

## II

*(Acts whose publication is not obligatory)*

## COUNCIL

### COUNCIL DIRECTIVE

of 17 December 1979

**on the protection of groundwater against pollution caused by certain dangerous substances**

(80/68/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the European Parliament <sup>(2)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(3)</sup>,

Whereas there is an urgent need for action to protect the groundwater of the Community from pollution, particularly that caused by certain toxic, persistent and bioaccumulable substances ;

Whereas the 1973 programme of action of the European Communities on the environment <sup>(4)</sup>, supplemented by that of 1977 <sup>(5)</sup>, provides for a number of measures to protect groundwater from certain pollutants ;

Whereas Article 4 of Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain

dangerous substances discharged into the aquatic environment of the Community <sup>(6)</sup> provides for the implementation of a separate Directive on groundwater ;

Whereas any disparity between the provisions on the discharge of certain dangerous substances into groundwater already applicable or in preparation in the Member States may create unequal conditions of competition and thus directly affect the functioning of the common market ; whereas it is therefore necessary to approximate laws in this field, as provided for in Article 100 of the Treaty ;

Whereas it is necessary for this approximation of laws to be accompanied by Community action in the sphere of environmental protection and improvement of the quality of life ; whereas certain specific provisions to this effect should therefore be laid down ; whereas Article 235 of the Treaty should be invoked as the requisite powers have not been provided for by the Treaty ;

Whereas the following should be excluded from the scope of this Directive : domestic effluent from certain isolated dwellings and discharges containing substances in lists I or II in very small quantities and concentrations, on account of the low risk of pollution and the difficulty of controlling the discharge of such effluent ; whereas discharges of matter containing radioactive substances, which will be dealt with in a specific Community instrument, should also be excluded ;

<sup>(1)</sup> OJ No C 37, 14. 2. 1978, p. 3.

<sup>(2)</sup> OJ No C 296, 11. 12. 1978, p. 35.

<sup>(3)</sup> OJ No C 283, 27. 11. 1978, p. 39.

<sup>(4)</sup> OJ No C 112, 20. 12. 1973, p. 3.

<sup>(5)</sup> OJ No C 139, 13. 6. 1977, p. 3.

<sup>(6)</sup> OJ No L 129, 18. 5. 1976, p. 23.

Whereas to ensure the effective protection of groundwater in the Community it is necessary to prevent the discharge of substances in list I and limit the discharge of substances in list II;

Whereas a distinction should be drawn between direct discharges of dangerous substances into groundwater and actions likely to result in indirect discharges;

Whereas, with the exception of direct discharges of substances in list I, which are automatically prohibited, all discharges must be made subject to a system of authorization; whereas such authorizations may only be delivered after a survey of the receiving environment;

Whereas provision should be made for exceptions to the rules prohibiting discharges into groundwater of substances in list I, after a survey has been made of the receiving environment and prior authorization given, provided that the discharge is made into groundwater permanently unsuitable for any other use, particularly domestic or agricultural purposes;

Whereas artificial recharges of groundwater intended for public water supplies should be made subject to special rules;

Whereas the competent authorities of the Member States should monitor compliance with the conditions laid down in the authorizations and the effects of discharges on groundwater;

Whereas an inventory should be kept of authorization of discharges into groundwater of substances in list I and of direct discharges into groundwater of substances in list II, and an inventory of authorizations for artificial recharges for the purpose of groundwater management;

Whereas, to the extent that the Hellenic Republic is to become a member of the European Economic Community on 1 January 1981 in accordance with the Act concerning the conditions of accession of the Hellenic Republic and the adjustments to the Treaties, it appears necessary that, for that State, the period granted to Member States to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive should be extended from two to four years, bearing in mind the inadequacy of that State's technical and administrative infrastructure,

HAS ADOPTED THIS DIRECTIVE:

#### *Article 1*

1. The purpose of this Directive is to prevent the pollution of groundwater by substances belonging to

the families and groups of substances in lists I or II in the Annex, hereinafter referred to as 'substances in lists I or II', and as far as possible to check or eliminate the consequences of pollution which has already occurred.

2. For the purposes of this Directive:

- (a) 'groundwater' means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;
- (b) 'direct discharge' means the introduction into groundwater of substances in lists I or II without percolation through the ground or subsoil;
- (c) 'indirect discharge' means the introduction into groundwater of substances in lists I or II after percolation through the ground or subsoil;
- (d) 'pollution' means the discharge by man, directly or indirectly, of substances or energy into groundwater, the results of which are such as to endanger human health or water supplies, harm living resources and the aquatic ecosystem or interfere with other legitimate uses of water.

#### *Article 2*

This Directive shall not apply to:

- (a) discharges of domestic effluents from isolated dwellings not connected to a sewerage system and situated outside areas protected for the abstraction of water for human consumption;
- (b) discharges which are found by the competent authority of the Member State concerned to contain substances in lists I or II in a quantity and concentration so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater;
- (c) discharges of matter containing radioactive substances.

