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(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 18 November 2002

concerning a request for derogation under paragraph 2(b) of Annex III to and Article 9 of Council Directive 91/676/EEC concerning protection of waters against pollution caused by nitrates from agricultural sources

(notified under document number C(2002) 464)

(Only the Danish text is authentic)

(2002/915/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources ⁽¹⁾, and in particular paragraph 2(b) of Annex III thereto,

Whereas:

(1) Paragraph 2(b) of Annex III to Directive 91/676/EEC provides that if a Member State allows a different amount of manure to be applied per hectare each year than the one specified in paragraph 2 of Annex III and subparagraph (a) of Annex III, it shall inform the Commission which will examine the justification in accordance with the procedure laid down in Article 9 of Directive 91/676/EEC.

These amounts must be fixed so as not to prejudice the achievement of the objectives specified in Article 1 of Directive 91/676/EEC and must be justified on the basis of objective criteria, for example:

- long growing seasons,
- crops with high nitrogen uptake,
- high net precipitation in the vulnerable zone,
- soils with exceptionally high denitrification capacity.

This Decision in particular applies to the first and second of the above criteria.

(2) Denmark informed the Commission on 2 July 1998 of its intention to apply a derogation under paragraph 2(b) of Annex III to Directive 91/676/EEC with regard to the action programme established under Article 5 of the Directive, and completed this request by technical documents on 2 December 1999, 30 June 2000, 20 November 2000 and 8 October 2001.

(3) Denmark intends to allow the application of livestock manure, comparable to 230 kg nitrogen per hectare per year on specific cattle holdings with an average of 90 % of agricultural land available for manure application, cropped by grass, grass catch crops or beets and other crops being undersown by grass with low nitrate leaching potential.

(4) No leguminous or other plants fixing atmospheric nitrogen will be cropped in these farms and clover in grassland will be limited by adapted practices.

(5) This derogation applies to approximately 10 % of the total number of livestock units in Denmark based on nitrogen equivalent in animal manure, and 5 % of the agricultural surface.

(6) Cattle holdings with more than 250 livestock units must obtain an approval following the Danish implementation of the Integrated Pollution Prevention and Control Directive from the Municipality ensuring that manure use is in compliance with local needs for water protection. The cattle holdings, that in the next eight years must obtain an approval, correspond to 6 to 8 % of the national cattle herd.

⁽¹⁾ OJ L 375, 31.12.1991, p. 1.

