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COUNCIL DIRECTIVE

of 12 December 1991

concerning the protection of waters against pollution caused by nitrates from agricultural sources

(91/676/EEC)

(OJ L 375 31.12.1991, p. 1)

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►M3	COMMISSION DIRECTIVE (EU) 2026/288 of 9 February 2026	L 288	1	10.2.2026

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COUNCIL DIRECTIVE

of 12 December 1991

concerning the protection of waters against pollution caused by nitrates from agricultural sources

(91/676/EEC)

Article 1

This Directive has the objective of:

— reducing water pollution caused or induced by nitrates from agricultural sources and

— preventing further such pollution.

Article 2

For the purpose 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) ‘freshwater’: means naturally occurring water having a low concentration of salts, which is often acceptable as suitable for abstraction and treatment to produce drinking water;

(c) ‘nitrogen compound’: means any nitrogen-containing substance except for gaseous molecular nitrogen;

(d) ‘livestock’: means all animals kept for use or profit;

(e) ‘fertilizer’: means any substance containing a nitrogen compound or nitrogen compounds utilized on land to enhance growth of vegetation; it may include livestock manure, the residues from fish farms and sewage sludge;

(f) ‘chemical fertilizer’: means any fertilizer which is manufactured by an industrial process;

(g) ‘livestock manure’: means waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, even in processed form;

(h) ‘land application’: means the addition of materials to land whether by spreading on the surface of the land, injection into the land, placing below the surface of the land or mixing with the surface layers of the land;

(i) ‘eutrophication’: means the enrichment of water by nitrogen compounds, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the

balance of organisms present in the water and to the quality of the water concerned;

(j) ‘pollution’: means the discharge, directly or indirectly, of nitrogen compounds from agricultural sources into the aquatic environment, the results of which are such as to cause hazards to human health, harm to living resources and to aquatic ecosystems, damage to amenities or interference with other legitimate uses of water;

(k) ‘vulnerable zone’: means an area of land designated according to Article 3 (2).

Article 3

1. Waters affected by pollution and waters which could be affected by pollution if action pursuant Article 5 is not taken shall be identified by the Member States in accordance with the criteria set out in Annex I.
2. Member States shall, within a two-year period following the notification of this Directive, designate as vulnerable zones all known areas of land in their territories which drain into the waters identified according to paragraph 1 and which contribute to pollution. They shall notify the Commission of this initial designation within six months.
3. When any waters identified by a Member State in accordance with paragraph 1 are affected by pollution from waters from another Member State draining directly or indirectly in to them, the Member States whose waters are affected may notify the other Member States and the Commission of the relevant facts.

The Member States concerned shall organize, where appropriate with the Commission, the concertation necessary to identify the sources in question and the measures to be taken to protect the waters that are affected in order to ensure conformity with this Directive.
4. Member States shall review if necessary revise or add to the designation of vulnerable zones as appropriate, and at last every four years, to take into account changes and factors unforeseen at the time of the previous designation. They shall notify the Commission of any revision or addition to the designations within six months.
5. Member States shall be exempt from the obligation to identify specific vulnerable zones, if they establish and apply action programmes referred to in Article 5 in accordance with this Directive throughout their national territory.

Article 4

1. With the aim of providing for all waters a general level of protection against pollution, Member States shall, within a two-year period following the notification of this Directive:

(a) establish a code or codes of good agricultural practice, to be implemented by farmers on a voluntary basis, which should contain provisions covering at least the items mentioned in Annex II A;

(b) set up where necessary a programme, including the provision of training and information for farmers, promoting the application of the code(s) of good agricultural practice.

2. Member States shall submit to the Commission details of their codes of good agricultural practice and the Commission shall include information on these codes in the report referred to in Article 11. In the light of the information received, the Commission may, if it considers it necessary, make appropriate proposals to the Council.

Article 5

1. Within a two-year period following the initial designation referred to in Article 3 (2) or within one year of each additional designation referred to in Article 3 (4), Member States shall, for the purpose of realizing the objectives specified in Article 1, establish action programmes in respect of designated vulnerable zones.

