

GENERAL AGREEMENT ON

RESTRICTED

TARIFFS AND TRADE

DPG/W/4

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Limited Distribution

Working Group on Domestically Prohibited Goods

SYNOPTIC TABLE SUMMARIZING THE TRADE RELATED PROVISIONS IN SELECTED INTERNATIONAL LEGAL INSTRUMENTS DEALING WITH TRADE IN DOMESTICALLY PROHIBITED GOODS AND OTHER HAZARDOUS SUBSTANCES

The synoptic table attempts to summarize the trade related provisions in the following international legal instruments:

1. Montreal Protocol on Substances That Deplete the Ozone Layer (UNEP), signed September 1987.
2. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (UNEP), signed March 1989.
3. London Guidelines for the Exchange of Information on Chemicals in International Trade (UNEP), signed June 1987.
4. Certification Scheme on the Quality of Pharmaceutical Products Moving in International Trade (WHO), in operation since 1976.
5. Recommendation Concerning Information Related to Export of Banned or Severely Restricted Chemicals (OECD) adopted April 1984.

The trade related provisions in the above legal instruments have been categorized under the following headings:

- (A) Objectives and Nature of Instruments
- (B) Coverage of Products and Substances
- (C) Obligations of Producers/Generators
- (D) Obligation of Countries as Exporters
- (E) Obligation of Countries as Importers
- (F) Control of Illegal Traffic
- (G) International Co-operation and Technical Assistance
- (H) Dispute Settlement Procedures

It should be emphasized that the synoptic table, including the categories used, may not always fully reflect the content and scope of the trade-related provisions in these instruments. However, it is hoped that it will provide a useful basis for consideration by the members of the Group.

A. OBJECTIVES AND NATURE OF INSTRUMENTS

(I) Montreal Protocol

To provide legal guidelines for the reduction of consumption and production of specified substances that deplete the ozone layer.

(II) Basel Convention

To regulate transboundary movement of hazardous substances (as they are defined in Annex I, II, III of the convention, see attachment) with a view to ensuring:

- that the movement occurs in transparent situation;
- that environmentally sound management and/or efficient processing of the said substance is provided by technically informed parties.

(III) London Guidelines

To assist governments in increasing chemical safety through exchange of scientific, technical, economic or legal information on chemicals in international trade through the mechanism provided by the International Register of Potentially Toxic Chemicals (IRPTC).

To complement the information exchange system established under the IRPTC by adopting Prior Informed Consent (PIC) procedures under which a chemical that is banned or severely restricted in order to protect human health, should not be exported without the agreement, where such agreement exists or contrary to the decision of the national authority in the importing country. The procedures will be jointly administered and managed by UNEP and FAO, including the selection of chemicals to be included in the PIC procedures.

(IV) WHO Certification Scheme

To provide an administrative mechanism whereby an importing country can:

- obtain assurance that an imported pharmaceutical product is authorized to be sold in the market of the exporting country and, if it is not, information on the reasons why it is not authorized;
- obtain assurance that the manufacturing plant in which the product is produced is subject to periodic inspections and conforms to the WHO guidelines on Good Practices in the Manufacture and Quality Control of Drugs;
- exchange information on the implementation of inspections and controls exercised by the authorities in the exporting country.

(V) OECD Recommendation

To provide guiding principles for exporting countries to assist importing countries, through information exchange, in making timely and informed decisions regarding imports of banned or severely restricted chemicals. Such exchanges may apply to exports from one Member country to another, as well as exports to non-Member countries.

B. COVERAGE OF PRODUCTS OR SUBSTANCES

(I) Montreal Protocol

Certain bulk chemicals and chemical compounds

(i.e. chlorofluorocarbons (CFCs), halons, and other chlorine - and bromine - containing chemicals).

The obligation to reduce consumption and production applies to these substances only. An amendment to the Protocol to include methylchloroform and carbontetrachloride has been recommended.

The manufactured products that contain these substances, (i.e. aerosol cans; refrigerators or refrigerating plants; air-conditioners or air-conditioning plants; heatpumps; polyurethane prepolymer or any foam containing or manufactured with a controlled substance) are not controlled, per se. However domestic regulatory programs are encouraged in order to phase down the production and consumption of such products which, in effect, is necessary in order to fulfil the provisions of the Protocol. (See also "Obligation of Countries as Exporters and Obligations of Countries as Importers").

