 Waste organic phosphorous compounds

A3140 Waste non-halogenated organic solvents but excluding such wastes specified on list B

A3150 Waste halogenated organic solvents

A3160 Waste halogenated or unhalogenated non-aqueous distillation residues arising from organic solvent recovery operations

A3170 Wastes arising from the production of aliphatic halogenated hydrocarbons (such as chloromethane, dichloro-ethane, vinyl chloride, vinylidene chloride, allyl chloride and epichlorhydrin)

A3180 Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more[6]

A3190 Waste tarry residues (excluding asphalt cements) arising from refining, distillation and any pyrolitic treatment of organic materials

A4 Wastes which may contain either inorganic or organic constituents

A4010 Wastes from the production, preparation and use of pharmaceutical products but excluding such wastes specified on list B

A4020 Clinical and related wastes; that is wastes arising from medical, nursing, dental, veterinary, or similar practices, and wastes generated in hospitals or other facilities during the investigation or treatment of patients, or research projects

A4030 Wastes from the production, formulation and use of biocides and phytopharmaceuticals, including waste pesticides and herbicides which are off-specification, outdated,[7] or unfit for their originally intended use

A4040 Wastes from the manufacture, formulation and use of wood-preserving chemicals[8]

A4050 Wastes that contain, consist of or are contaminated with any of the following:

- Inorganic cyanides, excepting precious-metal-bearing residues in solid form containing traces of inorganic cyanides
- Organic cyanides

[6] The 50 mg/kg level is considered to be an internationally practical level for all wastes. However, many individual countries have established lower regulatory levels (e.g., 20 mg/kg) for specific wastes.

[7] "Outdated" means unused within the period recommended by the manufacturer.

[8] This entry does not include wood treated with wood preserving chemicals.

| | |
|---|---|
| A4060 | Waste oils/water, hydrocarbons/water mixtures, emulsions |
| A4070 | Wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish excluding any such waste specified on list B (note the related entry on list B B4010) |
| A4080 | Wastes of an explosive nature (but excluding such wastes specified on list B) |
| A4090 | Waste acidic or basic solutions, other than those specified in the corresponding entry on list B (note the related entry on list B B2120) |
| A4100 | Wastes from industrial pollution control devices for cleaning of industrial off-gases but excluding such wastes specified on list B |
| A4110 | Wastes that contain, consist of or are contaminated with any of the following:<br>• Any congenor of polychlorinated dibenzo-furan<br>• Any congenor of polychlorinated dibenzo-dioxin |
| A4120 | Wastes that contain, consist of or are contaminated with peroxides |
| A4130 | Waste packages and containers containing Annex I substances in concentrations sufficient to exhibit Annex III hazard characteristics |
| A4140 | Waste consisting of or containing off specification or outdated[9] chemicals corresponding to Annex I categories and exhibiting Annex III hazard characteristics |
| A4150 | Waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on human health and/or the environment are not known |
| A4160 | Spent activated carbon not included on list B (note the related entry on list B B2060) |

## Annex IX

## LIST B

Wastes contained in the Annex will not be wastes covered by Article 1, paragraph 1 (a), of this Convention unless they contain Annex I material to an extent causing them to exhibit an Annex III characteristic.

[9] "Outdated" means unused within the period recommended by the manufacturer.

## B1 Metal and metal-bearing wastes

B1010 Metal and metal-alloy wastes in metallic, non-dispersible form:

- Precious metals (gold, silver, the platinum group, but not mercury)
- Iron and steel scrap
- Copper scrap
- Nickel scrap
- Aluminium scrap
- Zinc scrap
- Tin scrap
- Tungsten scrap
- Molybdenum scrap
- Tantalum scrap
- Magnesium scrap
- Cobalt scrap
- Bismuth scrap
- Titanium scrap
- Zirconium scrap
- Manganese scrap
- Germanium scrap
- Vanadium scrap
- Scrap of hafnium, indium, niobium, rhenium and gallium
- Thorium scrap
- Rare earths scrap

B1020 Clean, uncontaminated metal scrap, including alloys, in bulk finished form (sheet, plate, beams, rods, etc), of:

- Antimony scrap
- Beryllium scrap
- Cadmium scrap
- Lead scrap (but excluding lead-acid batteries)
- Selenium scrap
- Tellurium scrap

B1030 Refractory metals containing residues

B1040 Scrap assemblies from electrical power generation not contaminated with lubricating oil, PCB or PCT to an extent to render them hazardous

B1050 Mixed non-ferrous metal, heavy fraction scrap, not containing Annex I materials in concentrations sufficient to exhibit Annex III characteristics[10]

[10] Note that even where low level contamination with Annex I materials initially exists, subsequent processes, including recycling processes, may result in separated fractions containing significantly enhanced concentrations of those Annex I materials.

