

2006 No. 489

ENVIRONMENTAL PROTECTION

**The Nitrates Action Programme Regulations (Northern Ireland)
2006**

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Coming into operation - *1st January 2007*

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SCHEDULE 1 — CRITERIA AS TO NUTRIENT MANAGEMENT

The Department of the Environment and the Department of Agriculture and Rural Development, being departments designated(a) for the purposes of section 2(2) of the European Communities Act 1972(b) in relation to measures relating to water resources and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment(c), acting

(a) S.I. 2003/2901

(b) 1972 c.68

(c) O.J. L.156. 25/06/2003, P. 0017 - 0025

jointly in exercise of the powers conferred upon them by that section and every other power enabling them in that behalf and the Department of the Environment in exercise of the powers conferred on it by Articles 32, 44 and 72 of the Waste and Contaminated Land (Northern Ireland) Order 1997(a) make the following Regulations:

PART 1

PRELIMINARY

Citation and commencement

1. These Regulations may be cited as The Nitrates Action Programme Regulations (Northern Ireland) 2006 and subject to regulation 28 shall come into operation on 1st January 2007.

Territorial application

2. These Regulations shall apply to the whole of the territory of Northern Ireland as required under The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004(b).

Interpretation

3.—(1) The Interpretation Act (Northern Ireland) 1954(c) shall apply to these Regulations as it applies to an Act of the Assembly.

(2) In these Regulations:

“action programme” means measures regarding the protection of water against pollution caused by nitrates from agricultural sources as set out in Article 5 and Annex III of the Directive;

“agricultural area” means any land suitable for agricultural activities, including any common land used for grazing and excludes areas under farm roads, paths, buildings, woods, dense scrub, rivers, streams, ponds, lakes, sandpits, quarries, areas of peat cutting, bare rock, areas of forestry and areas fenced off or inaccessible other than forests where the use of the same is ancillary to the farming of land for other agricultural purposes;

“agricultural land” has the same meaning as in the Agriculture Act (Northern Ireland) 1949(d);

“Appeals Commission” means the Water Appeals Commission for Northern Ireland established under Article 7(1) of the Water and Sewerage Services (Northern Ireland) Order 1973(e);

“authorised person” means a person authorised by the Department under Article 72 of the Order in respect of fulfilling its functions;

“chemical fertiliser” means any fertiliser containing a nitrogen compound which is manufactured or blended by an industrial process;

“controller” means in relation to a holding, the person charged with management of the holding for the calendar year in question and in the absence of written agreement to the contrary, the owner of the agricultural area will be taken to be charged with its management;

“crop requirement” means the amount of nitrogen fertiliser which is reasonable to apply to land in any year for the purpose of promoting the growth of the crop having regard to the foreseeable nitrogen supply to the crop from the soil and from other sources, including any

(a) S.I. 1997/2778 (N.I. 19)
(b) S.R. 2004 No. 419
(c) 1954 c.33 (N.I.)
(d) 1949 c.2 (N.I.)
(e) S.I. 1973/70 (N.I. 2)

previous applications of livestock and other organic manure and any chemical fertilisers estimated as described in the fertiliser technical standards and regulation 9 of these Regulations;

“Department” means the Department of the Environment;

“Departments” mean the Department of the Environment and the Department of Agriculture and Rural Development acting jointly;

“Directive” means Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources^(a);

“dirty water” means a low dry matter waste made up of water contaminated by manure, urine, effluent, milk and cleaning materials with a Biochemical Oxygen Demand (BOD) no greater than 2000 mg/litre and total nitrogen and dry matter contents as set out in Schedule 1 Table 2;

“environment” means any or all of the following media, namely the air, water and land;

“farmyard manure” means a mixture of bedding material and animal excreta in solid form arising from the housing of cattle, sheep and other livestock, excluding poultry manure, but including spent mushroom compost and the stackable solids fraction from mechanical separation of slurry excluding pig slurry;

“fertiliser technical standards” means the ‘DEFRA Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) 2000 7th edition’ (as may from time to time be re-issued) and any supplementary guidance, and any other DEFRA publication substituting the standards set out in RB209 and any supplementary guidance;