(II) Basel Convention

Wastes - i.e. substances or objects which are disposed of or are intended to be disposed of, or are required to be disposed of by the Party of export, import or transit.

Categories of wastes that are controlled by the Convention are reproduced in Annex I and II (see attachment).

Wastes are treated as hazardous wastes if they possess any of the characteristics enumerated in Annex III (see attachment).

Wastes which are radioactive and those which derive from the normal operations of a ship are excluded as they are covered by other international instruments.

(III) London Guidelines

The Guidelines are aimed at regulating banned or severely restricted chemicals.

Definition of Banned or Severely Restricted Chemicals

A "banned chemical" means a chemical which has, for health and environmental reasons, been prohibited for all uses by final governmental action.

A "severely restricted chemical" means a chemical for which, for health and environmental reasons, virtually all uses have been prohibited by national governmental action, but for which certain specific uses remain authorized.

The guidelines do not apply to:

- pharmaceuticals;
- radioactive materials;
- chemicals imported, in insignificant quantities, for the purpose of research or as personal or household effects; and
- food additives.

However, if States so choose, they may apply the guidelines to pharmaceuticals and food additives.

Initial Identification of Chemicals for inclusion in the Prior Informed Consent (PIC) procedures

- Designated National Authorities of all States should submit inventories of control action to ban or severely restrict a chemical to the International Register of Potentially Toxic Chemicals (IRPTC) as soon as possible.
- On the basis of these notifications, IRPTC will identify all chemicals banned or severely restricted by five or more countries. These will be introduced into the PIC procedure, as follows:
 - All chemicals banned or severely restricted by ten or more countries should be immediately placed on a list and circulated with PIC decision guidance documents, to participating countries for determination regarding future use and importation.
 - Chemicals banned or severely restricted by five or more countries, but by less than ten should be submitted to on information consultation by an expert group of UNEP and FAO which would advise IRPTC whether they meet the definitions of banned or severely restricted for human health or environmental reasons. Those that meet the definition will be circulated as an addition to the above list.

- The inventory will be assessed annually and the original inventory will be updated as appropriate.
- Additionally, an Expert Group comprised of representatives from WHO, FAO and UNEP will consider the problem of acutely hazardous pesticide formulations to determine if there exists a need for a list of such products to be subject to PIC procedures.

(IV) WHO Certification Scheme

Definition of Pharmaceutical Products

- Starting materials (basic drugs) used in the manufacture of the pharmaceutical products.
- Medicine in its finished dosage forms, intended for human use, that is subject to control by legislation in the exporting member State.
- Veterinary products administered to food processing animals presented in their finished dosage forms.

(V) OECD Recommendation

The Guiding Principles apply to banned or severely restricted chemicals which are defined as:

- Any chemical that is the subject of control action taken by a competent authority in the exporting member country to:
 - Ban or severely restrict the use of handling of the chemical in order to protect human health or the domestic environment; or
 - Refuse a required authorization for a proposed first time use of a chemical based upon a decision in the exporting member country that such use would endanger human health or the environment.
- The guiding principles do not apply to hazardous substances.

In practice, to determine which chemicals are banned or severely restricted under national law, most countries choose to establish a list of chemicals subject to their notification schemes. The development of the list is usually a joint exercise between government and industry and they range in size from 20 to 40 chemicals.

C. GENERAL OBLIGATIONS OF PARTICIPATING COUNTRIES

(I) Montreal Protocol

Each party should ensure that its consumption and production of controlled substances do not exceed by 30 June 1999, 50 per cent of its 1986 calculated levels of consumption and production. This reduction shall occur in specified stages over the ten year period.

The Protocol provides for assessments of its control measures every four years beginning in 1990. Such assessments are to be based on the available scientific, environmental, technical and economic information furnished by appropriate expert panels set up for this purpose. Based on the initial assessments, it has been suggested that all controlled substances be phased out so that 95% of their production and consumption is effected by the year 2000, and a complete phase out is achieved by the year 2005.