B1060 Waste selenium and tellurium in metallic elemental form including powder

B1070 Waste of copper and copper alloys in dispersible form, unless they contain Annex I constituents to an extent that they exhibit Annex III characteristics

B1080 Zinc ash and residues including zinc alloys residues in dispersible form unless containing Annex I constituents in concentration such as to exhibit Annex III characteristics or exhibiting hazard characteristic H4.3[11]

B1090 Waste batteries conforming to a specification, excluding those made with lead, cadmium or mercury

B1100 Metal-bearing wastes arising from melting, smelting and refining of metals:

- Hard zinc spelter
- Zinc-containing drosses:
  - Galvanizing slab zinc top dross (>90% Zn)
  - Galvanizing slab zinc bottom dross (>92% Zn)
  - Zinc die casting dross (>85% Zn)
  - Hot dip galvanizers slab zinc dross (batch)(>92% Zn)
  - Zinc skimmings
- Aluminium skimmings (or skims) excluding salt slag
- Slags from copper processing for further processing or refining not containing arsenic, lead or cadmium to an extend that they exhibit Annex III hazard characteristics
- Wastes of refractory linings, including crucibles, originating from copper smelting
- Slags from precious metals processing for further refining
- Tantalum-bearing tin slags with less than 0.5% tin

B1110 Electrical and electronic assemblies:

- Electronic assemblies consisting only of metals or alloys
- Waste electrical and electronic assemblies or scrap[12] (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

[11] The status of zinc ash is currently under review and there is a recommendation with the United Nations Conference on Trade and Development (UNCTAD) that zinc ashes should not be dangerous goods.

[12] This entry does not include scrap from electrical power generation.

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,[13] and not for recycling or final disposal[14]

B1120 Spent catalysts excluding liquids used as catalysts, containing any of:

| | | |
|---|---|---|
| Transition metals, excluding waste catalysts (spent catalysts, liquid used catalysts or other catalysts) on list A: | Scandium<br>Vanadium<br>Manganese<br>Cobalt<br>Copper<br>Yttrium<br>Niobium<br>Hafnium<br>Tungsten | Titanium<br>Chromium<br>Iron<br>Nickel<br>Zinc<br>Zirconium<br>Molybdenum<br>Tantalum<br>Rhenium |
| Lanthanides (rare earth metals): | Lanthanum<br>Praseodymium<br>Samarium<br>Gadolinium<br>Dysprosium<br>Erbium<br>Ytterbium | Cerium<br>Neody<br>Europium<br>Terbium<br>Holmium<br>Thulium<br>Lutetium |

B1130 Cleaned spent precious-metal-bearing catalysts

B1140 Precious-metal-bearing residues in solid form which contain traces of inorganic cyanides

B1150 Precious metals and alloy wastes (gold, silver, the platinum group, but not mercury) in a dispersible, non-liquid form with appropriate packaging and labelling

B1160 Precious-metal ash from the incineration of printed circuit boards (note the related entry on list A A1150)

B1170 Precious-metal ash from the incineration of photographic film

[13] Reuse can include repair, refurbishment or upgrading, but not major reassembly.

[14] In some countries these materials destined for direct re-use are not considered wastes.

B1180 Waste photographic film containing silver halides and metallic silver

B1190 Waste photographic paper containing silver halides and metallic silver

B1200 Granulated slag arising from the manufacture of iron and steel

B1210 Slag arising from the manufacture of iron and steel including slags as a source of $TiO_2$ and vanadium

B1220 Slag from zinc production, chemically stabilized, having a high iron content (above 20%) and processed according to industrial specifications (e.g., DIN 4301) mainly for construction

B1230 Mill scaling arising from the manufacture of iron and steel

B1240 Copper oxide mill-scale

B2 Wastes containing principally inorganic constituents, which may contain metals and organic materials

B2010 Wastes from mining operations in non-dispersible form:

- Natural graphite waste
- Slate waste, whether or not roughly trimmed or merely cut, by sawing or otherwise
- Mica waste
- Leucite, nepheline and nepheline syenite waste
- Feldspar waste
- Fluorspar waste
- Silica wastes in solid form excluding those used in foundry operations

B2020 Glass waste in non-dispersible form:

- Cullet and other waste and scrap of glass except for glass from cathode-ray tubes and other activated glasses

B2030 Ceramic wastes in non-dispersible form:

- Cermet wastes and scrap (metal ceramic composites)
- Ceramic based fibres not elsewhere specified or included

B2040 Other wastes containing principally inorganic constituents:

- Partially refined calcium sulphate produced from flue-gas desulphurization (FGD)
- Waste gypsum wallboard or plasterboard arising from the demolition of buildings
- Slag from copper production, chemically stabilized, having a high iron content (above 20%) and processed according to industrial specifications (e.g., DIN 4301 and DIN 8201) mainly for construction and abrasive

applications

- Sulphur in solid form
- Limestone from the production of calcium cyanamide (having a pH less than 9)
- Sodium, potassium, calcium chlorides
- Carborundum (silicon carbide)
- Broken concrete
- Lithium-tantalum and lithium-niobium containing glass scraps

B2050 Coal-fired power plant fly-ash, not included on list A (note the related entry on list A A2060)

B2060 Spent activated carbon resulting from the treatment of potable water and processes of the food industry and vitamin production (note the related entry on list A A4160)

B2070 Calcium fluoride sludge

B2080 Waste gypsum arising from chemical industry processes not included on list A (note the related entry on list A A2040)

B2090 Waste anode butts from steel or aluminium production made of petroleum coke or bitumen and cleaned to normal industry specifications (excluding anode butts from chlor alkali electrolyses and from metallurgical industry)

B2100 Waste hydrates of aluminium and waste alumina and residues from alumina production excluding such materials used for gas cleaning, flocculation or filtration processes

B2110 Bauxite residue ("red mud") (pH moderated to less than 11.5)

B2120 Waste acidic or basic solutions with a pH greater than 2 and less than 11.5, which are not corrosive or otherwise hazardous (note the related entry on list A A4090)

B3 Wastes containing principally organic constituents, which may contain metals and inorganic materials

B3010 Solid plastic waste:

The following plastic or mixed plastic materials, provided they are not mixed with other wastes and are prepared to a specification:

- Scrap plastic of non-halogenated polymers and co-polymers, including but not limited to the following[15]:

[15] It is understood that such scraps are completely polymerized.

- ethylene
- styrene
- polypropylene
- polyethylene terephthalate
- acrylonitrile
- butadiene
- polyacetals
- polyamides
- polybutylene terephthalate
- polycarbonates
- polyethers
- polyphenylene sulphides
- acrylic polymers
- alkanes C10-C13 (plasticiser)
- polyurethane (not containing CFCs)
- polysiloxanes
- polymethyl methacrylate
- polyvinyl alcohol
- polyvinyl butyral
- polyvinyl acetate

• Cured waste resins or condensation products including the following:

- urea formaldehyde resins
- phenol formaldehyde resins
- melamine formaldehyde resins
- epoxy resins
- alkyd resins
- polyamides

• The following fluorinated polymer wastes[16]

- perfluoroethylene/propylene (FEP)
- perfluoroalkoxy alkane (PFA)
- perfluoroalkoxy alkane (MFA)
- polyvinylfluoride (PVF)
- polyvinylidenefluoride (PVDF)

B3020 Paper, paperboard and paper product wastes

The following materials, provided they are not mixed with hazardous wastes:

Waste and scrap of paper or paperboard of:

• unbleached paper or paperboard or of corrugated paper or paperboard

[16] Post-consumer wastes are excluded from this entry: - Wastes shall not be mixed - Problems arising from open-burning practices to be considered

- other paper or paperboard, made mainly of bleached chemical pulp, not coloured in the mass
- paper or paperboard made mainly of mechanical pulp (for example, newspapers, journals and similar printed matter)
- other, including but not limited to 1) laminated paperboard 2) unsorted scrap.

B3030 Textile wastes

The following materials, provided they are not mixed with other wastes and are prepared to a specification:

- Silk waste (including cocoons unsuitable for reeling, yarn waste and garnetted stock)

  - not carded or combed
  - other

- Waste of wool or of fine or coarse animal hair, including yarn waste but excluding garnetted stock

  - noils of wool or of fine animal hair
  - other waste of wool or of fine animal hair
  - waste of coarse animal hair

- Cotton waste (including yarn waste and garnetted stock)

