COUNCIL DIRECTIVE

of 16 June 1988

amending Annex II to Directive 86/280/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC

(88/347/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130 S thereof,

Having regard to Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community [1], and in particular Articles 6 and 12 thereof,

Having regard to Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC [2],

Having regard to the proposal from the Commission [3],

Having regard to the opinion of the European Parliament [4],

Having regard to the opinion of the Economic and Social Committee [5],

Whereas, in order to protect the aquatic environment of the Community against pollution by certain dangerous substances, Article 3 of Directive 76/464/EEC introduces a system of prior authorization laying down emission standards for discharges of the substances in List I in the Annex thereto; whereas Article 6 of the said Directive provides that limit values shall be laid down for such emission standards and also quality objectives for the aquatic environment affected by discharges of the substances;

Whereas Member States are required to apply the limit values except in cases where they may employ quality objectives;

Whereas Directive 86/280/EEC will have to be amended and supplemented, on proposals from the Commission, in line with developments in scientific knowledge relating principally to the toxicity, persistence and accumulation of the substances referred to in living organisms and sediments, or in the event of an improvement in the best technical means available; whereas it is necessary, for that purpose, to provide for additions to the said Directive, relating to measures in respect of other dangerous substances, and for amendments to the content of Annex II;

Whereas, on the basis of the criteria laid down in Directive 76/464/EEC, aldrin, dieldrin, endrin, isodrin, hexachlorobenzene, hexachlorobutadiene and chloroform should be made subject to the provisions of Directive 86/280/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annex II to Council Directive 86/280/EEC is amended as follows:

1. The following are added below the title:

'4. Relating to aldrin, dieldrin, endrin and isodrin

5. Relating to hexachlorobenzene

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[1] OJ No L 129, 18. 5. 1976, p. 23.
[2] OJ No L 181, 4. 7. 1986, p. 16.
[3] OJ No C 146, 12. 6. 1979, p. 5, OJ No C 309, 3. 12. 1986, p. 3, OJ No C 314, 26. 11. 1987, p. 5 and OJ No C 70, 18. 3. 1985, p. 15.
[4] OJ No C 122, 9. 5. 1988 and OJ No C 120, 20. 5. 1986, p. 164.
[5] OJ No C 232, 31. 8. 1987, p. 2, OJ No C 356, 31. 12. 1987, p. 69 and OJ No C 188, 29. 7. 1985, p. 19.

6. Relating to hexachlorobutadiene
7. Relating to chloroform'.

2. The following sections are added:

'IV. **Specific provisions relating to:**

— **aldrin (No 1)** (1) CAS-No 309-00-2
— **dieldrin (No 71)** (2) CAS-No 60-57-1
— **endrin (No 77)** (3) CAS-No 72-20-8
— **isodrin (No 130)** (4) CAS-No 465-73-6

(1) Aldrin is the chemical compound $C_{12}H_8Cl_6$
1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-1, 4-endo-5, 8-exo-dimethanonaphtalene.

(2) Dieldrin is the chemical compound $C_{12}H_8C1_6O$
1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-5, 8-exo-dimethanonaphtalene.

(3) Endrin is the chemical compound $C_{12}H_8C1_6O$
1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-5, 8-endo-dimethanonaphtalene.

(4) Isodrin is the chemical compound $C_{12}H_8C1_6$
1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-1, 4-endo-5, 8-endo-dimethanonaphtalene.

Heading A (1, 71, 77, 130): Limit values for emission standards (1)

Type of industrial plant (2)	Type of average value	Limit value expressed as		To be complied with as from
		Weight	Concentration in effluent µg/l of water discharged (3)	
Production of aldrin and/or dieldrin and/or endrin including formulation of these substances on the same site	Monthly	3 g per tonne of total production capacity (g/tonne)	2	1. 1. 1989
	Daily	15 g per tonne of total production capacity (g/tonne) (4)	10 (4)	1. 1. 1989

(1) The limit values indicated in this heading shall apply to the total discharge of aldrin, dieldrin and endrin. If the effluent resulting from the production or use of aldrin, dieldrin and/or endrin (including formulation of these substances) also contains isodrin, the limit values laid down above shall apply to the total discharges of aldrin, dieldrin, endrin and isodrin.