2. An action programme may relate to all vulnerable zones in the territory of a Member State or, where the Member State considers it appropriate, different programmes may be established for different vulnerable zones or parts of zones.

3. Action programmes shall take into account:

(a) available scientific and technical data, mainly with reference to respective nitrogen contributions originating from agricultural and other sources;

(b) environmental conditions in the relevant regions of the Member State concerned.

4. Action programmes shall be implemented within four years of their establishment and shall consist of the following mandatory measures:

(a) the measures in Annex III;

(b) those measures which Member States have prescribed in the code(s) of good agricultural practice established in accordance with Article 4, except those which have been superseded by the

measures in Annex III.

5. Member States shall moreover take, in the framework of the action programmes, such additional measures or reinforced actions as they consider necessary if, at the outset or in the light of experience gained in implementing the action programmes, it becomes apparent that the measures referred to in paragraph 4 will not be sufficient for achieving the objectives specified in Article 1. In selecting these measures or actions, Member States shall take into account their effectiveness and their cost relative to other possible preventive measures.

6. Member States shall draw up and implement suitable monitoring programmes to assess the effectiveness of action programmes established pursuant to this Article.

Member States which apply Article 5 throughout their national territory shall monitor the nitrate content of waters (surface waters and groundwater) at selected measuring points which make it possible to establish the extent of nitrate pollution in the waters from agricultural sources.

7. Member States shall review and if necessary revise their action programmes, including any additional measures taken pursuant to paragraph 5, at least every four years. They shall inform the Commission of any changes to the action programmes.

Article 6

1. For the purpose of designating and revising the designation of vulnerable zones, Member States shall:

(a) within two years of notification of the Directive, monitor the nitrate concentration in freshwaters over a period of one year:

  (i) at surface water sampling stations, laid down in Article 5 (4) of Directive 75/440/EEC and/or at other sampling stations which are representative of surface waters of Member States, at least monthly and more frequently during flood periods;

  (ii) at sampling stations which are representative of the groundwater aquifers of Member States, at regular intervals and taking into account the provisions of Directive 80/778/EEC;

(b) repeat the monitoring programme outlined in (a) at least every four years, except for those sampling stations where the nitrate concentration in all previous samples has been below 25 mg/l

and no new factor likely to increase the nitrage content has appeared, in which case the monitoring programme need be repeated only every eight years;

(c) review the eutrophic state of their fresh surface waters, estuarial and coastal waters every four years.

2. The reference methods of measurement set out in Annex IV shall be used.

Article 7

Guidelines for the monitoring referred to in Article 5 and 6 may be drawn up in accordance with the procedure laid down in Article 9.

Article 8

The Annexes to this Directive may be adapted to scientific and technical progress in accordance with the procedure laid down in Article 9.

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Article 9

1. The Commission shall be assisted by a committee.

2. Where reference is made to this Article, Articles 5 and 7 of Decision 1999/468/EC ([1]) shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The Committee shall adopt its rules of procedure.

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Article 10

1. Member States shall, in respect of the four-year period following the notification of this Directive and in respect of each subsequent four-year period, submit a report to the Commission containing the information outlined in Annex V.

2. A report pursuant to this Article shall be submitted to the Commission within six months of the end of the period to which it relates.

Article 11

On the basis of the information received pursuant to Article 10, the

Commission shall publish summary reports within six months of receiving the reports from Member States and shall communicate them to the European Parliament and to the Council. In the light of the implementation of the Directive, and in particular the provisions of Annex III, the Commission shall submit to the Council by 1 January 1998 a report accompanied where appropriate by proposals for revision of this Directive.

Article 12

1. The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification ([2]). They shall forthwith inform the Commission thereof.
2. When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.
3. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

Article 13

This Directive is addressed to the Member States.

ANNEX I

CRITERIA FOR IDENTIFYING WATERS REFERRED TO IN ARTICLE 3 (1)

A. Waters referred to in Article 3 (1) shall be identified making use, *inter alia,* of the following criteria:

   1. whether surface freshwaters, in particular those used or intended for the abstraction of drinking water, contain or could contain, if action pursuant to Article 5 is not taken, more than the concentration of nitrates laid down in accordance with Directive 75/440/EEC;

   2. whether groundwaters contain more than 50 mg/l nitrates or could contain more than 50 mg/l nitrates if action pursuant

to Article 5 is not taken;

3. whether natural freshwater lakes, other freshwater bodies, estuaries, coastal waters and marine waters are found to be eutrophic or in the near future may become euthropic if action pursuant to Article 5 is not taken.