#### *Article 3*

Member States shall take the necessary steps to:

- (a) prevent the introduction into groundwater of substances in list I; and
- (b) limit the introduction into groundwater of substances in list II so as to avoid pollution of this water by these substances.

#### *Article 4*

1. To comply with the obligation referred to in Article 3 (a), Member States:

- shall prohibit all direct discharge of substances in list I,

- shall subject to prior investigation any disposal or tipping for the purpose of disposal of these substances which might lead to indirect discharge. In the light of that investigation, Member States shall prohibit such activity or shall grant authorization provided that all the technical precautions necessary to prevent such discharge are observed,
- shall take all appropriate measures they deem necessary to prevent any indirect discharge of substances in list I due to activities on or in the ground other than those mentioned in the second indent. They shall notify such measures to the Commission, which, in the light of this information, may submit proposals to the Council for revision of this Directive.

2. However, should prior investigation reveal that the groundwater into which the discharge of substances in list I is envisaged is permanently unsuitable for other uses, especially domestic or agricultural, the Member States may authorize the discharge of these substances provided that their presence does not impede exploitation of ground resources.

These authorizations may be granted only if all technical precautions have been taken to ensure that these substances cannot reach other aquatic systems or harm other ecosystems.

3. Member States may, after prior investigation, authorize discharges due to re-injection into the same aquifer of water used for geothermal purposes, water pumped out of mines and quarries or water pumped out for civil engineering works.

#### *Article 5*

1. To comply with the obligation referred to in Article 3 (b), Member States shall make subject to prior investigation :

- all direct discharge of substances in list II, so as to limit such discharges,
- the disposal or tipping for the purpose of disposal of these substances which might lead to indirect discharge.

In the light of that investigation, Member States may grant an authorization, provided that all the technical precautions for preventing groundwater pollution by these substances are observed.

2. Furthermore, Member States shall take the appropriate measures they deem necessary to limit all indirect discharge of substances in list II, due to activities on or in the ground other than those mentioned in the first paragraph.

#### *Article 6*

Notwithstanding Articles 4 and 5, artificial recharges for the purpose of groundwater management shall be subject to a special authorization issued by the Member States on a case-by-case basis. Such authorization shall be granted only if there is no risk of polluting the groundwater.

#### *Article 7*

The prior investigations referred to in Articles 4 and 5 shall include examination of the hydrogeological conditions of the area concerned, the possible purifying powers of the soil and subsoil and the risk of pollution and alteration of the quality of the groundwater from the discharge and shall establish whether the discharge of substances into groundwater is a satisfactory solution from the point of view of the environment.

#### *Article 8*

The authorizations referred to in Articles 4, 5 and 6 may not be issued by the competent authorities of the Member States until it has been checked that the groundwater, and in particular its quality, will undergo the requisite surveillance.

#### *Article 9*

When direct discharge is authorized in accordance with Article 4 (2) and (3) or Article 5, or when waste water disposal which inevitably causes indirect discharge is authorized in accordance with Article 5, the authorization shall specify in particular :

- the place of discharge,
- the method of discharge,
- essential precautions, particular attention being paid to the nature and concentration of the substances present in the effluents, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water,
- the maximum quantity of a substance permissible in an effluent during one or more specified periods of time and the appropriate requirements as to the concentration of these substances,
- the arrangements enabling effluents discharged into groundwater to be monitored ;
- if necessary, measures for monitoring groundwater, and in particular its quality.

*Article 10*

When disposal or tipping for the purpose of disposal which might lead to indirect discharge is authorized in accordance with Articles 4 or 5, authorization shall specify in particular :

- the place where such disposal or tipping is done,
- the methods of disposal or tipping used,
- essential precautions, particular attention being paid to the nature and concentration of the substances present in the matter to be tipped or disposed of, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water,
- the maximum quantity permissible, during one or more specified periods of time, of the matter containing substances in lists I or II and, where possible, of those substances themselves, to be tipped or disposed of and the appropriate requirements as to the concentration of those substances,
- in the cases referred to in Article 4 (1) and Article 5 (1) the technical precautions to be implemented to prevent any discharge into groundwater of substances in list I and any pollution of such water by substances in list II,
- if necessary, the measures for monitoring the groundwater, and in particular its quality.

*Article 11*

The authorizations referred to in Articles 4 and 5 may be granted for a limited period only, and will be reviewed at least every four years. They may be renewed, amended or withdrawn.

*Article 12*

1. If the person requesting an authorization as referred to in Articles 4 or 5 states that he is unable to comply with the conditions laid down, or if this situation is evident to the competent authority in the Member State concerned, authorization shall be refused.

