

ANNEX I

DISPOSAL OPERATIONS

D 1

Deposit into or on to land (e.g. landfill, etc.)

D 2 Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)

D 3 Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)

D 4 Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.)

D 5 Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)

D 6 Release into a water body except seas/oceans

D 7 Release to seas/oceans including sea-bed insertion

D 8 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 numbered D 1 to D 12

D 9 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 numbered D 1 to D 12 (e.g. evaporation, drying, calcination, etc.)

D 10 Incineration on land

D 11 Incineration at sea⁽¹⁾

D 12 Permanent storage (e.g. emplacement of containers in a mine, etc.)

D 13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12⁽²⁾

D 14 Repackaging prior to submission to any of the operations numbered D 1 to D 13

D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced)⁽³⁾

ANNEX II

RECOVERY OPERATIONS

R 1

Use principally as a fuel or other means to generate energy⁽⁴⁾

R 2 Solvent reclamation/regeneration

R 3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)⁽⁵⁾

- R 4 Recycling/reclamation of metals and metal compounds
- R 5 Recycling/reclamation of other inorganic materials⁽⁶⁾
- R 6 Regeneration of acids or bases
- R 7 Recovery of components used for pollution abatement
- R 8 Recovery of components from catalysts
- R 9 Oil re-refining or other reuses of oil
- R 10 Land treatment resulting in benefit to agriculture or ecological improvement
- R 11 Use of waste obtained from any of the operations numbered R 1 to R 10
- R 12 Exchange of waste for submission to any of the operations numbered R 1 to R 11⁽⁷⁾
- R 13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced)⁽⁸⁾

ANNEX III

PROPERTIES OF WASTE WHICH RENDER IT HAZARDOUS

H 1

‘Explosive’: substances and preparations which may explode under the effect of flame or which are more sensitive to shocks or friction than dinitrobenzene.

H 2 ‘Oxidizing’: substances and preparations which exhibit highly exothermic reactions when in contact with other substances, particularly flammable substances.

H 3-A ‘Highly flammable’

- liquid substances and preparations having a flash point below 21 °C (including extremely flammable liquids), or
- substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or
- solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or
- gaseous substances and preparations which are flammable in air at normal pressure, or
- substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.

H 3-B ‘Flammable’: liquid substances and preparations having a flash point equal to or greater than 21 °C and less than or equal to 55 °C.

H 4 ‘Irritant’: non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.

H 5 ‘Harmful’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks.

- H 6 ‘Toxic’: substances and preparations (including very toxic substances and preparations) which, if they are inhaled or ingested or if they penetrate the skin, may involve serious, acute or chronic health risks and even death.
- H 7 ‘Carcinogenic’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence.
- H 8 ‘Corrosive’: substances and preparations which may destroy living tissue on contact.
- H 9 ‘Infectious’: substances and preparations containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms.
- H 10 ‘Toxic for reproduction’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce non-hereditary congenital malformations or increase their incidence.
- H 11 ‘Mutagenic’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce hereditary genetic defects or increase their incidence.
- H 12 Waste which releases toxic or very toxic gases in contact with water, air or an acid.
- H 13⁽⁹⁾ ‘Sensitizing’: substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced.
- H 14 ‘Ecotoxic’: waste which presents or may present immediate or delayed risks for one or more sectors of the environment.
- H 15 Waste capable by any means, after disposal, of yielding another substance, e.g. a leachate, which possesses any of the characteristics listed above.

Notes

1. Attribution of the hazardous properties ‘toxic’ (and ‘very toxic’), ‘harmful’, ‘corrosive’, ‘irritant’, ‘carcinogenic’, ‘toxic to reproduction’, ‘mutagenic’ and ‘ecotoxic’ is made on the basis of the criteria laid down by Annex VI, to Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances⁽¹⁰⁾.
2. Where relevant the limit values listed in Annex II and III to Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations⁽¹¹⁾ shall apply.

Test methods

The methods to be used are described in Annex V to Directive 67/548/EEC and in other relevant CEN-notes.

ANNEX IV

EXAMPLES OF WASTE PREVENTION MEASURES REFERRED TO IN ARTICLE 29
Measures that can affect the framework conditions related to the generation of waste

1. The use of planning measures, or other economic instruments promoting the efficient use of resources.
2. The promotion of research and development into the area of achieving cleaner and less wasteful products and technologies and the dissemination and use of the results of such research and development.
3. The development of effective and meaningful indicators of the environmental pressures associated with the generation of waste aimed at contributing to the prevention of waste generation at all levels, from product comparisons at Community level through action by local authorities to national measures.

Measures that can affect the design and production and distribution phase

4. The promotion of eco-design (the systematic integration of environmental aspects into product design with the aim to improve the environmental performance of the product throughout its whole life cycle).
5. The provision of information on waste prevention techniques with a view to facilitating the implementation of best available techniques by industry.
6. Organise training of competent authorities as regards the insertion of waste prevention requirements in permits under this Directive and Directive 96/61/EC.
7. The inclusion of measures to prevent waste production at installations not falling under Directive 96/61/EC. Where appropriate, such measures could include waste prevention assessments or plans.
8. The use of awareness campaigns or the provision of financial, decision making or other support to businesses. Such measures are likely to be particularly effective where they are aimed at, and adapted to, small and medium sized enterprises and work through established business networks.
9. The use of voluntary agreements, consumer/producer panels or sectoral negotiations in order that the relevant businesses or industrial sectors set their own waste prevention plans or objectives or correct wasteful products or packaging.
10. The promotion of creditable environmental management systems, including EMAS and ISO 14001.