“grassland” means any land on which the vegetation consists predominantly of grass species;

“holding” in relation to a controller means all the agricultural area managed by that controller;

“lake” means a body of standing inland surface water;

“land application” means the addition of materials to agricultural 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 but does not include the direct deposition of manure onto land by animals;

“livestock” means any animal kept for use or profit;

“livestock manure” save for the purposes of regulation 14 means waste products excreted by livestock, or a mixture of litter and waste products excreted by livestock, even in processed form;

“nitrogen compound” means any nitrogen-containing substance except for gaseous molecular nitrogen;

“nitrogen fertiliser” means any substance, including chemical fertiliser, containing a nitrogen compound utilised on land to enhance growth of vegetation;

“notice” means notice in writing;

“organic manure” means

- (a) livestock manure, and
- (b) nitrogen fertiliser, not being livestock manure or chemical fertiliser, derived from organic matter, and includes sewage sludge, residues from fish farms and other organic wastes;

“pig enterprise” means any enterprise with more than 10 breeding sow places or 150 finishing pig places;

“poultry enterprise” means any enterprise with more than 500 places;

“public” means such persons as appear to the Departments—

- (a) to be representative of those carrying on any business which—
 - (i) is, or is likely to be, directly affected by the action programme; or

(a) O.J. L. 375, 31/12/1991 P. 0001- 0008

(ii) relies upon the water environment; or

(b) to have an interest in the protection of the water environment;

“scientific case” means a reasoned case, as set out in guidance issued on these Regulations, designed to demonstrate that the proposed deviation from the values set out in Schedule 1 Tables 1, 2 or 3 of these Regulations will have no worse effect on the environment than that caused by using the aforementioned values;

“silage effluent” has the same meaning as in regulation 1(1) of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003(a);

“slurry” means (a) excreta produced by livestock whilst in a yard or building or (b) a mixture of such excreta with bedding, rainwater, seepage, washings or any other extraneous material from a building or yard used by livestock or in which livestock manure is stored or (c) any other organic manure or any combination of these, of a consistency that allows it to be pumped or discharged by gravity at any stage in the handling process and includes dirty water that is stored with slurry or mixed with slurry;

“soil fertility status” means the soil reserves available for uptake by the next crop estimated as described in the fertiliser technical standards;

“steeply sloping land” means land which has an average incline of 20% or more;

“the Order” means the Waste and Contaminated Land (Northern Ireland) Order 1997;

“underground strata” has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999(b);

“water pollution” means the discharge, directly or indirectly, of nitrogen compounds from agricultural sources into the aquatic environment, the results of which are such 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;

“waterlogged” means soil where water appears on the surface of the land when pressure is added;

“waterway” has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999.

(3) Other expressions used in these Regulations have the same meaning as in the Directive.

PART 2

GENERAL

Duty of the controller to prevent water pollution

4. The controller of a holding shall not knowingly or otherwise cause directly or indirectly the entry of nitrogen fertiliser into any waterway or water contained in any underground strata.

Duty of the owner and/or controller to comply with these Regulations

5. In complying with any duty under these Regulations, the owner and/or controller of a holding shall have regard to any guidance which may be issued from time to time by the Department or Departments for the purposes of these Regulations and, in accordance with Article 4 of the Directive, the Code of Good Agricultural Practice as may be amended from time to time.

(a) S.R. 2003 No. 319

(b) S.I. 1999/662 (N.I. 6)

PART 3

PREVENTION OF WATER POLLUTION FROM THE APPLICATION OF FERTILISERS

Periods when the land application of nitrogen fertiliser is prohibited

6.—(1) The land application of chemical fertiliser to grassland shall not be permitted between 15 September in any year and 31 January of the following year.

(2) The land application of chemical fertiliser to any land shall not be permitted between 15 September in any year and 31 January of the following year for crops other than grass unless there is a demonstrable crop requirement between those dates.

(3) The land application of organic manure, excluding farmyard manure and dirty water, to any land shall not be permitted between 15 October in any year and 31 January of the following year.

