# TRACTATENBLAD

VAN HET

#### KONINKRIJK DER NEDERLANDEN

#### JAARGANG 1988 Nr. 127

#### A. TITEL

Verdrag nopens de Organisatie voor Economische Samenwerking en Ontwikkeling, met Aanvullende Protocollen en Memorandum; Parijs, 14 december 1960

#### B. TEKST

De tekst van Verdrag, Protocollen en Memorandum is geplaatst in Trb. 1961, 42.

#### C. VERTALING.

Zie Trb. 1961, 60.

#### D. PARLEMENT

Zie Trb. 1962, 28.

#### E. BEKRACHTIGING

Zie Trb. 1961, 60 en 125 en Trb. 1962, 28.

#### F. TOETREDING

Zie Trb. 1965, 19, Trb. 1971, 145 en Trb. 1975, 14.

#### G. INWERKINGTREDING

Zie Trb. 1961, 125, Trb. 1962, 28, Trb. 1965, 19, Trb. 1971, 145 en Trb. 1975, 14.

#### H. TOEPASSELIJKVERKLARING

Zie Trb. 1962, 28.

#### J. GEGEVENS

Zie Trb. 1961, 60 en 125, Trb. 1962, 28, Trb. 1965, 19, Trb. 1971, 145, Trb. 1975, 14 en Trb. 1977, 181.

Voor het op 26 juni 1945 te San Francisco tot stand gekomen Handvest van de Verenigde Naties zie ook, laatstelijk, *Trb.* 1987, 113.

Voor het op 18 april 1951 te Parijs tot stand gekomen Verdrag tot oprichting van de Europese Gemeenschap voor Kolen en Staal zie ook, laatstelijk, *Trb.* 1988, 79.

Voor het op 25 maart 1957 te Rome tot stand gekomen Verdrag tot oprichting van de Europese Economische Gemeenschap zie ook, laatstelijk, *Trb.* 1987, 116.

Voor het op 25 maart 1957 te Rome tot stand gekomen Verdrag tot oprichting van de Europese Gemeenschap voor Atoomenergie zie ook, laatstelijk, *Trb.* 1987, 117.

Op 1 februari 1984, 5 juni 1986 en 27 mei 1988 heeft de Raad van de Organisatie voor Economische Samenwerking en Ontwikkeling in overeenstemming met artikel 5, letter a, van het Verdrag een drietal Besluiten genomen met betrekking tot grensoverschrijdende verplaatsing van gevaarlijk afval: Besluit C (83) 180 (Final) inzake informatie met betrekking tot dergelijke verplaatsingen; Besluit C (86) 64 (Final) inzake de export van gevaarlijke afvalstoffen naar niet-Lid-Staten; en C (88) 90 (Final) inzake de definitie en de classificatie van gevaarlijk afval.

De Engelse tekst<sup>1</sup>) van de Besluiten luidt als volgt:

# Decision and Recommendation of the Council on Transfrontier Movements of Hazardous Waste

The Council,

Having regard to Articles 5(a) and 5(b) of the Convention on the Organisation for Economic Co-operation and Development of 14th December, 1960;

Having regard to the Recommendation of the Council of 28th September, 1976 on a Comprehensive Waste Management Policy [C(76)155(Final)];

Bearing in mind that the Governments of the OECD Member countries have recognised "the responsibility they share to safeguard

<sup>1)</sup> De Franse tekst van de Besluiten is niet afgedrukt.

and improve the quality of the environment, both nationally and in a global context" and have declared that "the protection and progressive improvement of the quality of the environment is a major objective of the OECD Member countries" (Declaration on Environmental Policy, 1974);

Considering that a number of OECD Member countries generate substantial amounts of hazardous waste and that a significant proportion of such waste is subject to transfrontier movements;

Considering that efficient and environmentally sound management of hazardous waste may justify some transfrontier movements of such waste in order to make use of appropriate disposal facilities in other countries:

Considering that the generator of a hazardous waste has responsibilities to ensure that the disposal of its waste is carried out in a manner consistent with the protection of the environment, whatever the place of disposal;

Considering that countries have the sovereign right to manage hazardous waste within their jurisdiction pursuant to their own environmental policies and legislation, taking account of the rules of international law:

Considering the need for concerted action among Member countries to protect man and his environment against pollution which may arise in connection with hazardous waste management;

# On the proposal of the Environment Committee:

- I. Decides that Member countries shall control the transfrontier movements of hazardous waste and, for this purpose, shall ensure that the competent authorities of the countries concerned are provided with adequate and timely information concerning such movements.
- II. Recommends that, to implement this Decision, countries apply the principles concerning transfrontier movements of hazardous waste set out below.
- III. Instructs the Environment Committee, having regard to work of other international organisations, to elaborate a programme of activities to develop further the principles set out below and facilitate their implementation, and to explore what additional international action may be necessary concerning transfrontier movements of hazardous waste.
- IV. Instructs the Environment Committee to review periodically action taken by Member countries in pursuance of this Decision and Recommendation.