2. Should the conditions laid down in an authorization not be complied with, the competent authority in the Member State concerned shall take appropriate steps to ensure that these conditions are fulfilled; if necessary, it shall withdraw the authorization.

*Article 13*

The competent authorities of the Member States shall monitor compliance with the conditions laid down in

the authorizations and the effects of discharges on groundwater.

*Article 14*

As regards discharges of the substances in lists I or II already occurring at the time of notification of this Directive, the Member States may stipulate a period not exceeding four years after entry into force of the provisions referred to in Article 21 (1), on expiry of which the discharges in question must comply with this Directive.

*Article 15*

The competent authorities of the Member States shall keep an inventory of the authorizations referred to in Article 4 of discharges of substances in list I, the authorizations referred to in Article 5 of direct discharges of substances in list II and the authorizations referred to in Article 6.

*Article 16*

1. For the purposes of implementing this Directive, Member States shall supply the Commission, at its request and on a case-by-case basis, with all the necessary information, and in particular with :

- (a) the results of the prior investigations referred to in Articles 4 and 5 ;
- (b) details of the authorizations granted ;
- (c) the results of the monitoring and inspection operations carried out ;
- (d) the results of the inventories provided for in Article 15.

2. Information acquired as a result of the application of this Article shall be used only for the purpose for which it was requested.

3. The Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information acquired by them pursuant to this Directive and of a kind covered by the obligation of professional secrecy.

4. The provisions of paragraphs 2 and 3 shall not prevent publication of general information or surveys which do not contain information relating to particular undertakings or associations of undertakings.

*Article 17*

With regard to discharges into transfrontier groundwater, the competent authority of the Member State which intends to grant authorization for such discharges shall inform the other Member States concerned before an authorization is issued. At the request of one of the Member States concerned and before an authorization is issued, consultations shall be held in which the Commission may participate.

*Article 18*

The application of the measures taken pursuant to this Directive may on no account lead, either directly or indirectly, to pollution of the water referred to in Article 1.

*Article 19*

Where appropriate, one or more Member States may individually or jointly take more stringent measures than those provided for under this Directive.

*Article 20*

The Council, acting on a proposal from the Commission, shall, in the light of experience, revise and, if necessary, supplement lists I and II, where appropriate, by transferring certain substances from list II to list I.

*Article 21*

1. The Member States shall bring into force the laws, regulations and administrative provisions neces-

sary to comply with this Directive within two years of its notification. They shall immediately inform the Commission thereof.

However, this period shall be increased to four years for the Hellenic Republic, subject to its accession on 1 January 1981.

2. The Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

3. Once the measures referred to in paragraph 1 have been implemented by a Member State, the provisions of Directive 76/464/EEC relating to groundwater shall no longer apply in respect of that Member State.

*Article 22*

This Directive is addressed to the Member States.

Done at Brussels, 17 December 1979.

*For the Council*

*The President*

S. BARRETT

**ANNEX****LIST I OF FAMILIES AND GROUPS OF SUBSTANCES**

List I contains the individual substances which belong to the families and groups of substances enumerated below, with the exception of those which are considered inappropriate to list I on the basis of a low risk of toxicity, persistence and bioaccumulation.

Such substances which with regard to toxicity, persistence and bioaccumulation are appropriate to list II are to be classed in list II.

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment
2. Organophosphorus compounds
3. Organotin compounds
4. Substances which possess carcinogenic mutagenic or teratogenic properties in or via the aquatic environment <sup>(1)</sup>
5. Mercury and its compounds
6. Cadmium and its compounds
7. Mineral oils and hydrocarbons
8. Cyanides.

**LIST II OF FAMILIES AND GROUPS OF SUBSTANCES**

List II contains the individual substances and the categories of substances belonging to the families and groups of substances listed below which could have a harmful effect on groundwater.

1. The following metalloids and metals and their compounds :

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|---------------|---------------|
| 1. Zinc       | 11. Tin       |
| 2. Copper     | 12. Barium    |
| 3. Nickel     | 13. Beryllium |
| 4. Chrome     | 14. Boron     |
| 5. Lead       | 15. Uranium   |
| 6. Selenium   | 16. Vanadium  |
| 7. Arsenic    | 17. Cobalt    |
| 8. Antimony   | 18. Thallium  |
| 9. Molybdenum | 19. Tellurium |
| 10. Titanium  | 20. Silver.   |

2. Biocides and their derivatives not appearing in list I.
3. Substances which have a deleterious effect on the taste and/or odour of groundwater, and compounds liable to cause the formation of such substances in such water and to render it unfit for human consumption.
4. Toxic or persistent organic compounds of silicon, and substances which may cause the formation of such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
5. Inorganic compounds of phosphorus and elemental phosphorus.
6. Fluorides.
7. Ammonia and nitrites.

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<sup>(1)</sup> Where certain substances in list II are carcinogenic, mutagenic or teratogenic, they are included in category 4 of this list.