Requirements as to the manner of land application of nitrogen fertiliser other than dirty water

7.—(1) The land application of nitrogen fertiliser shall be done in an accurate and uniform manner and, other than for dirty water, in accordance with paragraphs (2) to (8).

(2) The land application of nitrogen fertiliser shall not be permitted when: -

- (a) soil is waterlogged; or
- (b) land is flooded or likely to flood; or
- (c) the soil has been frozen for 12 hours or longer in the preceding 24 hours; or
- (d) land is snow-covered; or
- (e) heavy rain is forecast within 48 hours; or
- (f) the land is steeply sloping land where, taking into account factors such as proximity to waterways, soil condition, ground cover and rainfall there is a significant risk of causing water pollution.

(3) The land application of nitrogen fertiliser shall not be permitted on any land in a location or manner which would make it likely that the nitrogen fertiliser will directly enter a waterway or water contained in any underground strata.

(4) The land application of chemical fertiliser shall not be permitted within 1.5 m of any waterway.

(5) The land application of organic manures shall not be permitted within: -

- (a) 20m of lakes; or
- (b) 50m of a borehole, spring or well; or
- (c) 250m of a borehole used for a public water supply; or
- (d) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features); or
- (e) 10m of any waterway, other than lakes, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; except that
- (f) the distance for (e) may be reduced to 3m of any waterway where the land has an average incline less than 10% towards the waterway and where:
 - (i) organic manures are spread by bandspreaders, trailing hose or trailing shoe or soil injection; or
 - (ii) the adjoining area is less than 1 hectare in size or not more than 50m in width.

(6) The maximum land application of solid organic manure shall be 50 tonnes per hectare at any one time provided this does not exceed the limits set out in regulation 9(1) and 10(3) and a period of at least 3 weeks shall be left between such land applications.

(7) The maximum land application of slurry shall be 50 m³/ha at any one time provided this does not exceed the limits set out in regulation 9(1) and 10(3) and a period of at least 3 weeks shall be left between such land applications.

(8) The land application of slurry shall only be permitted by spreading close to the ground using inverted splash plate spreading, bandspreading, trailing hose, trailing shoe, soil injection or soil incorporation methods.

Requirements as to the manner of land application of dirty water

8.—(1) Subject to regulations 7(2) and 7(3), the land application of dirty water to any land shall be permitted throughout the year, provided that it is done in a uniform and accurate manner.

(2) The maximum land application of dirty water shall be 50 m³/ha at any one time and a period of at least 2 weeks shall be left between such land applications.

(3) The land application of dirty water shall not be permitted within: –

- (a) 20m of lakes; or
- (b) 50m of a borehole, spring or well; or
- (c) 250m of a borehole used for a public water supply; or
- (d) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features); or
- (e) 10m of any waterway, other than lakes, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; except that
- (f) the distance for (e) may be reduced to 3m of any waterway where the land has an average incline less than 10% towards the waterway and where:
 - (i) organic manures are spread by bandspreaders, trailing hose or trailing shoe or soil injection; or
 - (ii) the adjoining area is less than 1 hectare in size or not more than 50m in width.

(4) The land application of dirty water shall only take place by spreading close to the ground using inverted splash plate spreading, bandspreading, trailing hose, trailing shoe, soil injection or soil incorporation methods and by irrigation.

Measures governing the limits on land application of nitrogen fertiliser to grassland

9.—(1) The amount of total nitrogen in livestock manure applied to the agricultural area of a holding, both by land application and by the animals themselves, shall not exceed 170kg N/ha/year when calculated in accordance with paragraphs (3) and (4).

(2) For each holding, the total available nitrogen in organic manures and chemical fertiliser, excluding livestock manures, applied to grassland, shall be in proportion to the crop requirement of the holding, and shall not exceed the amounts as defined in Schedule 1 Table 4, when calculated in accordance with paragraphs (5), (6) and (7).

(3) The total nitrogen from livestock manure from animals kept on the holding will be calculated in accordance with Schedule 1 Table 1.

(4) The total nitrogen from imported livestock manures will be calculated in accordance with Schedule 1 Table 2 for slurry and Schedule 1 Table 3 for solid livestock manures.