(II) Basel Convention

Each Party shall take appropriate measures to ensure that a generator (i.e. a person whose activity produces hazardous or other wastes or who is in possession and/or control of those wastes) takes appropriate measures to ensure:

- that the generation of waste within its territory is reduced to the minimum;
- that adequate disposal facilities are located, to the extent possible, within its territory;
- that persons involved in the management of wastes take necessary steps to avoid pollution.

Each party shall further:

- prohibit all persons under its national jurisdiction from transporting or disposing of such waste unless such persons are allowed to perform such types of operations;
- ensure that the obligation under the Convention to manage such wastes in an environmentally sound manner are not transferred to the States of import or transit.

(III) London Guidelines

States taking measures to regulate chemicals should:

- establish and strengthen legislative and regulatory systems for improving control and management of chemicals;
- create national registers of toxic chemicals, both industrial chemicals and pesticides;

- prepare manuals and directories for more effective information collection and dissemination; and

- designate a national governmental authority (or authorities) to communicate with designated national authorities of other States and with international organizations concerned.

(IV) WHO Certification Scheme

Each member State that agrees to participate in the Certification Scheme shall communicate to the Director General of WHO:

- the name and address of its competent authority responsible for the certification of exports;

- the decision to grant or refuse the authorization for sale of imports; and

- any reservations relating to their participation in the scheme.

In addition, all manufacturers of drugs are requested to adhere to the WHO Good Practices in the Manufacture and Quality Control of Drugs.

Certification of individual batches of pharmaceutical products and substances (i.e. a homogeneous quantity of any drug produced during a given cycle of manufacture) is only undertaken exceptionally for other than vaccines and other biologicals. However, if certificates of individual batches of products are required, these may be issued either by the manufacturer or by the competent authority of the exporting member State.

(V) OECD Recommendation

(See "Obligations of Countries as Exporters", and "Obligations of Countries as Importers").

D. OBLIGATIONS OF COUNTRIES AS EXPORTERS

(I) Montreal Protocol

Parties shall not export any controlled substances to any State which is not a party to the Protocol.

Exports of controlled substances to Parties are controlled implicitly in the Convention through the method of calculation to determine the levels of production and consumption. Since consumption is calculated by adding together production and imports and subtracting exports, it is assumed that Parties must reduce their imports (i.e. so their Parties exports) to reduce the total consumption figure. Furthermore, beginning on 1 January 1993, exports of controlled substances to non-Parties shall not be subtracted from this equation.

Developing countries, which are parties to the Protocol, whose annual consumption of controlled substances is less than 0.3 kilogramme per capita on the date of entry of the Protocol, shall be entitled to delay the compliance with the control measure by ten years.

Parties shall discourage the export of technology for producing and for utilising controlled substances to any State which is not a party to the Protocol.

(II) Basel Convention

Obligations relating to control of exports

Parties to the Convention:

- shall prohibit or not permit exports of wastes to the States which have prohibited such imports;
- not permit exports of wastes to a non-Party;
- not allow the export of wastes for disposal within the area south of 60 degrees latitude (basically only Antarctica);
- shall permit exports of such wastes to the State of import only if the latter consents in writing to the specific import.
- shall not allow the export of such wastes to developing countries if it has reason to believe that wastes will not be managed in an environmentally suitable manner; and shall require that those that are permitted are, in fact, managed in an environmentally sound manner in the State of import;

- shall ensure that the transboundary movement of hazardous wastes only be allowed if the State of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites to dispose of the wastes in question in an environmentally sound manner, or the wastes in question are required as a raw material for recycling or recovery industries in the State of import, or the transboundary movement in question is in accordance with other criteria to be decided by the Parties, provided those criteria do not differ from the objectives of this Convention;

Obligations relating to transborder movement

Parties to the Convention:

- shall require that information about a proposed transboundary movement of wastes be provided to the States concerned that states clearly the effects of the proposed movement on human health and the environment;

- shall require that such wastes that are to be the subject of transboundary movement are packaged, labelled and transported in accordance with the recognised international standards and regulations:

- shall require that such wastes be accompanied by a movement document from the point at which a transboundary movement commences to the point of disposal.