B. In applying these criteria, Member States shall also take account of:

1. the pyhsical and environmental characteristics of the waters and land;

2. the current understanding of the behaviour of nitrogen compounds in the environment (water and soil);

3. the current understanding of the impact of the action taken pursuant to Article 5.

ANNEX II

CODE(S) OF GOOD AGRICULTURAL PRACTICE

A. A code or codes of good agricultural practice with the objective of reducing pollution by nitrates and taking account of conditions in the different regions of the Community should certain provisions covering the following items, in so far as they are relevant:

1. periods when the land application of fertilizer is inappropriate;

2. the land application of fertilizer to steeply sloping ground;

3. the land application of fertilizer to water-saturated, flooded, frozen or snow-covered ground;

4. the conditions for land application of fertilizer near water courses;

5. the capacity and construction of storage vessels for livestock manures, including measures to prevent water pollution by run-off and seepage into the groundwater and surface water of liquids containing livestock manures and effluents from stored plant materials such as silage;

6. procedures for the land application, including rate and

uniformity of spreading, of both chemical fertilizer and livestock manure, that will maintain nutrient losses to water at an acceptable level.

B. Member States may also include in their code(s) of good agricultural practices the following items:

7. land use management, including the use of crop rotation systems and the proportion of the land area devoted to permanent crops relative to annual tillage crops;

8. the maintenance of a minimum quantity of vegetation cover during (rainy) periods that will take up the nitrogen from the soil that could otherwise cause nitrate pollution of water;

9. the establishment of fertilizer plans on a farm-by-farm basis and the keeping of records on fertilizer use;

10. the prevention of water pollution from run-off and the downward water movement beyond the reach of crop roots in irrigation systems.

ANNEX III

MEASURES TO BE INCLUDED IN ACTION PROGRAMMES AS REFERRED TO IN ARTICLE 5 (4) (a)

1. The measures shall include rules relating to:

1. periods when the land application of certain types of fertilizer is prohibited;

2. the capacity of storage vessels for livestock manure; this capacity must exceed that required for storage throughout the longest period during which land application in the vulnerable zone is prohibited, except where it can be demonstrated to the competent authority that any quantity of manure in excess of the actual storage capacity will be disposed of in a manner which will not cause harm to the environment;

3. limitation of the land application of fertilizers, consistent with good agricultural practice and taking into account the

characteristics of the vulnerable zone concerned, in particular:

(a) soil conditions, soil type and slope;

(b) climatic conditions, rainfall and irrigation;

(c) land use and agricultural practices, including crop rotation systems;

and to be based on a balance between:

(i) the foreseeable nitrogen requirements of the crops,

and

(ii) the nitrogen supply to the crops from the soil and from fertilization corresponding to:

— the amount of nitrogen present in the soil at the moment when the crop starts to use it to a significant degree (outstanding amounts at the end of winter),

— the supply of nitrogen through the net mineralization of the reserves of organic nitrogen in the soil,

— additions of nitrogen compounds from livestock manure,

— additions of nitrogen compounds from chemical and other fertilizers.

2. These measures will ensure that, for each farm or livestock unit, the amount of livestock manure applied to the land each year, including by the animals themselves, shall not exceed a specified amount per hectare.

The specified amount per hectare be the amount of manure containing 170 kg N. However:

(a) for the first four year action programme Member States may allow an amount of manure containing up to 210 kg N;

(b) during and after the first four-year action programme, Member States may fix different amounts from those referred to above. These amounts must be fixed so as not to prejudice the achievement of the objectives specified in Article 1 and must be justified on the basis of objectives

criteria, for example:

— long growing seasons,

— crops with high nitrogen uptake,

— high net precipitation in the vulnerable zone,

— soils with exceptionally high denitrification capacity.