(5) The total nitrogen content per tonne of other organic manures, excluding livestock manure, shall be as declared in accordance with the Waste Management Licensing Regulations (Northern Ireland) 2003^(a) and any amending Regulations.

(6) The amount of nitrogen available to a crop from chemical fertiliser, in the year of application of that fertiliser, is the percentage specified in Schedule 1 Table 6.

(7) Except in the case of livestock manure, the amount of nitrogen available to a crop from organic manure in the year of its application is the percentage specified in Schedule 1 Table 6, in relation to cattle and other livestock manure.

(8) Any controller wishing to deviate from the values set out in Schedule 1 Tables 1, 2 or 3 must present a scientific case in order to obtain prior approval from the Department, and the Department shall only grant such approval where it is satisfied that a scientific case has been established.

(9) A controller may appeal the decision by the Department in paragraph (8) in accordance with the procedure set out in regulation 23.

Measures governing the limits on land application of nitrogen fertiliser to land other than grassland

10.—(1) Subject to paragraphs (2) and (3), in relation to a holding the quantity of nitrogen fertiliser added to land other than grassland both by land application and by the animals themselves each year shall not exceed the crop requirements for nitrogen calculated in accordance with paragraphs (4) to (8).

(2) The amount of nitrogen fertiliser applied to land other than grassland both by land application and by the animals themselves shall not exceed the recommendations contained in the fertiliser technical standards.

(3) The amount of total nitrogen in livestock manure applied to the agricultural area of the holding, both by land application and by the animals themselves, shall not exceed 170kg N/ha/year when calculated in accordance with paragraphs (4) and (5).

(4) The total nitrogen from livestock manure from animals kept on the holding will be calculated in accordance with Schedule 1 Table 1.

(5) The total nitrogen from imported livestock manures will be calculated in accordance with Schedule 1 Table 2 for slurry and Schedule 1 Table 3 for solid livestock manures.

(6) The total nitrogen content per tonne of other organic manures, excluding livestock manure, shall be as declared in accordance with the Waste Management Licensing Regulations (Northern Ireland) 2003 and any amending Regulations.

(7) The amount of nitrogen available to a crop from livestock manures or chemical fertiliser in the year of application of that fertiliser is the percentage specified in Schedule 1 Table 6.

(8) Except in the case of livestock manure, the amount of nitrogen available to a crop from organic manure in the year of its application is the percentage specified in Schedule 1 Table 6, in relation to cattle and other livestock manure.

(9) Any controller wishing to deviate from the values set out in Schedule 1 Tables 1, 2 or 3 must present a scientific case in order to obtain prior approval from the Department, and the Department shall only grant such approval where it is satisfied that a scientific case has been established.

(10) A controller may appeal the decision by the Department in paragraph (9) in accordance with the procedure set out in regulation 23.

(a) S.R. 2003 No. 493

PART 4

LIVESTOCK MANURE STORAGE REQUIREMENTS

General obligations as to storage facilities for livestock manure

11.—(1) Subject to paragraphs (2) and (3) and regulations 14 and 16, the capacity of storage facilities for livestock manure of a holding shall be sufficient and adequate to provide for the storage of all the livestock manure which is likely to require storage on the holding for such period as may be necessary to ensure compliance with these Regulations and the avoidance of water pollution.

(2) For the purposes of paragraph (1), the controller shall have due regard to the storage capacity likely to be needed by the holding during periods of adverse weather conditions when, due to extended periods of wet weather, frozen ground or otherwise, the application to land of livestock manure is not permitted.

(3) Subject to regulation 12, the total livestock manure storage capacity on holdings shall be sufficient for at least 22 weeks storage.

(4) All storage facilities for livestock manure and silage effluent shall be maintained free of structural defect, shall be of such standard as is necessary to prevent run-off or seepage, directly or indirectly, into a waterway or water contained in any underground strata and where applicable shall comply with The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 and any amending Regulations.

Obligations as to livestock manure storage capacity on pig and poultry enterprises

12.—(1) Subject to paragraph (2), on holdings where there is a pig or poultry enterprise there shall be a storage requirement of 26 weeks.