#### PRINCIPLES CONCERNING TRANSFRONTIER MOVE-MENTS OF HAZARDOUS WASTE

The following principles are designed to facilitate the development of harmonized policies concerning transfrontier movements of hazardous waste. They do not prejudice the implementation of more favourable measures for the protection of the environment that are now in force or that may be adopted; neither do they prejudice the application of any international agreement dealing with the free trade of goods or services or the transport of dangerous goods.

Definitions of terms used in these Principles are given in the Appendix.

## General principles

1. Countries should ensure that hazardous waste situated within the limits of their jurisdiction is managed in such a way as to protect man and the environment. For this purpose, countries should promote the establishment of appropriate disposal installations and should adopt all necessary measures to enable their authorities to control the activities related to generation, transport and disposal of hazardous waste, and to ensure compliance with the laws and regulations in force.

2. In respect of the management of hazardous waste that is subject to transfrontier movements countries should require that:

(a) the entities concerned abstain from participation in transfrontier movements which do not comply with the laws and regulations applicable in the countries concerned;

(b) the entities involved in transport or disposal be authorized for

this purpose.

3. Furthermore, with regard to any specific transfrontier movement of hazardous waste, countries should require that the generator of the waste should:

(a) take all practicable steps to ensure that the transport and disposal of its waste be undertaken in accordance with the laws and

regulations applicable in the countries concerned;

(b) in particular obtain assurances that all entities concerned with the transfrontier movement or the disposal of its waste have the necessary authorisations to perform their activities in accordance with the laws and regulations applicable in the countries concerned;

(c) reassume responsibility for the proper management of its waste, including if necessary the re-importation of such waste, if arrangements for safe disposal cannot be completed.

4. Countries should apply their laws and regulations on control of hazardous waste movements as stringently in the case of waste intended for export as in the case of waste managed domestically.

# International Pre-Notification and Cooperation

- 5. Countries should co-operate in the control, from the place of generation to the place of disposal, of all hazardous waste that is subject to transfrontier movements.
- 5.1 For this purpose, and given the Decision, countries should take the measures necessary to ensure that the entities within their jurisdiction provide, directly or indirectly, the authorities of the exporting, importing and transit countries with adequate and timely information.
- 5.2 This information should specify the origin, nature, composition, and quantities of waste intended to be exported, the conditions of carriage, the nature of environmental risks involved, the type of disposal and the identity of all entities concerned with the transfrontier movement or the disposal of the waste.
- 6. Exporting countries should take the measures necessary to ensure that a request from an importing or transit country for relevant information elicits a constructive and diligent response.
- 7. Countries should adopt the measures necessary to enable their authorities to object to or, if necessary, prohibit the entrance of a consignment of hazardous waste into their territory, for either disposal or transit, if the information provided is insufficient or inaccurate or the arrangements made for transport or disposal are not in conformity with their legislation.
- 8. Countries should take all practicable steps to ensure that a projected transfrontier movement of hazardous waste is not initiated if one of the countries concerned has decided in conformity with its legislation to oppose the import or transit of the waste and has so informed the entities or authorities concerned in the exporting country.
- 9. When an importing or transit country opposes in conformity with its legislation a transfrontier movement into its territory and the waste has already left the exporting country, the latter should not oppose reimport of the waste.

#### Appendix

#### **DEFINITIONS**

For the purposes of the above principles:

(a) "Waste" means any material considered as waste or legally defined as waste in the country where it is situated or through or to which it is conveyed;

(b) "Hazardous waste" means any waste other than radioactive waste considered as hazardous or legally defined as hazardous in the country where it is situated or through or to which it is conveyed, because of the potential risk to man or the environment likely to result from an accident or from improper transport or disposal;

(c) "Transfrontier movement of hazardous waste" means any shipment of waste from one country to another, where the waste is considered as being hazardous waste in at least on of the countries concerned. Hazardous waste arising from the normal operation of ships, including slops and residues, shall not be considered a transfrontier movement covered by this Decision and Recommendation:

(d) "Exporting country" means any country from which a transfrontier movement of hazardous waste is initiated or is envisaged;

(e) "Importing country" means any country to which a transfrontier movement of hazardous waste takes place or is envisaged for purpose of disposal (treatment, landfill, storage, dumping or incineration at sea);

(f) "Transit country" means any country other than the exporting or importing country across which a transfrontier movement of hazardous waste takes place or is envisaged;

(g) "Countries concerned" mean the exporting, transit and

importing countries;

(h) "Entity" means the waste generator and any natural or legal, public or private person, acting on his own behalf or as contractor or sub-contractor (export, import, transport, collection, disposal, etc.), who owns or has the possession of the waste.