  - yarn waste (including thread waste)
  - garnetted stock
  - other

- Flax tow and waste
- Tow and waste (including yarn waste and garnetted stock) of true hemp (Cannabis sativa L.)
- Tow and waste (including yarn waste and garnetted stock) of jute and other textile bast fibres (excluding flax, true hemp and ramie)
- Tow and waste (including yarn waste and garnetted stock) of sisal and other textile fibres of the genus Agave
- Tow, noils and waste (including yarn waste and garnetted stock) of coconut
- Tow, noils and waste (including yarn waste and garnetted stock) of abaca (Manila hemp or Musa textilis Nee)
- Tow, noils and waste (including yarn waste and garnetted stock) of ramie and other vegetable textile fibres, not elsewhere specified or included
- Waste (including noils, yarn waste and garnetted stock) of man-made fibres

  - of synthetic fibres
  - of artificial fibres

- Worn clothing and other worn textile articles
- Used rags, scrap twine, cordage, rope and cables and worn out articles of twine, cordage, rope or cables of textile materials

  - sorted
  - other

B3040 Rubber wastes

The following materials, provided they are not mixed with other wastes:

- Waste and scrap of hard rubber (e.g., ebonite)
- Other rubber wastes (excluding such wastes specified elsewhere)

B3050 Untreated cork and wood waste:

- Wood waste and scrap, whether or not agglomerated in logs, briquettes, pellets or similar forms
- Cork waste: crushed, granulated or ground cork

B3060 Wastes arising from agro-food industries provided it is not infectious:

- Wine lees
- Dried and sterilized vegetable waste, residues and byproducts, whether or not in the form of pellets, of a kind used in animal feeding, not elsewhere specified or included
- Degras: residues resulting from the treatment of fatty substances or animal or vegetable waxes
- Waste of bones and horn-cores, unworked, defatted, simply prepared (but not cut to shape), treated with acid or degelatinised
- Fish waste
- Cocoa shells, husks, skins and other cocoa waste
- Other wastes from the agro-food industry excluding by-products which meet national and international requirements and standards for human or animal consumption

B3070 The following wastes:

- Waste of human hair
- Waste straw
- Deactivated fungus mycelium from penicillin production to be used as animal feed

B3080 Waste parings and scrap of rubber

B3090 Paring and other wastes of leather or of composition leather not suitable for the manufacture of leather articles, excluding leather sludges, not containing hexavalent chromium compounds and biocides (note the related entry on list A A3100)

B3100 Leather dust, ash, sludges or flours not containing hexavalent chromium compounds or biocides (note the related entry on list A A3090)

B3110 Fellmongery wastes not containing hexavalent chromium compounds or biocides or infectious substances (note the related entry on list A A3110)

B3120 Wastes consisting of food dyes

B3130 Waste polymer ethers and waste non-hazardous monomer ethers incapable of forming peroxides

B3140 Waste pneumatic tyres, excluding those destined for Annex IVA operations

B4 Wastes which may contain either inorganic or organic constituents

B4010 Wastes consisting mainly of water-based/latex paints, inks and hardened varnishes not containing organic solvents, heavy metals or biocides to an extent to render them hazardous (note the related entry on list A A4070)

B4020 Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives, not listed on list A, free of solvents and other contaminants to an extent that they do not exhibit Annex III characteristics, e.g., water-based, or glues based on casein starch, dextrin, cellulose ethers, polyvinyl alcohols (note the related entry on list A A3050)

B4030 Used single-use cameras, with batteries not included on list A

**ISO codes**

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|---|---|
| Algeria | DZ |
| Andorra | AD |
| Angola | AO |
| Antigua and Barbuda | AG |
| Argentina | AR |
| Armenia | AM |
| Aruba | AW |
| Australia | AU |
| Austria | AT |
| Azerbaijan | AZ |
| Bahamas | BS |
| Bahrain | BH |
| Bangladesh | BD |
| Barbados | BB |
| Belarus | BY |
| Belgium | BE |
| Belize | BZ |
| Benin | BJ |
| Bhutan | BT |
| Bolivia | BO |
| Bosnia and Herzegovina | BA |
| Botswana | BW |
| Brazil | BR |
| Brunei Darussalam | BN |
| Bulgaria | BG |
| Burkina Faso | BF |
| Burundi | BI |
| Cambodia | KH |
| Cameroon | CM |
| Canada | CA |
| Cape Verde | CV |
| Central African Republic | CF |
| Chad | TD |
| Chile | CL |
| China | CN |
| Colombia | CO |
| Comoros | KM |
| Congo | CG |
| Congo, Democratic Republic | ZR |
| Cook Islands | CK |
| Costa Rica | CR |
| Côte d'Ivoire | CI |