- (7) Development of organic farming is a high priority for the Danish government. Organic cattle holdings allow only 140 kg nitrogen per hectare and reduce consequently nitrogen leaching of more than 10 %. Organic dairy farming in 1998 covers approximately 50 000 livestock units corresponding to 5 % of the national cattle herd and the prognosis for 2003 is that organic dairy farming covers 130 000 livestock units, equivalent to 15 % of the national cattle herd.
- (8) Denmark on 6 June 1997 notified legislation to the Commission in order to transpose the Directive into Danish law. Denmark on 2 July 1998 notified additional legislation to the Commission in order to implement fully the Directive. The legislation as notified is considered to be in compliance with the Directive. The provisions of that legislation apply equally to the notified derogation.
- (9) Action programmes are established with objectives for the aquatic environment to be attained through the appropriate associated reduction targets for nutrient discharges, i.e. elimination of point source farm-waste discharges and reduction of leaching losses to a level corresponding to an average of approximately 50 kg nitrogen per hectare annually which will ensure compliance with the objective of the Directive of a maximum of 50 mg/l of nitrates in groundwater.
- (10) Denmark's implementation of the Nitrates Directive is based on a stringent interpretation of the provisions of the Directive, in this context in particular the calculation of livestock units, nitrogen content of manure and the calculation of the acreage available for application of manure.
- (11) The Danish implementation of the Nitrates Directive is aimed at ensuring full achievement of the environmental objectives of the Directive as set out in Article 1.
- (12) The national monitoring program set up in agricultural areas contributes to the demonstration of the effect of the initiatives under the action programmes. The results will contribute to the basis for decision on additional measures or reinforced actions if it becomes apparent that the measures already taken are not sufficient for achieving the objective specified in Article 1 of the Directive.
- (13) The objective of the national monitoring programme is to demonstrate:
- development in the agricultural contribution to water pollution,
 - relations between agricultural praxis and the discharge of nutrients to the environment,
 - reduction of the amount of nutrients in water leaving the root zone until it rejoins the watercourses,
- development in the nutrient content in near-surface groundwater,
 - development in the agricultural use of nutrients,
 - size of and development in the agricultural field discharge.
- (14) The Danish action program for implementation of the Nitrates Directive includes a comprehensive set of general regulations setting standards for animal housing, manure containers, field application of livestock manure and fertiliser management. These regulations are based on acts and statutory orders.
- (15) As part of the implementation considering manure handling includes requests for animal houses built with appropriate drainage and collection of all manure and liquid waste, nine months storage capacity, tight floating cover on open liquid manure containers and limitations on manure spreading to certain times of the year. A control system has been set up by the municipalities to ensure compliance with these rules.
- (16) Each livestock holding must ensure a balance between agricultural land and number of livestock units corresponding to 170 kg nitrogen per hectare in animal manure (210 kg N/ha for cattle holdings) until 2002 and after 2002 the balance shall be equivalent to 140 kg N/ha (170 kg N/ha for cattle holdings). Acreage available for manure application excludes land that does not require fertilisation, land where livestock manure cannot be applied under normal conditions and land designated as set-aside acreage.
- (17) The nitrogen content of livestock manure is understood as the amount of total nitrogen in excreta minus volatile losses of ammonia in animal housing systems and during storage (10 % volatile losses being the maximum allowed for calculations).
- (18) As part of the implementation an increase in efficiency of utilisation of nitrogen content of manure (cattle slurry) from the present 60 % to a minimum of 65 % in the fertilisation year 2001/2002 is prescribed. A reduction of nitrogen fertilisation norms by 10 % below the economic optimum is prescribed, determined annually on the basis of numerous field trials.
- (19) All agricultural holdings must draw up crop rotation and fertilisation plans each year covering the period 1 August to 31 July. Such plans must be submitted to the competent authority. Such plans covering the period 1 August to 31 March the following year must be available to the authorities by 1 September at the latest. By 31 March such plans covering the whole of the period must be available. Crop rotation plans must specify green crops (catch crops, winter grain cereals and crops with a long growing season). Fertilisation plans must include the estimated need for nitrogen and phosphorous

application according to the economic optimal and specifying the nature of fertiliser to be used (e.g. livestock manure, waste products, chemical fertiliser). Fertilisation plans must include a sketch map indicating location of individual fields. Such plans must be revised no later than seven days following any changes in agricultural practices to ensure consistency between plans and actual agricultural practices. These regulations are based on acts and statutory orders.

- (20) Fertilisation norms, crop nitrogen requirements and the relationship between these, in terms of permitted fertilisation, are stipulated in Statutory Orders.
- (21) Empirical models and calculations, presented in the Danish notification, based on amounts of manure and chemical fertiliser, crop type and soil type, show that a leaching of nitrate below 50 kg nitrogen per hectare annually could be reached with some complementary preventive measures on farming practices. The above models and calculations indicate that compliance with the objective of a maximum of 50 mg per litre of nitrates in groundwater at watershed level and considering denitrification is ensured.
- (22) Calculations presented by Denmark show the possibility of further reducing the amount of chemical fertiliser to ensure a higher efficiency of nitrogen uptake from applied manure in case monitoring shows a need for reduction of total nitrogen applied. Such further reduction of leaching shall ensure compliance with the above leaching target.
- (23) Maps showing the percentage of fields cultivated under this Decision will be presented every two years.
- (24) Results of representative monitoring from intensive cattle holdings in the approximately 1 500 ha agricultural catchment monitoring program relevant to the situation covered by this Decision will be presented in order to show practical compliance with the conditions of this Decision.
- (25) This Decision is applicable within the framework of the Danish action programs adopted for the years 1999 to 2003.
- (26) The Commission, having examined the justification of Denmark's request, is satisfied that the amount fixed and the conditions for its application will not prejudice the achievement of the objectives of the Directive, as specified in Article 1.
- (27) The measures provided for in this Decision are in accordance with the opinion of 6 December 2001 of the Committee set up pursuant to Article 9 of Directive 91/676/EEC,

HAS ADOPTED THIS DECISION:

Article 1

Denmark's request submitted by letter of 2 July 1998 asking the Commission to allow derogation under paragraph 2(b) of Annex III to Directive 91/676/EEC is approved, subject to the conditions laid down hereunder.