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## OECD Council Decision-Recommendation on Exports of Hazardous Wastes from the OECD Area (\*)

The Council,

Having regard to Articles 5a) and 5b) of the Convention on the Organisation for Economic Cooperation and Development of 14th December 1960:

Having regard to the Decision and Recommendation of the Council of 1st February 1984 on Transfrontier Movements of Hazardous Waste [C(83)180(Final)] and without prejudice to that

Decision and Recommendation;

Having regard to the Resolution of the Council of 20th June 1985 on International Cooperation Concerning Transfrontier Movements of Hazardous Wastes [C(85)100], by which it has been decided to develop an international system for effective control of transfrontier movements of hazardous wastes, including an international agreement of a legally binding character;

Considering the European Communities Council Directive of 6th December 1984 on the Supervision and Control within the European Community of the Transfrontier Shipment of Hazardous Waste [84/631/EEG], supplemented by the Decision of the Council of the

European Communities of 6th March 1986;

Considering the work carried out within the United Nations Environment Programme on the environmentally sound management of hazardous wastes:

Considering the particular nature of wastes and the distinction between wastes and products which are traded internationally;

Convinced that the exports of hazardous wastes may, if not properly monitored and controlled, result in serious risks to health and the environment:

# On the proposal of the Environment Committee:

I. Decides that Member countries shall:

 Monitor and control exports of hazardous wastes to a final destination which is outside the OECD area; and for this purpose shall ensure that their competent authorities are empowered to prohibit such exports in appropriate instances;

ii) Apply no less strict controls on transfrontier movements of hazardous wastes involving non-Member countries than they would on movements involving only Member countries;

<sup>(\*)</sup> Australia abstained.

- Prohibit movements of hazardous wastes to a non-Member country without the consent of that country and the prior notification to any transit countries of the proposed movements;
- iv) Prohibit movements of hazardous wastes to a non-Member country unless the wastes are directed to an adequate disposal facility in that country.
- II. Recommends that, to implement this Decision, Member countries should:
  - i) Seek to conclude bilateral or multilateral agreements with non-Member countries to which frequent exports of hazardous wastes are taking place or are foreseen to take place;
  - Apply the measures set out below concerning the control of exports of hazardous wastes to a final destination outside the OECD area.
- III. Instructs the Environment Committee to take account of the elements of this Decision-Recommendation in developing the draft international agreement referred to in the Resolution of the Council on International Cooperation Concerning Transfrontier Movements of Hazardous Wastes [C(85)100].

# MEASURES CONCERNING THE CONTROL OF EXPORTS OF HAZARDOUS WASTES

- 1. The following measures are designed to facilitate the harmonisation of policies concerning transfrontier movements of hazardous wastes to a final destination outside the OECD area. They do not prejudice the implementation of stricter measures which have been or might be adopted at national, regional or world level to reduce the dangers associated with the transport and disposal of hazardous wastes.
- 2. These measures should apply in the absence of a bilateral or multilateral agreement concerning transfrontier movements of hazardous wastes between the exporting Member country and the importing non-Member country concerned, and should be taken into account in the negotiation of such an agreement.
- 3. Member countries should require, with respect to any export of hazardous wastes to a final destination outside the OECD area, that the measures set out below be taken by the exporter or by the competent authorities of the exporting country.
  - 4. The exporter should:
- a) provide the competent authorities of the importing country (and of any transit countries) with at least the same information that he would provide them if they were Member countries;

- b) inform the competent authorities of the importing country of any specific disposal methods legally required or forbidden for such wastes in the exporting country;
  - c) provide to the competent authorities of the exporting country:
  - i) the information used by the exporter to assure himself that the proposed disposal operation can be performed in an environmentally sound manner;
  - ii) certification that the proposed disposal facility may, under the laws and regulations of the importing country, dispose of the kinds of wastes whose export is proposed;
  - iii) a copy of an undertaking by the operator of the proposed disposal facility that he will dispose of the wastes as foreseen in the disposal contract, and in the facility specified therein;
  - iv) a copy of the information transmitted to the competent authorities of the importing country to obtain their written consent to the import and disposal of the wastes;
  - a copy of the written consent of the competent authorities of the importing country, and confirmation that the competent authorities of any transit countries have received delivery of notification:
- d) demand and receive from the disposer documents confirming that the wastes have been handed over to the disposer and disposed of as foreseen, and put these documents at the disposition of the competent authorities of the exporting country.
- 5. Member countries may choose to charge their competent authorities instead of the exporter with some of the tasks listed above.
  - 6. The competent authorities of the exporting country should:
- a) before any final decision is taken, inform the competent authorities of the importing country when they have specific environmental concerns regarding the proposed disposal operation;
  - b) prohibit the export of the hazardous wastes whenever:
  - i) they are not satisfied with the information provided under 4 c) above:
  - ii) an objection is made by any country of transit and no appropriate alternative route can be found by the exporter;
  - iii) the proposed disposal operation is not in conformity with applicable international law;
- c) prohibit additional exports of hazardous waste to a given destination when the documents specified in 4 d) above were not provided to the exporter by the disposer after a previous export to the same destination;
- d) notify the exporter promptly whether or not they object to the proposed transfrontier movement;
- e) notify the competent authorities of the importing country if they have prohibited the export of the wastes.