(2) Holdings with less than 10 breeding sow places or 150 finishing pig places and holdings with less than 500 poultry places shall require 22 weeks storage.

(3) Holdings where there is a pig and/or poultry enterprise and another livestock enterprise shall require 26 weeks storage for the pig and/or poultry enterprise and 22 weeks storage for the other livestock enterprise.

Manner of storage and location of farmyard manure storage facilities

13.—(1) Prior to field storage or land application farmyard manure should be stored in a midden which shall have adequate effluent collection facilities.

(2) Farmyard manure may be stored in the field where land application will take place subject to a maximum limit of 180 days.

(3) Where stored in a field, farmyard manure must not be stored in the same location of the field in consecutive years.

(4) Farmyard manure must be stored in a compact heap and such heaps must not be placed within:

- (a) 50m of lakes; or
- (b) 20m of any waterway, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; or
- (c) 50m around a borehole, spring or well; or
- (d) 250m from any borehole used for a public water supply; or
- (e) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features).

Manner of storage and location of poultry litter storage facilities

14.—(1) Subject to regulation 28 poultry litter may be stored in the field where land application will take place subject to a maximum limit of 180 days.

(2) Where poultry litter is stored in a midden it shall have adequate effluent collection facilities prior to field storage or land application.

(3) Where stored in a field, poultry litter must be stored in a compact heap but not in the same location of the field in consecutive years and must be covered with an impermeable membrane within 24 hours of placement in the fields.

(4) Poultry litter heaps must not be placed within:

- (a) 50m of lakes; or
- (b) 20m of any waterway, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; or
- (c) 50m around a borehole, spring or well; or
- (d) 250m from any borehole used for a public water supply; or
- (e) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features).

(5) In this regulation, poultry litter means a mixture of bedding material and poultry manure arising from the housing of poultry and with a dry matter content not less than 55%.

Manner of storage for dirty water

15. Provision for the safe storage of dirty water should be available for those periods when weather and ground conditions, as set out in regulation 7(2), are unsuitable for land application.

Calculation of livestock manure storage capacity

16.—(1) In calculating the livestock manure storage capacity of a holding, the following farming practices may be taken into account:

- (a) the quantity of farmyard manure;
- (b) any solids removed from slurry other than pig slurry by means of a slurry separator;
- (c) any additional storage available off the holding, by means of a rental agreement; and
- (d) any valid contract the holding has with a manure processing facility or demonstrable access to an approved treatment or recovery outlet.

(2) Subject to paragraph (4), the livestock manure storage capacity of a holding may be less than the capacity specified in regulation 11 in relation to: –

- (a) sheep, deer and goats which are out-wintered at a grassland stocking rate which does not exceed 130 kg nitrogen at any time during the period specified in regulation 6(3) in relation to the application of organic manure as calculated in accordance with paragraph (6); and
- (b) livestock (other than dairy cows, sheep, deer and goats) which are out-wintered at a grassland stocking rate which does not exceed 85 kg of nitrogen at any time during the period specified in regulation 6(3) in relation to the application of organic manure, as calculated in accordance with paragraph (6), provided the amount of livestock manure produced on the holding does not exceed 140kg N/ha/year in accordance with regulation 9.
- (c) in the case of a mixed holding the nitrogen limit in sub-paragraph (b) shall apply except where the controller of the holding demonstrates to the Department that the livestock out-wintered more appropriately reflects the composition of the livestock applicable in sub-paragraph (a).

(3) The livestock manure storage capacity of a holding shall be calculated in accordance with:

- (a) the livestock manure production figures specified in Schedule 1 Table 5; and
 - (b) any further procedures for calculating such storage capacity which will be specified in guidance relating to these Regulations.
- (4) A holding falling within paragraph (2) must ensure that:
- (a) out-wintered livestock have free access at all times to the required land area;
 - (b) land is maintained in good agricultural and environmental condition; and
 - (c) the reduction in storage capacity is proportionate to the extent of out-wintered livestock on the holding.
- (5) Any land used for the purpose of out-wintering under paragraphs (2) and (4) must be under the control of the holding to which the exemption applies.
- (6) In this regulation, a grassland stocking rate of 130 kg or 85 kg of nitrogen, as the case may be, means the stocking of grassland on a holding at any time by such numbers and types of livestock as would in the course of a year excrete waste products containing 130 kg or 85 kg of nitrogen, as the case may be, per hectare of the grassland when calculated in accordance with the nitrogen excretion rate for livestock specified in Schedule 1 Table 1.
- (7) In this regulation, mixed holding means a holding where there are sheep, deer, goats and other livestock (other than dairy cows).