(2) Among the industrial plants referred to under heading A, point 3, of Annex I, reference is made in particular to plants formulating aldrin, and/or dieldrin and/or endrin away from the production site.

(3) These figures take account of the total amount of water passing through the plant.

(4) If possible, daily values should not exceed twice the monthly value.

Heading B (1, 71, 77, 130): Quality objectives

Environment	Substance	Quality objectives ng/l to be complied with as from	
		1. 1. 1989	1. 1. 1994
Inland surface waters	Aldrin	30 for the four substances in total with a maximum of 5 for endrin	10
Estuary waters	Dieldrin		10
Internal coastal waters other than estuary waters	Endrin		5
Territorial waters	Isodrin		5

Standstill: The concentration(s) of aldrin and/or dieldrin and/or endrin and/or isodrin in sediments and/or molluscs and/or shellfish and/or fish must not increase significantly with time.

Heading C (1, 71, 77, 130): Reference method of measurement

1. The reference method of measurement to be used for determining aldrin, dieldrin, endrin and/or isodrin in effluents and the aquatic environment is gas chromatography with electron-capture detection after extraction by means of an appropriate solvent. The limit of determination (1) for each substance is 2,5 ng/l for the aquatic environment and 400 ng/l for effluents, depending on the number of parasite substances present in the sample.

2. The reference method to be used for determining aldrin, dieldrin and/or endrin and/or isodrin in sediments and organisms is gas chromatography with electron-capture detection after appropriate preparation of samples. The limit of determination is 1 µg/kg dry weight for each separate substance.

3. The accuracy and precision of the method must be ± 50 % at a concentration which represents twice the value of the limit of determination.

(1) The "limit of determination" x g of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

V. Specific provisions relating to hexachlorobenzene (HCB) (No 83)

CAS-118-74-1

Heading A (83): Limit values for emission standards

Standstill: There must be no significant direct or indirect increase over time in pollution arising from discharges of HCB and affecting concentrations in sediments and/or molluscs and/or shellfish and/or fish.

Type of industrial plant (1) (2) (3)	Type of average value	Limit values expressed as		To be complied with as from
		weight	concentration	
1. HCB production and processing	monthly	10 g HCB/tonne of HCB production capacity	1 mg/l of HCB	1. 1. 1990
	daily	20 g HCB/tonne of HCB production capacity	2 mg/l of HCB	
2. Production of perchloro ethylene (PER) and carbon tetrachloride (CCl_4) by perchlorination	monthly	1,5 g HCB/tonne of PER + CCl_4 total production capacity	1,5 mg/l of HCB	1. 1. 1990
	daily	3 g HCB/tonne of PER + CCl_4 total production capacity	3 mg/l of HCB	
3. Production of trichloroethylene and/or perchloroethylene by any other process (4)	monthly	—	—	—
	daily	—	—	—

(1) A simplified monitoring procedure may be introduced if annual discharges do not exceed 1 kg a year.

(2) Among the industrial plants referred to in Annex I, heading A, point 3, reference is made in particular to industrial plants producing quintozene and tecnazene, industrial plants producing chlorine by chlor-alkali electrolysis with graphite electrodes, industrial rubber processing plants, plants manufacturing pyrotechnic products and plants producing vinylchloride.

(3) On the basis of experience gained in implementing the Directive, and taking into account the fact that the use of best technical means already makes it possible to apply in some cases much more stringent values than those indicated above, the Council shall decide, on the basis of proposals from the Commission, upon more stringent limit values, such decision to be taken by 1 January 1995.

(4) It is not possible at present to adopt limit values for this sector. The Council shall adopt such limit values at a later stage, acting on a proposal from the Commission. In the meantime, Member States will apply national emission standards in accordance with Annex I, heading A, point 3.