#### DEFINITIONS

For the purpose of this Decision-Recommendation:

a) "Waste" means any material considered as waste or legally defined as waste in the country where it is situated or through or to which it is conveyed;

b) "Hazardous waste" means any waste other than radioactive waste considered as hazardous or legally defined as hazardous in the country where it is situated or through or to which it is conveyed, because of the potential risk to man or the environment likely to result from an accident or from improper transport or disposal;

c) "Transfrontier movement of hazardous wastes" means any shipment of wastes from one country to another, where the wastes are considered as being hazardous wastes in at least one of the countries concerned. Hazardous wastes arising from the normal operation of ships, including slops and residues, shall not be considered a transfrontier movement covered by this Decision-Recommendation:

d) "Exporting country" means any country from which a transfrontier movement of hazardous wastes is initiated or is envisaged;

e) "Importing country" means any country to which a transfrontier movement of hazardous wastes takes place or is envisaged for purpose of disposal (treatment, landfill, storage, dumping or incineration at sea);

f) "Transit country" means any country other than the exporting or importing country across which a transfrontier movement of hazardous wastes takes place or is envisaged;

g) "Exporter" means the generator of the wastes or the person in the exporting country who arranges for exporting the wastes at the request and on behalf of the generator;

h) "OECD area" means all land or marine areas under the national jurisdiction of any OECD Member country.

#### Decision on Transfrontier Movements of Hazardous Wastes

The Council,

Having regard to Article 5 a) of the Convention on the Organisation for Economic Co-operation and Development of 14th December 1960;

Having regard to the Decision and Recommendation of the Council of 1st February 1984 on Transfrontier Movements of Hazardous Waste [C (83) 180(Final)];

Having regard to the Decision-Recommendation of the Council of 5th June 1986 on Exports of Hazardous Wastes from the OECD

[C(86)64(Final)]:

Having regard to the Resolution of the Council of 20th June 1985 on International Cooperation Concerning Transfrontier Movements of Hazardous Wastes, by which it has been decided to develop an international system for effective control of transfrontier movements of hazardous wastes [C(85)100];

Convinced that the development of such a system requires a clear

delineation of the wastes to be included in the system;

# On the proposal of the Environment Committee;

I. Decides that for the purpose of implementing the above mentioned Council Acts on the control of transfrontier movements of hazardous wastes involving any Member country:

a) the terms "wastes" and "disposal" shall be defined as specified

in the Annex, which is an integral part of this Decision;

b) those wastes which are referred to in the above-mentioned Council Acts as Hazardous Wastes shall consist of:

(i) a core list of wastes as specified in the Annex; and

- (ii) all other wastes are considered to be or are legally defined as hazardous wastes in the Member country from which these wastes are exported or in the Member country into which these wastes are imported;
- c) Member countries shall ensure that the wastes subject to control are classified in the manner specified in the Annex unless these wastes are subject to a transfrontier movement which takes place entirely among the parties to a bilateral or multilateral agreement or arrangement specifying a different method of classification.
- II. Decides that the definitions of Waste and Hazardous Waste contained in the above-mentioned Council Acts are hereby repealed.
  - III. Instructs the Environment Committee:
  - a) to take account of this Decision in developing the draft

international agreement referred to in the Resolution on International Cooperation Concerning Transfrontier Movements of Hazardous Wastes [C(85)100];

b) to report to the Council after an appropriate period not exceeding three years on the implementation of this Decision and to make any proposals it deems necessary for revisions of the Annex in the light of experience gained in its implementation.

#### Annex

A series of seven tables serves to define and classify the wastes to be controlled when subject to transfrontier movements. The tables cover the following:

Table Y - Core list of wastes to be controlled

Table 1 - Reasons why materials are intended for disposal

Table 2 - Disposal operations

Table 3 - Generic types of potentially hazardous wastes Table 4 - Constituents of potentially hazardous wastes

Table 5 – List of hazardous characteristics

Table 6 - Activities which may generate potentially hazardous wastes

#### DEFINITIONS

For the purposes of this Decision:

- 1. Wastes are materials other than radioactive materials intended for Disposal, for reasons specified in Table 1.
  - 2. Disposal means any of the operations specified in Table 2.