PART 5

MEASURES RELATING TO LAND MANAGEMENT

Cover in winter

17. After harvesting a crop of cereals (other than maize), oil seeds or grain legumes (such as peas or beans) the controller shall ensure that from harvest until 1 March in the following year, one of the following conditions is met on the land at any time:

- (a) the stubble of the harvested crop remains in the land; or
- (b) the land is sown with a crop which will take up nitrogen from the soil; or
- (c) the land is left with a rough surface, ploughed or disced, to encourage the infiltration of rain.

Crop management

18. In having regard to these Regulations, the following principles of crop management shall apply:

- (a) residues of crops harvested late, such as maize and potatoes, shall be left undisturbed until immediately prior to sowing the following Spring; and
- (b) where grass leys are grown in rotation with arable crops the first crop should be sown as soon as possible after the grass has been ploughed.

PART 6

RECORD KEEPING AND COMPLIANCE MONITORING

Type of records required

19.—(1) On all holdings the controller shall keep sufficient records available for inspection as detailed in paragraph (2).

(2) The records shall be kept so as to allow the following information to be ascertained on an annual basis: -

- (a) the controller of the land for the calendar year in question;
- (b) the total agricultural area including the size and location of each field;
- (c) the cropping regimes and their individual areas;
- (d) the soil nitrogen supply index for cropping areas other than grassland as estimated in accordance with the fertiliser technical standards;
- (e) the number of livestock kept on the holding, their species and type, and the length of time for which they were kept on the holding;
- (f) the capacity of livestock manure storage, and where applicable the details of rented storage, farmyard manure production, out wintered livestock, manure separation and manure processing facilities utilised;
- (g) the details of any rental or contractual agreement to demonstrate compliance with regulations 16(1)(c) and 16(1)(d);
- (h) the quantity of each type of nitrogen fertiliser moved on or off the holding, the amount of each type of nitrogen fertiliser applied, the certified nitrogen content of the chemical fertiliser, the total nitrogen content per tonne of other organic manures as declared in accordance with regulations 9(5) and 10(6), the date of that movement and, in the case of organic manure, the name and address of the consignee, the consignor and any third party transporter of the manure; and
- (i) evidence of the right to graze common land.

(3) Records under this regulation shall be prepared for each calendar year by 30 June of the following year and shall be retained for a period of 5 years from that date.

Duty of the controller not to provide false or misleading information

20. The controller shall not compile records which are false or misleading to a material extent or furnish any such false or misleading records or any notice or other document for the purposes of these Regulations.

PART 7

ENFORCEMENT

Enforcement

21.—(1) The enforcement authority for the purpose of compliance with these Regulations shall be the Department or any person authorised by the Department.

(2) In ensuring compliance with these Regulations an authorised person may have regard to the Code of Good Agricultural Practice and any guidance produced on these Regulations.

(3) A person authorised under Article 72 of the Order may exercise any of the functions under that Article to determine or ensure compliance with these Regulations.

Notices

22.—(1) Where the Department is of the opinion that a controller is in breach or is likely to be in breach of these Regulations or has breached these Regulations in such circumstances which make it likely that the breach will continue or be repeated, the Department may serve a notice on the controller in accordance with this regulation.

(2) A notice served in accordance with paragraph (1) shall:

- (a) require the controller upon whom it is served to carry out such works or to take reasonable precautions and other steps as the Department considers appropriate to remedy, or to prevent the continuation or repetition of, any contravention to which the notice relates;

- (b) state the period within which any such requirement is to be complied with; and
- (c) inform the controller on whom the notice is served of their right to appeal under regulation 23(1).