Article 2

Definitions

- 'Cattle farms' means holdings with more than three livestock units, where at least two-thirds of livestock are cattle,
- 'grass' means permanent or temporary grassland (generally temporary lies less than four years),
- 'crops being undersown by grass': silage cereals, silage maize and/or spring barley, to be undersown before (maize) or after harvest, by grass which will act as a catch crop, for biological retention of nitrogen residual during winter,
- 'beets' means forage beets.

Article 3

Scope

This derogation applies, on an individual basis, to cattle farms where the crop rotation includes more than 70 % of particularly nitrogen consuming crops, with a long growing season. Farmers, who will annually submit an application to the competent authorities, shall give written commitment to fulfill the conditions prescribed in Articles 4 and 5.

Article 4

Application of manure and other fertilisers

The amount of livestock manure applied to the land each year on cattle holdings, including by the animal themselves, shall not exceed the amount of manure containing 230 kg nitrogen, under the following conditions:

- the total nitrogen inputs will comply with the nutrient demand of the considered crop and the supply from the soil, the fertilisation rate being fixed 10 % under optimal economic level,
- a fertilisation plan and account will be kept for each farm,
- each farm must annually submit an application together with the fertilisation account to the competent national authority and accept that they can be subject to random control,

- periodic autumn and spring nitrogen and phosphorous analysis in soil will be done by each farmer who is granted derogation (at least every three years per 5 ha of land), for accurate fertilisation,
- no manure will be spread in the autumn before a grass cultivation, and the ploughing will be followed by a high nitrogen demanding crop.

Article 5

Land cover

1. 70 % or more of the acreage available for manure application on the cattle holding in question shall be cultivated with grass, grass catch crops or beets and other crops being under-sown by grass with low nitrate leaching potential.
2. Grass catch crops shall not be ploughed before 1 March in order to ensure permanent vegetal cover of arable area for recovering subsoil autumn losses of nitrates and limit winter losses.
3. Temporary grasslands shall be ploughed in spring.

Article 6

Monitoring

1. Two maps, showing the percentage of farms and percentage of agricultural land encompassed by the derogation in each municipality of Denmark, shall be updated every year, and transmitted to the Commission. The first submission will take place in the last quarter of 2002.
2. Survey and continuous nutrient analysis shall be carried out in the national monitoring program on reference sites on sandy and clay soils providing data on local land use, crop rotations and practices on cattle holdings. These data can be used for model-based calculations of the magnitude of nitrate leaching from fields where up to 230 kg nitrogen in livestock manure is applied based on scientific principles.
3. In order to prove that the derogation will not jeopardise the objective of national action program and the Directive, a network of sampling of ditches with drainage waters and of

shallow groundwater established as agricultural catchment monitoring sites under the national monitoring program shall be maintained to provide data on state of nitrate content in water leaving the root zone and entering the groundwater system.

Article 7

Reporting

The results of the monitoring shall be transmitted every year to the Commission, with a concise report on evaluation practice (controls at farm level) and water quality evolution (based on root zone leaching monitoring, surface/ground water quality and model-based calculations). Based on initial assessment, first results shall be transmitted at the end of 2002, and a second report at the end of 2003.

Article 8

Validity

This derogation is valid until 1 August 2004.

Article 9

Extension

Following a request of the Danish authorities, the Commission could extend the derogation period, taking into account, *inter alia*, the results of monitoring.

Article 10

This Decision is addressed to the Kingdom of Denmark.

Done at Brussels, 18 November 2002.

For the Commission

Margot WALLSTRÖM

Member of the Commission