#### CORE LIST

For the purposes of this Decision those wastes which belong to any of the categories described in Table Y shall be controlled unless such wastes do not possess any of the hazardous characteristics listed in Table 5.

# CLASSIFICATION INTERNATIONAL WASTE IDENTIFICATION CODE

Tables 1 to 6 contain code numbers which, taken together, provide a means of complete characterisation of wastes, through an International Waste Identification Code, in order to facilitate their control from generation to disposal.

The International Waste Identification Code (IWIC) is obtained as follows:

- 1. Choose the one or at most two major reason(s) why the wastes are intended for disposal from the list in Table 1. Mark down the reason(s) as Q... plus the code number(s).
- 2. Indicate the method which has been selected for disposal of the wastes by choosing the *one* operation from Table 2 which most closely describes the fate intended for the wastes. Mark down as D .... or R... plus the code number from Table 2.A or Table 2.B as appropriate.
- 3. Decide whether the wastes are liquid (L), sludge (P) or solid (S). Powders are considered to be solids.
- 4. Select from Table 3, the *one* descriptor which most closely describes the generic form of the wastes. Mark down this descriptor as L...., P... or S... plus the code number.
- 5. Examine Table 4; either the wastes do or do not contain one or more of the constituents listed. If none, mark down as code "CO". If one, mark down the appropriate code number. If more than one, then the best estimate for the group of no more than three entries in terms of descending hazard should be made. This estimate is meant to be qualitative and based upon the best judgement of the generator of the wastes; physical testing is not implied.
- 6. Select from Table 5 the one or at most two major potential hazard(s) presented by the wastes. Mark down as H... plus the code number(s).
- 7. Select from Table 6 the most appropriate *single* activity generating the wastes. Mark down as A... plus the code number.
- 8. The order of the International Waste Identification Code is the same as Tables 1 through 6. Main heads of the coding system are set off by double oblique lines. Where more than one entry from a specific Table is applicable, the plus sign (+) is used to separate the codes for each such entry:

#### Table Y

#### Core List of wastes to be controlled

- 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 oil/water, hyydrocarbon/water mixtures, emulsions
- Y10 Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCB's) and/or polychlorinated terphenyls (PCT's) and/or polybrominated biphenyls (PBB's)
- Y11 Waste tarry residues arising from refining, distillation and any pyrolytic treatment
- Y12 Wastes from production, formulation and use of inks, dyes, pigments, paints, laquers, 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

# Wastes having as constituents:

- Y18 Metal carbonyls
- Y19 Beryllium; beryllium compounds
- Y20 Hexavalent chromium compounds
- Y21 Copper compounds

- Y22 Zinc compounds
- Y23 Arsenic; arsenic compounds
- Y24 Selenium; selenium compounds
- Y25 Cadmium; cadmium compounds
- Y26 Antimony; antimony compounds
- Y27 Tellurium; tellurium compounds Y28 Mercury: mercury compounds
- Y28 Mercury; mercury compounds Y29 Thallium: thallium compounds
- Y30 Lead; lead compounds
- Y31 Inorganic fluorine compounds excluding calcium fluoride
- Y32 Inorganic cyanides
- Y33 Acidic solutions or acids in solid form
- Y34 Basic solutions or bases in solid form
- Y35 Asbestos (dust and fibres)
- Y36 Organic phosphorous compounds
- Y37 Organic cyanides
- Y38 Phenols; phenol compounds including chlorophenols
- Y39 Ethers
- Y40 Halogenated organic solvents
- Y41 Organic solvents excluding halogenated solvents
- Y42 Organohalogen compounds excluding inert polymerized materials and other substances referred to in this Table.
- Y43 Any material contaminated with any congenor of polychlorinated dibenzo-furan
- Y44 Any material contaminated with any congenor of polychlorinated dibenzo-p-dioxin

#### Table 1

# Reasons why materials are intended for disposal

Q1 Production residues not otherwise specified below

O2 Off-specification products

- Q3 Products whose date for appropriate use has expired
- Materials spilled, lost or having undergone other mishap including any materials, equipment etc, contaminated as a result of the mishap
- Q5 Materials contaminated or soiled as a result of planned actions, [e.g., residues from cleaning operations, packing materials, containers, etc.]
- Q6 Unusable parts, [e.g., reject batteries, exhausted catalyst, etc.]
- Q7 Substances which no longer perform satisfactorily, [e.g., contaminated acids, contaminated solvents, exhausted tempering salts, etc.]
- Q8 Residues of industrial processes, [e.g., slags, still bottoms, etc.]
- Q9 Residues from pollution abatement processes, [e.g., scrubber sludges, baghouse dusts, spent filters, etc.]
- Q10 Machining/finishing residues, [e.g. lathe turnings, mill scales, etc.]
- Q11 Residues from raw materials processing, [e.g., mining residues, oil field slops, etc.]
- Q12 Adulterated materials, [e.g. oils contaminated with PCB, etc.]
- Q13 Any materials, substances or products whose use has been banned by law in the country of exportation
- Q14 Products for which there is no further use, [e.g., agriculture, household, office, commercial and shop discards, etc.]
- Q15 Materials, substances or products resulting from remedial actions with respect to contaminated land
- Q16 Any materials, substances or products which the generator or exporter declares to be wastes and which are not contained in the above categories