If a Member State allows a different amount under subparagraph (b), it shall inform the Commission which will examine the justification in accordance with the procedure laid down in Article 9;

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(c) Member States may authorise, above the amount of 170 kg nitrogen per hectare per year as set out in this subparagraph and up to a separate additional limit of 80 kg nitrogen per hectare per year, the use of certain fertilising materials from livestock manure that have undergone processing, provided all the following conditions are met:

(i) the livestock manure component of the fertilising material has undergone a treatment process that increases the concentration of nitrogen in mineral form, urea nitrogen or crystal-bound nitrogen, expressed as a percentage by weight of the total nitrogen compared to the input to the treatment process, resulting in any of the following:

(1) an ammonium salt (scrubbing salt), stemming from a gas purification or emission control process designed to remove ammonia from off-gases;

(2) a mineral concentrate obtained through reverse osmosis;

(3) a nitrogen-rich phosphate salt (struvite), precipitated out of livestock manure;

(ii) the fertilising materials are of consistent quality across batches and have a ratio of mineral nitrogen to total nitrogen of at least 90 % or a ratio of organically bound carbon to total nitrogen of no

more than 3, in both cases correcting for any nitrogen derived from component materials that do not originate from manure and contain more than 3 % of nitrogen on a dry matter basis;

(iii) the fertilising materials do not exceed the following upper limits:

— copper (Cu): 300 mg kg-1 dry matter,

— zinc (Zn): 800 mg kg-1 dry matter;

(iv) pathogens in the fertilising materials containing more than 1 % organic carbon do not exceed the following upper limits:

Micro-organisms to be tested	**Sampling plans**			**Limit**
	n	**c**	**m**	**M**
Salmonella spp.	5	0	0	Absence in 25 g or 25 ml
Escherichia coli or *enterococci*	5	5	0	1 000 in 1 g or 1 ml
Where: n = number of samples to be tested, c = number of samples where the number of bacteria expressed in colony forming units (CFU) is between m and M, m = threshold value for the number of bacteria expressed in CFU that is considered satisfactory, M = maximum value of the number of bacteria expressed in CFU.				

(v) Member States implement strict quality standards to ensure a consistent nutrient content in fertilising materials across production batches in line with the

criteria set out in point (ii);

(vi) Member States ensure that the fertilising material is accompanied by documentation containing information on the content of nitrogen (N) and phosphates (P_2O_5) where the concentration of any of those elements exceeds 1 % of dry matter, with a maximum deviation of 25 % from the declared value;

(vii) Member States ensure that livestock numbers and manure production do not increase as a result of the application of this point, (i) at national level when nitrogen content of total annual national manure production per hectare of utilised agricultural area (UAA) exceeds 75 % of the 170 kg N per hectare limit set out in this subparagraph; and (ii) at the level of NUTS 2 territorial units where the authorisation is given, when nitrogen content of the total annual manure production per hectare of UAA in these territorial units exceeds 75 % of the 170 kg N per hectare limit set out in this subparagraph;

(viii) Member States tighten the limitations on land application of fertilisers (fertilisation rates), set out in point 1, paragraph 3 of this Annex, to take into account the increased risks of nitrogen loss in water and air resulting from the use of fertilising materials meeting the conditions set out in points (i) to (iv) of this point, while applying a mineral fertiliser equivalence coefficient of 1 for such materials. Member States ensure as far as possible the maintenance of a living plant cover or equivalent measures on land where fertilising materials meeting the conditions in points (i) to (iv) of this point are applied; Member States ensure that, where relevant to prevent the loss of ammonia from agricultural soils, appropriate precautions are taken during the land application of fertilising materials meeting the conditions in points (i) to (iv) of this point, in particular, through injection, immediate incorporation of surface-applied materials, or equivalent measures;

(ix) Member States take measures to prevent to the extent possible emissions, including emissions to air, resulting from storage of fertilising materials meeting the conditions in points (i) to (iv) by defining appropriate storage conditions and requirements for such materials;

(x) Member States take all necessary measures to ensure that the use of fertilising materials meeting the conditions set out in points (i) to (iv) of this point does not prejudice the attainment of the objectives of this Directive, of Council Directive 92/43/EEC ([3]) and Directives 2000/60/EC ([4]), (EU) 2016/2284 ([5]), (EU) 2020/2184 ([6]) and 2008/50/EC ([7]) of the European Parliament and of the Council in so far as the measures of the action programme are relevant to those Directives. Member States take measures to prevent adverse effects in and around Natura 2000 areas, and in the vicinity of drinking water abstraction points, in accordance with Directive 92/43/EEC and Directive (EU) 2020/2184, respectively.