Measures that can affect the consumption and use phase

11. Economic instruments such as incentives for clean purchases or the institution of an obligatory payment by consumers for a given article or element of packaging that would otherwise be provided free of charge.
12. The use of awareness campaigns and information provision directed at the general public or a specific set of consumers.
13. The promotion of creditable eco-labels.
14. Agreements with industry, such as the use of product panels such as those being carried out within the framework of Integrated Product Policies or with retailers on the

availability of waste prevention information and products with a lower environmental impact.

15. In the context of public and corporate procurement, the integration of environmental and waste prevention criteria into calls for tenders and contracts, in line with the Handbook on environmental public procurement published by the Commission on 29 October 2004.
16. The promotion of the reuse and/or repair of appropriate discarded products or of their components, notably through the use of educational, economic, logistic or other measures such as support to or establishment of accredited repair and reuse-centres and networks especially in densely populated regions.

ANNEX V

CORRELATION TABLE

Directive 2006/12/EC	This Directive
Article 1(1)(a)	Article 3(1)
Article 1(1)(b)	Article 3(5)
Article 1(1)(c)	Article 3(6)
Article 1(1)(d)	Article 3(9)
Article 1(1)(e)	Article 3(19)
Article 1(1)(f)	Article 3(15)
Article 1(1)(g)	Article 3(10)
Article 1(2)	Article 7
Article 2(1)	Article 2(1)
Article 2(1)(a)	Article 2(1)(a)
Article 2(1)(b)	Article 2(2)
Article 2(1)(b)(i)	Article 2(1)(d)
Article 2(1)(b)(ii)	Article 2(2)(d)
Article 2(1)(b)(iii)	Article 2(1)(f) and (2)(c)
Article 2(1)(b)(iv)	Article 2(2)(a)
Article 2(1)(b)(v)	Article 2(1)(e)
Article 2(2)	Article 2(4)
Article 3(1)	Article 4
Article 4(1)	Article 13
Article 4(2)	Article 36(1)
Article 5	Article 16

Status: This is the original version (as it was originally adopted).

Article 6	—
Article 7	Article 28
Article 8	Article 15
Article 9	Article 23
Article 10	Article 23
Article 11	Articles 24 and 25
Article 12	Article 26
Article 13	Article 34
Article 14	Article 35
Article 15	Article 14
Article 16	Article 37
Article 17	Article 38
Article 18(1)	Article 39(1)
—	Article 39(2)
Article 18(2)	—
Article 18(3)	Article 39(3)
Article 19	Article 40
Article 20	—
Article 21	Article 42
Article 22	Article 43
Annex I	—
Annex IIA	Annex I
Annex IIB	Annex II
Directive 75/439/EEC	This Directive
Article 1(1)	Article 3(18)
Article 2	Articles 13 and 21
Article 3(1) and (2)	—
Article 3(3)	Article 13
Article 4	Article 13
Article 5(1)	—
Article 5(2)	—
Article 5(3)	—
Article 5(4)	Articles 26 and 34
Article 6	Article 23

Article 7(a)	Article 13
Article 7(b)	—
Article 8(1)	—
Article 8(2)(a)	—
Article 8(2)(b)	—
Article 8(3)	—
Article 9	—
Article 10(1)	Article 18
Article 10(2)	Article 13
Article 10(3) and (4)	—
Article 10(5)	Articles 19, 21, 25, 34 and 35
Article 11	—
Article 12	Article 35
Article 13(1)	Article 34
Article 13(2)	—
Article 14	—
Article 15	—
Article 16	—
Article 17	—
Article 18	Article 37
Article 19	—
Article 20	—
Article 21	—
Article 22	—
Annex I	—
Directive 91/689/EEC	This Directive
Article 1(1)	—
Article 1(2)	—
Article 1(3)	—
Article 1(4)	Articles 3(2) and 7
Article 1(5)	Article 20
Article 2(1)	Article 23
Article 2(2)-(4)	Article 18
Article 3	Articles 24, 25 and 26

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Article 4(1)	Article 34(1)
Article 4(2)(3)	Article 35
Article 5(1)	Article 19(1)
Article 5(2)	Article 34(2)
Article 5(3)	Article 19(2)
Article 6	Article 28
Article 7	—
Article 8	—
Article 9	—
Article 10	—
Article 11	—
Article 12	—
Annexes I and II	—
Annex III	Annex III

- (1) This operation is prohibited by EU legislation and international conventions.
- (2) If there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, inter alia, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12.
- (3) Temporary storage means preliminary storage according to point (10) of Article 3.
- (4) This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:
 - 0,60 for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009,
 - 0,65 for installations permitted after 31 December 2008,using the following formula:
Energy efficiency = $(E_p - (E_f + E_i)) / (0,97 \times (E_w + E_f))$
In which:
 - Ep means annual energy produced as heat or electricity. It is calculated with energy in the form of electricity being multiplied by 2,6 and heat produced for commercial use multiplied by 1,1 (GJ/year)
 - Ef means annual energy input to the system from fuels contributing to the production of steam (GJ/year)
 - Ew means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year)
 - Ei means annual energy imported excluding Ew and Ef (GJ/year)
 - 0,97 is a factor accounting for energy losses due to bottom ash and radiation.This formula shall be applied in accordance with the reference document on Best Available Techniques for waste incineration.
- (5) This includes gasification and pyrolysis using the components as chemicals.
- (6) This includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.
- (7) If there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, inter alia, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11.
- (8) Temporary storage means preliminary storage according to point (10) of Article 3.
- (9) As far as testing methods are available.
- (10) [OJ 196, 16.8.1967, p. 1.](#)
- (11) [OJ L 200, 30.7.1999, p. 1.](#)