Procedural Obligations

- the State of export shall notify, or shall require the generator or exporter to notify in writing, through the channel of the competent authority of the State of export, the competent authority of the States concerned, of any proposed transboundary movement of such wastes;

- the State of export shall not allow the generator or exporter to begin the movement until it has received written confirmation that the exporter has received the written consent of the State of import and that the exporter has received from the State of import confirmation of the existence of a contract between the exporter and the importer specifying environmentally sound management of the wastes;

- the State of export shall not allow the movement to begin until it has received the written consent of the State of transit;

- the State of export shall be responsible for ensuring that the disposal is completed as specified.

(III) London Guidelines

Participation in PIC procedures

All exporting countries are expected to participate in Prior Informed Consent (PIC) procedures by respecting the decisions of importing countries to ban or severely restrict a chemical.

It is, however, open to countries to participate in information exchange procedures without participating in PIC procedures. They may also at any time withdraw from PIC procedures.

Supply of information regarding exports

If an allowed export of a chemical which meets the definition of banned or severely restricted and which has been notified to the International Register of Potentially Toxic Chemicals (IRPTC) occurs, the State of export should take steps to provide the designated authority in the importing country with the following minimum information:

- (i) a copy of, or reference of the information provided at the time of notification of control action to IRPTC;
- (ii) indication that an export of chemical concerned will occur or is occurring;
- (iii) an estimate of the quantity to be exported annually as well as any specific shipment inspection.

The purpose in providing such information is to remind the designated authority in the importing country of the original notification to IRPTC regarding control action and to alert it to the fact that an export will occur.

All States should ensure that chemicals exported from their territories are subject to no less stringent requirements for classification, packaging and labelling, than comparable products destined for use in the State of export.

(IV) WHO Certification Scheme

At the request of an interested party, the competent authority in the exporting Member State shall certify that:

- (i) the pharmaceutical product is authorized for sale or distribution within the exporting country. (If it is not so authorized the reasons should be stated in the certificate).
- (ii) the manufacturing plant in which the product is produced is inspected at suitable intervals to show that the manufacturer conforms to requirements for Good Practices in Manufacture and Quality Control.

This certificate shall be sent to the competent authority of the importing member State.

At the request of importing member States, the authority of the exporting member State should provide any and all other information pertaining to implementation of the Good Practices, controls of the product, and the names and functions of the persons designated to sign certificates of individual batches of exported products.

(V) OECD Recommendations

If an exporting member country takes control action to ban or severely restrict a chemical, it should ensure that importing countries of such chemicals are provided with all relevant information, in so far as possible, prior to export and the procedures should not be such as to delay or control the exports.

In practice, this usually occurs through two ways:

- government-to-government export notifications, with the exporter informing its government of the intent to export;

- exporter-to-government notifications, with the exporter directly informing the government of the importing country while also informing its own government of its initiative.

E. OBLIGATIONS OF COUNTRIES AS IMPORTERS

(I) Montreal Protocol

Within one year of entry into force of the Protocol, each party shall ban the import of controlled substances from any State not party to Protocol.

Imports of controlled substances are controlled implicitly in the convention through the method of calculation to determine the levels of production and consumption. (See "Obligations of Countries as Exporters").

Within three years, Parties shall elaborate a list of products containing controlled substance of which, unless objected to, importation from non-party States shall be banned.

Within five years, Parties shall determine the feasibility of banning the importation of products produced with controlled substances from non-party States, and if feasible, will follow the above procedure. However, the imports referred to above may be permitted from any State not party to this Protocol if that State is determined to be in full compliance with certain obligations of the Protocol.

An amendment to prohibit all trade with non-parties in products produced with or containing the controlled substances by an earlier date to be determined by the Parties has been recommended.

(II) Basel Convention

Obligations relating to control of imports

Parties exercising their right to prohibit the import of wastes shall inform the other parties of the decision.

They shall prevent the import of such wastes if they have reason to believe that the waste would not be managed in environmentally sound way.

Procedural Obligations

The State of import shall respond to the exporter in writing, consenting to the movement with or without condition, denying permission, or requesting additional information. If the import is allowed, the importer must inform both the exporter and the authority of the State of export of its receipt of the wastes, and of the completion of disposal as specified in the notification.

(III) London Guidelines

Generally, importing States should ensure that actions taken with regard to an imported chemical are not more restrictive than those applied to the same chemical produced for domestic use or imported from a State other than the one that supplied the information.

A designated authority in an importing country shall respond within 90 days, to the IRPTC indicating its initial response to notifications of banned or severely restricted chemicals.