#### Table 2

#### Disposal operations

(Table 2 is divided into two sections)

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

Table 2.A is meant to encompass all such disposal operations which occur in practice, whether or not they are adequate from the point of view of environmental protection.

- 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 into wells, salt domes or 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 Table which results in final compounds or mixtures which are discarded by means of any of the operations in Table 2.A
- D9 Physico chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations in Table 2.A, [e.g., evaporation, drying, calcination, 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 Table 2.A
- D14 Repackaging prior to submission to any of the operations in Table 2.A
- D15 Storage pending any of the operations in Table 2.A

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

Table 2.B is meant to encompass all such operations with respect to materials considered to be or legally defined as hazardous wastes and which otherwise would have been destined for operations included in Table 2.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 form 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 Table 2B

#### Table 3

# Generic types of potentially hazardous wastes\* (these may be liquid, sludge or solid in form)

Code Number\*\*

- Clinical wastes from medical care in hospitals, medical centers and clinics
- Wastes from the production and preparation of pharmaceutical products
- Waste pharmaceuticals, drugs and medicines
- 4 Wastes from the production, formulation and use of biocides and phytopharmaceuticals
- Wastes from the manufacture, formulation and use of wood preserving chemicals
- 6 Wastes from the production, formulation and use of organic solvents
- Wastes from heat treatment and tempering operations containing cyanides
- 8 Waste mineral oils unfit for their originally intended use
- 9 Waste oil/water, hydrocarbon/water mixtures, emulsions
- Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCB's) and/or polychlorinated terphenyls (PCT's) and/or polybrominated biphenyls (PBB's)
- Waste tarry residues arising from refining, distillation and any pyrolytic treatment
- Wastes from production, formulation and use of inks, dyes, pigments, paints, laquers, varnish
- Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives
- 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
- Wastes of an explosive nature not subject to other legislation
- Wastes from production, formulation and use of photographic chemicals and processing materials

<sup>\*</sup> If liquid, preface "L" is used

If sludge, preface "P" is used If solid, preface "S" is used

<sup>\*\*</sup> Items 1 to 17 in Table 3 correspond to items Y1 to Y17 in Table Y.

#### Code Number

Wastes resulting from surface treatment of metals and plastics

20

Materials which contain any of the constituents listed in Table 4 and consisting of:

- 18 Animal or vegetable soaps, fats, waxes
- 19 Non-halogenated organic substances not employed as solvents
- 20 Inorganic substances without metals
- 21 Ashes and/or cinders
- 22 Soil, sand, clay including dredging spoils
- 23 Non-cyanidic tempering salts
- 24 Metallic dust, powder
- 25 Spent catalyst materials
- 26 Liquids or sludges containing metals
- 27 Residue from pollution control operations, except (28) and (29)
- 28 Scrubber sludges
- 29 Sludges from water purification plants and waste water treatment plants
- 30 Decarbonization residue
- 31 Ion-exchange column residue
- 32 Sewage sludges
- Wastewaters not otherwise taken into account within Table 3
- 34 Residue from cleaning of tanks and/or equipment
- 35 Contaminated equipment
- Contaminated containers, whose contents included one or more of the constituents listed in Table 4
- 37 Batteries and other electrical cells
- 38 Vegetable oils
- 39 Materials which have been segregated from households and which also exhibit any of the characteristics listed in Table 5
- 40 Any other wastes which contain any of the constituents listed in Table 4