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| Croatia | HR |
| Cuba | CU |
| Cyprus | CY |
| Czech Republic | CZ |
| Denmark | DK |
| Djibouti | DJ |
| Dominica | DM |
| Dominican Republic | DO |
| Ecuador | EC |
| Egypt | EG |
| El Salvador | SV |
| Equatorial Guinea | GQ |
| Eritrea | ER |
| Estonia | EE |
| Ethiopia | ET |
| European Community | EU |
| Fiji | FJ |
| Finland | FI |
| France | FR |
| Gabon | GA |
| Gambia | GM |
| Georgia | GE |
| Germany | DE |
| Ghana | GH |
| Greece | GR |
| Grenada | GD |
| Guatemala | GT |
| Guinea | GN |
| Guinea-Bissau | GW |
| Guyana | GY |
| Haiti | HT |
| Honduras | HN |
| Hong Kong | HK |
| Hungary | HU |
| Iceland | IS |
| India | IN |
| Indonesia | ID |
| Iran, Islamic Republic of | IR |
| Iraq | IQ |
| Ireland | IE |
| Israel | IL |
| Italy | IT |

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|---|---|
| Jamaica | JM |
| Japan | JP |
| Jordan | JO |
| Kazakhstan | KZ |
| Kenya | KE |
| Kiribati | KI |
| Korea, Democratic People's Republic of | KP |
| Korea, Republic of | KR |
| Kuwait | KW |
| Kyrgyzstan | KG |
| Laos | LA |
| Latvia | LV |
| Lebanon | LB |
| Lesotho | LS |
| Liberia | LR |
| Libya | LY |
| Liechtenstein | LI |
| Lithuania | LT |
| Luxembourg | LU |
| Macao | MO |
| Macedonia | MK |
| Madagascar | MG |
| Malawi | MW |
| Malaysia | MY |
| Maldives | MV |
| Mali | ML |
| Malta | MT |
| Marshall Islands | MH |
| Mauritania | MR |
| Mauritius | MU |
| Mexico | MX |
| Micronesia, Federated States of | FM |
| Moldova | MD |
| Monaco | MC |
| Mongolia | MN |
| Morocco | MA |
| Mozambique | MZ |
| Myanmar | MM |
| Namibia | NA |
| Nauru | NR |
| Nepal | NP |
| Netherlands | NL |
| Netherlands Antilles | AN |
| New Caledonia | NC |

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|---|---|
| New Zealand | NZ |
| Nicaragua | NI |
| Niger | NE |
| Nigeria | NG |
| Niue | NU |
| Norway | NO |
| Oman | OM |
| Pakistan | PK |
| Palau | PW |
| Panama | PA |
| Papua and New Guinea | PG |
| Paraguay | PY |
| Peru | PE |
| Philippines | PH |
| Poland | PL |
| Portugal | PT |
| Qatar | QA |
| Romania | RO |
| Russian Federation | RU |
| Rwanda | RW |
| San Marino | SM |
| São Tomé and Príncipe | ST |
| Saudi Arabia | SA |
| Senegal | SN |
| Seychelles | SC |
| Sierra Leone | SL |
| Singapore | SG |
| Slovakia | SK |
| Slovenia | SI |
| Solomon Islands | SB |
| Somalia | SO |
| South Africa | ZA |
| Spain | ES |
| Sri Lanka | LK |
| St. Kitts and Nevis | KN |
| St. Lucia | LC |
| St. Vincent and the Grenadines | VC |
| Sudan | SD |
| Suriname | SR |
| Swaziland | SZ |
| Sweden | SE |
| Switzerland | CH |
| Syrian Arab Republic | SY |
| Taiwan, Province of China | TW |
| Tajikistan | TJ |

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|---|---|
| Tanzania, United Republic | TZ |
| Thailand | TH |
| Togo | TG |
| Tonga | TO |
| Trinidad and Tobago | TT |
| Tunisia | TN |
| Turkey | TR |
| Turkmenistan | TM |
| Tuvalu | TV |
| Uganda | UG |
| Ukraine | UA |
| United Arab Emirates | AE |
| United Kingdom | GB |
| United Nations | UN |

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|---|---|
| Uruguay | UY |
| USA | US |
| Uzbekistan | UZ |
| Vanuatu | VU |
| Vatican City State | VA |
| Venezuela | VE |
| Viet Nam | VN |
| Western Samoa | WS |
| Yemen | YE |
| Yugoslavia | YU |
| Zambia | ZM |
| Zimbabwe | ZW |
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