An initial response may take the form of:

- (i) a final decision to permit use and importation; to prohibit use and importation; or to permit importation only under specified stated conditions.
- (ii) an interim response which may be:
 - (a) a statement that importation is under active review but that a final decision has not yet been reached;
 - (b) a request for further information; and/or
 - (c) a request for assistance in evaluating the chemical.

If a participating importing country does not respond within 90 days, the status quo should continue. This means that the chemical should not be exported without the explicit consent of the importing country, unless it is a pesticide which is registered in the importing country or is a chemical, the use or importation of which has been allowed by other governmental action in the importing country. Any final or interim decision should be communicated to the national competent authority responsible for controlling imports so that it can take appropriate import control actions under its authority.

(IV) WHO Certification Scheme

The competent authority of a member State into which a pharmaceutical product covered by the Certification Scheme is to be or has been imported must decide upon the receipt of the certificate, whether to grant or refuse the authorization for sale or distribution of the pharmaceutical product or to make authorization conditional on the submission of supplementary data.

In the case of quality defects of products imported under the Certification Scheme that are considered to be of a serious nature by the importing (exporting) country, the competent authority of the importing (exporting) member State should notify the competent authority of the exporting (importing) member State with a request to institute enquiries.

(V) OECD Recommendation

Importing member States should establish internal procedures for handling the information from the exporting member country.

Any control measures applied to an imported chemical, based on the information received, should not be more restrictive than those applied to the same chemical produced domestically or imported from another country.

F. CONTROL OF TRANSBORDER MOVEMENTS AND ILLEGAL TRAFFIC

(I) Montreal Protocol

A working group of legal experts has been established to develop and submit to the (UNEP) Secretariat by 1 November 1989 proposals for determining non-compliance with the provisions of the Protocol and for the treatment of Parties that fail to comply with its terms.

(II) Basel Convention

If a transboundary movement is deemed to be illegal traffic as the result of conduct on the part of the exporter or generator, the State of export shall ensure that the wastes are taken back by the exporter or the generator, or by itself into the State of export, or, if impracticable, are otherwise disposed of in accordance with the provisions of this Convention. This shall be done within 30 days from the time the State of export has been informed about the illegal traffic.

If a transboundary movement is deemed to be illegal traffic as the result of conduct on the part of the importer or disposer, the State of import shall ensure that the wastes are disposed of in an environmentally sound manner by the importer or disposer within 30 days from the time the illegal traffic has come to the attention of the State of import. If the responsibility for the illegal traffic cannot be assigned to either Party, Parties shall ensure that the wastes are disposed of as soon as possible in an environmentally sound manner where appropriate.

(III) London Guidelines

There are no specific provisions relating to control of illegal traffic; the required periodic reviews could, however, provide opportunity for discussion of such issues.

Designated national authorities of States of import should provide to IRPTC a summary of action taken as a result of notifications and information received and information on any difficulties which they have experienced in using these Guidelines.

(IV) WHO Certification Scheme

There are no specific provisions relating to control of illegal traffic. The scheme provide for informal communication between the Parties involved and with WHO.

(V) OECD Recommendation

There are no specific provisions relating to control of illegal traffic by member countries in the Recommendation.

Most countries follow a voluntary approach in implementing the Recommendation, even where there exists legislative authority to impose a mandatory notification scheme. These voluntary schemes have included an industry code of conduct, a contract between industry and the government, and a commitment by industry to co-operate to meet the objectives of the Act.

G. INTERNATIONAL CO-OPERATION AND TECHNICAL ASSISTANCE

(I) Montreal Protocol

Parties must:

- facilitate access to environmentally safe alternative substances and technology for Parties that are developing countries;
- facilitate bilateral or multilateral funding mechanisms for the use of alternatives;
- co-operate in promoting, directly or through competent international bodies, research, development, public awareness and exchange of information on technologies, alternatives and costs and benefits of control strategies.
- co-operate in promoting technical assistance to facilitate participation in an implementation of the Protocol, taking into account the special needs of developing countries.

Modalities for establishing international financial and other mechanisms to implement these measures are presently being discussed.