Where Member States apply this point of the second subparagraph they shall notify the Commission thereof. In addition, they shall, as part of the report referred to in Article 10, report on its application, including annual data on the amount of materials produced meeting the conditions set out in points (i) to (iv) of this point and on livestock density and manure production at national level and at the level of NUTS 2 territorial units as established by Regulation (EC) No 1059/2003 of the European Parliament and of the Council ([8]).

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3. Member States may calculate the amounts referred to in paragraph 2 on the basis of animal numbers.

4. Member States shall inform the Commission of the manner in which they are applying the provisions of paragraph 2. In the light of the information received, the Commission may, if it considers

necessary, make appropriate proposals to the Council in accordance with Article 11.

ANNEX IV

REFERENCE METHODS OF MEASUREMENT

Chemical fertilizer

Nitrogen compounds shall be measured using the method described in Commission Directive 77/535/EEC of 22 June 1977 on the approximation of the laws of the Member States relating to methods of sampling and analysis for fertilizers ([9]), as amended by Directive 89/519/EEC ([10]).

Freshwaters, coastal waters and marine waters

Nitrate concentration shall be measured in accordance with Article 4a (3) of Council Decision 77/795/EEC of 12 December 1977 establishing a common procedure for the exchange of information on the quality of surface fresh water in the Community ([11]), as amended by Decision 86/574/EEC ([12]).

ANNEX V

INFORMATION TO BE CONTAINED IN REPORTS TO IN ARTICLE 10

1. A statement of the preventive action taken pursuant to Article 4.
2. A map showing the following:
   (a) waters identified in accordance with Article 3 (1) and Annex I indicating for each water which of the criteria in Annex I was used for the purpose of identification;
   (b) the location of the designed vulnerable zones, distinguishing between existing zones and zones designated since the previous report.
3. A summary of the monitoring results obtained pursuant to Article

6, including a statement of the considerations which led to the designation of each vulnerable zone and to any revision of or addition to designations of vulnerable zones.

4. A summary of the action programmes drawn up pursuant to Article 5 and, in particular:

   (a) the measures required by Article 5 (4) (a) and (b);

   (b) the information required by Annex III (4);

   (c) any additional measures or reinforced actions taken pursuant to Article 5 (5);

   (d) a summary of the results of the monitoring programmes implemented pursuant to Article 5 (6);

   (e) the assumptions made by the Member States about the likely timescale within which the waters identified in accordance with Article 3 (1) are expected to respond to the measure in the action programme, along with an indication of the level of uncertainty incorporated in these assumptions.

([1]) Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (OJ L 184, 17.7.1999, p. 23).

([2]) This Directive was notified to the Member States on 19 December 1991.

([3]) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7, ELI: http://data.europa.eu/eli/dir/1992/43/oj).

([4]) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1, ELI: http://data.europa.eu/eli/dir/2000/60/oj).

([5]) Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (OJ L 344, 17.12.2016, p. 1, ELI: http://data.europa.eu/eli/dir/2016/2284/oj).

([6]) Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (OJ L 435, 23.12.2020, p. 1, ELI: http://data.europa.eu/eli/dir/2020/2184/oj).

([7]) Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1, ELI: http://data.europa.eu/eli/dir/2008/50/oj). EU Ambient Air Quality Directive and as amended in 2024.

([8]) Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS) (OJ L 154, 21.6.2003, p. 1, ELI: http://data.europa.eu/eli/reg/2003/1059/oj).

([9]) OJ No L 213, 22. 8. 1977, p. 1.

([10]) OJ No L 265, 12. 9. 1989, p. 30.

([11]) OJ No L 334, 24. 12. 1977, p. 29.

([12]) OJ No L 335, 28. 11. 1986, p. 44.