# Table 4

# Constituents of potentially hazardous wastes

Code Number	Constituents*:
C 1	Beryllium; beryllium compounds [Y19]
C 2	Vanadium compounds
C 3	Hexavalent chromium compounds [Y20]
C 4	Cobalt compounds
C 5	Nickel compounds
C 6	Copper compounds [Y21]
C 3 C 4 C 5 C 6 C 7	Zinc compounds [Y22]
C 8	Arsenic; arsenic compounds [Y23]
C 9	Selenium; selenium compounds [24]
C10	Silver compounds
C11 C12	Cadmium; cadmium compounds [Y25]
C12	Tin Compounds Antimony; antimony compounds [Y26]
C13	Tellurium; tellurium compounds [Y27]
C15	Barium; Barium compounds; excluding barium sulfate
C16	Mercury; mercury compounds [Y28]
Č17	Thallium; thallium compounds [Y29]
C18	Lead; lead compounds [Y30]
C19	Inorganic sulphides
C20	Inorganic fluorine compounds excluding calcium fluoride [Y31]
C21	Inorganic cyanides [Y32]
C22	The following alkaline or alkaline earth metals: lithium, sodium potassium, calcium, magnesium in uncombined form
C23	Acidic solutions or acids in solid form [Y33]
C24	Basic solutions or bases in solid form [Y34]
C25	Asbestos (dust and fibres) [Y35]
C26	Organic phosphorus compounds [Y36]
C27	Metal carbonyls [Y18]
C28	Peroxides
C29	Chlorates
C31	Azides  Polyada a da d
C32	Polychlorinated biphenyls (PCB's) and/or polychlorinated terphenyls (PCT's) and/or polybrominated biphenyls (PBB's) [Y10]

<sup>\*</sup> The correspondance with Table Y is indicated in brackets

#### Code Number

imoei	
C33	Pharmaceutical or veterinary compounds
C34	Biocides and phyto-pharmaceutical substances
C35	Infectious substances
C36	Creosotes
C37	Isocyanates, thiocyanates
C38	Organic cyanides [Y37]
C39	Phenols; phenol compounds including chlorophenols
	[Y38]
C40	Ethers [Y39]
C41	Halogenated organic solvents [Y40]
C42	Organic solvents, excluding halogenated solvents [Y41]
C43	Organohalogen compounds, excluding inert polymerized
	materials and other substances referred to in this Table
	[Y42]
C44	Aromatic compounds; polycyclic and heterocyclic orga-
	nic compounds

C45 Organic nitrogen compounds; especially aliphatic amines
C46 Organic nitrogen compounds; especially aromatic amines

C46 Organic nitrogen compounds; especially arc C47 Substances of an explosive character [Y15]

C49 Substances of all explosive character [11]

C48 Sulphur organic compounds

C49 Any material contaminated with any congenor of polychlorinated dibenzo-furan [Y43]

C50 Any material contaminated with any congenor of polychlorinated dibenzo-p-diozin [Y44]

C51 Hydrocarbons and their oxygen, nitrogen and/or sulphur compounds not otherwise taken into account in Table 4

<sup>23</sup> 127

#### Table 5

#### List of hazardous characteristics

Code Characteristics Number

H 1 Explosive

An explosive substance is a solid or liquid substance (or mixture of substances) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.

H 3 Inflammable liquids

The word "flammable" has the same meaning as "inflammable".

Inflammable 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 an inflammable vapour at temperatures of not more than 60.5°C, closed-cup test, or not more than 65.6°C, 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.

- H 4.1 Inflammable Solids
  - 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.
- H 4.2 Substances or Wastes Liable to Spontaneous Combustion Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and being then liable to catch fire.
- H 4.3 Substances or Wastes which, in Contact with Water Emit Inflammable gases

<sup>\*</sup> Corresponds to hazard class numbering system included in the United Nations Recommendations on the Transport of Dangerous Goods (Orange Book) for H1 through H9; omiaaiona of H2, H7 and H9 are deliberate.

#### Code Number

Substances or wastes which, by interaction with water, are liable to become spontaneously inflammable or to give off inflammable gases in dangerous quantities.

H 5 Oxidizing

Substances which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause, or contribute to, the combustion of other materials. (Organic substances which contain the bivalent-0-0-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.)

- H 6 Toxic (Poisonous)
  Substances or wastes that have been found to be fatal to humans in low doses or which, if they are inhaled or ingested or if they penetrate the skin, may involve serious, acute or chronic hazards, including carcinogenicity.
- H 8 Corrosives
  Substances or wastes which, by chemical action, will cause reversible or irreversible damage when in contact with living tissue, or, in case of leakage, will materially damage, or even destroy, other items or the means of transport, or can liberate corrosive fumes when in contact with air or water.
- H10 Liberation of toxic gases in contact with air or water Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
- H11 Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.
- H12 Ecotoxic
  Substance 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.

The potential hazards posed by certain types of wastes are not yet fully documented; objective tests to define quantitatively these hazards do not exist. Further research is necessary in order to develop means to characterise 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 Member countries have developed tests which can be applied to materials destined for disposal by means of operations listed in Table

2 in order to decide if these materials exhibit any of the characteristics listed in Table 5.