(II) Basel Convention

Parties shall:

- make available, upon request, information to promote the environmentally sound management of hazardous wastes and other wastes, including harmonization of technical standards and practices for the adequate management of such wastes;
- co-operate in the development, implementation and transfer of new environmentally sound, low-waste technologies and the improvement of existing technologies that seek to eliminate the generation of such wastes;
- co-operate in developing the technical capacity among Parties, especially those which may need and request technical assistance in this field.

(III) London Guidelines

States should facilitate the exchange of scientific information and technical, economic and legal information concerning the management of chemicals, through designated national governmental authorities and through intergovernmental organizations and provide this information to other States which so desire it, taking into account the special needs of developing countries.

Designated national authorities should receive, from the United Nations, the regular updates of the United Nations Consolidated List of Products Whose Consumption and/or Sale have been Banned, Withdrawn or Severely Restricted by Governments.

The IRPTC should encourage funding agencies, such as the development banks, the United Nations Development Programme, and bilateral donors to provide training, technical assistance and funding for institutional strengthening and should further encourage other United Nations Organizations to strengthen their activities related to safe management of chemicals.

The Guidelines outline essential elements of technical assistance needed by developing countries for the management of chemicals such as: strengthening existing infrastructure, providing for the interchange of experts to share information and advice, training through technical workshops, awareness campaigns, and opportunities for decision makers in developing countries to study successful systems in other countries.

(IV) WHO Certification Scheme

There are no specific provisions involving international co-operation and technical assistance in the Certification Scheme. However, WHO invites bilateral and multilateral agencies inside and outside the UN system, and voluntary agencies, to support developing countries in setting up and carrying out programmes aimed at ensuring the rational use of drugs.

The forty-first session of the World Health Assembly, held in May 1988, requested the Director-General of WHO to initiate programmes for the prevention and detection of the export, import and smuggling of falsely labelled spurious, counterfeited or sub-standard pharmaceutical preparations.

(V) OECD Recommendation

There is no specific provision for international co-operation nor for technical assistance in the Recommendation. However, it is emphasized that exporting member countries should provide the information related to banned or severely restricted chemicals not only to member countries but also to non-member countries, and States. Thus, information is to be transmitted to those Third World countries with perhaps the greatest need for assistance in relation to impacts of hazardous chemicals.

H. PROCEDURES FOR REVIEW AND DISPUTE SETTLEMENT

(I) Montreal Protocol

An open-ended Working Group of legal experts has been established to develop and submit to the (UNEP) Secretariat by 1 November 1989 proposals for determining non-compliance with the provisions of the Protocol and for the treatment of Parties that fail to comply with its terms.

(II) Basel Convention

In case of a dispute as to the interpretation or application or compliance with this Convention or any protocol thereto, Parties shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice. If this is unsuccessful, the dispute shall be submitted to the International Court of Justice or to arbitration under the conditions set out in Annex VI of the Convention, while continuing to seek resolution by the first means.

(III) London Guidelines

There are no specific dispute settlement procedures in the Guidelines other than communicating dissatisfaction through IRPTC.

(IV) WHO Certification Scheme

There are no specific dispute settlement procedures in the Certification Scheme other than informal contact between the competent authorities of the member States and WHO.

(V) OECD Recommendation

There is no dispute settlement procedures in the Recommendation other than the required three-year reviews in which concerns may be expressed.

Annex ICATEGORIES OF WASTES TO BE CONTROLLEDWaste 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 phosphorous compounds
- Y38 Organic cyanides
- Y39 Phenols; phenol compounds including chlorophenols
- Y40 Ethers
- Y41 Halogenated organic solvents
- Y42 Organic solvents excluding halogenated solvents
- Y43 Any congener of polychlorinated dibenzo-furan
- Y44 Any congener of polychlorinated dibenzo-p-dioxin
- Y45 Organohalogen compounds other than substances referred to in this Annex (eg. Y39, Y41, Y42, Y43, Y44).

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

<u>UN Class*</u>	<u>Code</u>	<u>Characteristics</u>
1	H1	Explosive 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 a speed as to cause damage to the surroundings.
3	H3	Flammable liquids 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 60.5°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.)
4.1	H4.1	Flammable solids 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 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 Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

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

- 5.1 H5.1 Oxidizing
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
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)
Substances or wastes liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact.
- 6.2 H6.2 Infectious substances
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
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
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)
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
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.

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 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 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, neutralisation, 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