# Table 6

# Activities which may generate potentially hazardous wastes

Agriculture – Farming Industry	Agriculture	_	<b>Farming</b>	Industry
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A102	Agriculture, forest management Cultivation Animal husbandry Forest management and forest exploitation (lumbering)
A110 A111 A112 A113 A114 A115	Sugar industry
A122	Drink industry Distillation of alcohol and spirits Brewing of beer Manufacture of other drinks
A130	Manufacture of animal feed
Energy	
A151	Coal industry Production and preparation of coal and coal products Coking operations
A160 A161 A162 A163	Petroleum industry Extraction of petroleum and natural gas Petroleum refining Storage of petroleum and products derived from refining of natural gas
A171 A172 A173	Production of electricity Central thermal facilities Central hydraulic facilities Central nuclear facilities Other central electricity facilities
A180	Production of water

# Metallurgy - Mechanical and Electrical Engineering

<del>-</del> •
Extraction of metallic ores
Ferrous metallurgy Cast iron production (coke oven) Ray steel production (rig iron)
Raw steel production (pig iron) Primary steel transformation (rolling mills)
Non-ferrous metallurgy
Production of alumina
Aluminium metallurgy
Metallurgy of lead and zinc Metallurgy of precious metals
Metallurgy of other non-ferrous metals
Ferro-alloy industry
Manufacture of electrodes
Foundry and metalworking operations
Ferrous metal foundries
Non-ferrous metal foundries
Metalworking (not including machining)
Mechanical, electrical and electronic construction
Machining
Thermal treatment
Surface treatment
Application of paint
Assembly, wiring
Production of batteries and dry cells
Production of electrical wires and cables (cladding, plating, insulation)
Production of electronic components
tallic Minerals – Construction Materials – Ceramics – Glass
Mining and quarrying of non-metallic minerals
Construction materials, ceramics, glass
Production of lime, cement and plaster
Fabrication of ceramic products
Fabrication of products containing asbestos-cement
Production of other construction materials
Glass industry

# A280 Building, building sites, landscaping

#### Primary Chemical Industry

A300 Production of primary chemicals and chemical feedstocks

A301 Chlorine industry

A351 Fertilizer fabrication

A401 Other manufacturing generators of primary inorganic industrial chemicals

A451 Petroleum and coal industry

A501 Manufacture of basic plastic materials

A551 Other primary organic chemical manufacture

A601 Chemical treatment of fats; fabrication of basic substances for detergents

A651 Fabrication of pharmaceuticals, pesticides, biocides, weed killers

A669 Other manufacture of finished chemicals

# Industries producing products based upon primary chemicals

A700 Production of inks, varnish, paints, glues

A701 Production of ink

A702 Production of paint

A703 Production of varnish

A704 Production of glue

A710 Fabrication of photographic products

A711 Production of photosensitive plates

A712 Fabrication of products for photographic treatments

A720 Perfume industry and fabrication of soap and detergent products

A721 Fabrication of soap products

A722 Fabrication of detergent products

A723 Fabrication of perfume products

A730 Finished rubber and plastic materials

A731 Rubber industry

A732 Finished plastic materials

A740 Fabrication of products based upon asbestos

A750 Production of powders and explosives

<sup>29</sup> **127** 

#### Textiles and Leathers - Various Wood Based and Furniture Industries

A760 Textile and clothing industry

A761 Combing and carding of textile fibres

A762 Threading, spinning, weaving

A763 Bleaching, dyeing, printing

A764 Clothing manufacture

A770 Leather and hide industry

A771 Tanneries, tanning

A772 Fur trade

A773 Manufacture of shoes and other leacher products

A780 Wood and furniture industry

A781 Sawmills, production of wood panels

A782 Manufacture of wood and furniture products

A790 Various related industries

Paper - Cardboard - Printing

A800 Paper and cardboard industry

A801 Fabrication of paper pulp

A802 Manufacture of paper and cardboard A803 Finished goods of paper and cardboard

A810 Printing, publishing, photographic laboratories

A811 Printing, publishing

A812 Photographic laboratories

Commercial Services

A820 Laundries, bleaching services, dyers

A830 Business enterprise

A840 Transport, automobile dealers and repair facilities

A841 Automobile dealers and automobile repair facilities

A842 Transportation

A850 Hotels, cafés, restaurants

General Services

A860 Health

A861 Health (Hospitals, medical centres, nursing homes, laboratories)

A870 Research

A871 Research (including research laboratories)

A880 Administrative activities, offices

Households

A890 Households

Pollution Control - Waste Disposal

A900 Cleaning and maintenance of public areas

A910 Urban water treatment facilities

A920 Urban waste treatment

A930 Treatment of industrial effluents and wastes

A931 Incineration

A932 Physico-chemical treatment

A933 Biological treatment A934 Solidification of wastes

A935 Collection and/or pretreatment of wastes

A936 Landbased disposal above, on or below the surface

# Regeneration - Recovery

A940 Regeneration activities A941 Regeneration of oils

A941 Regeneration of oils
A942 Regeneration of solvents

A943 Regeneration of ion exchange resins

A950 Recovery activities

Uitgegeven de zevende oktober 1988.

De Minister van Buitenlandse Zaken,

H. VAN DEN BROEK