(3) Subject to paragraph (4), the period for compliance stated in the notice as per paragraph (2)(b) shall be such as is reasonable in the circumstances and shall not in any case be less than 28 days.

(4) A notice under paragraph (2) may be appealed in accordance with regulation 23 and such an appeal shall suspend the period of compliance under paragraph (2)(b).

(5) The Department may at any time: —

- (a) withdraw the notice;
- (b) extend the period for compliance;
- (c) with the consent of the person on whom the notice is served, modify the requirement of the notice.

Appeals against notices requiring works etc

23. Appeals under regulations 9(9), 10(10) and 22(4) shall be determined by the Appeals Commission in accordance with the procedure set down in Article 8 of the Water and Sewerage Services (Northern Ireland) Order 1973 and for the purposes of appeals under these Regulations references to the Department in Article 8 shall have the same meaning as under these Regulations.

Offences

24.—(1) It shall be an offence to fail to comply without reasonable excuse with regulation 4, 6(3), 7(2), 7(3), 7(6), 7(7), 8(2), 9(1) and 10(3).

(2) It shall be an offence to fail to comply with regulation 6(1), 6(2), 7(1), 7(4), 7(5), 7(8), 8(1), 8(3), 8(4), 9(2), 9(8), 10(1), 10(2), 10(9), 11(1), 11(3), 11(4), 12, 13, 14(1)-(4), 15, 17, 18, 19 and 20 of these Regulations.

(3) It shall be an offence for a controller to fail without reasonable cause to comply with the conditions of a notice issued under regulation 22.

Penalties

25. A controller found guilty of an offence under regulation 24 shall be liable:

- (a) on summary conviction, to a fine not exceeding level 5 on the standard scale together with a fine of an amount equal to one-tenth of that level for each day upon which the offence continues after the conviction; or
- (b) on conviction on indictment to a fine or to imprisonment for a term not exceeding 2 years or both.

PART 8

POWERS, DUTIES AND FUNCTIONS OF THE DEPARTMENTS

Reporting

26.—(1) The Departments shall prepare at four-yearly intervals a report in accordance with Article 10 of the Directive.

(2) The Departments shall submit a report to the European Commission within 6 months of the reporting cycle which ends on 31 December 2007 and every four years thereafter.

Reviewing

27.—(1) The Departments shall, every four years, in consultation with the public, review this action programme and, if appropriate, publish a revised action programme for the protection of water against nitrates from agricultural sources.

(2) An action programme shall include such measures necessary as required by Article 5 of the Directive and shall contain a review of the action programme most recently made and of such additional measures as may be required.

(3) The Departments shall:—

- (a) ensure that the public is given early and effective opportunity to participate in the preparation, review or revision of an action programme required by Article 5 of the Directive; and
- (b) in doing so shall—
 - (i) ensure that the public is informed by public notices or other appropriate means such as electronic media, about any proposals for the preparation, review or revision of an action programme;
 - (ii) ensure that the information about the proposals referred to in paragraph (3)(a), is made available to the public, including information about the right to participate in decision making in relation to those proposals;
 - (iii) ensure that the public is entitled to make comments before any decision is made on the establishment, review or revision of an action programme;
 - (iv) in making any such decision, take due account of the results of the public participation; and
 - (v) having examined the comments made by the public, make reasonable efforts to inform the public of the decisions taken and the reasons and considerations on which these decisions are based, including information on the public participation process.

(4) In carrying out their functions under paragraph (3), the Departments shall ensure that reasonable time is allowed as is sufficient to enable the public to participate effectively.

(5) In carrying out the functions under paragraph (3), where the Departments publish any information, the Departments shall:

- (a) do so in a way as they consider appropriate for the purpose of bringing the information to the attention of the public; and
- (b) make copies of that information accessible to the public free of charge through their websites or otherwise.

(6) The Departments shall specify in a notice on their websites or otherwise the detailed arrangements made to enable public participation in the preparation, review or revision of an action programme, including: -

- (a) the address to which comments in relation to those proposals may be submitted; and
- (b) the date by which such comments should be received.

PART 9

MISCELLANEOUS

Timescale for implementation of measures

28. The measures contained in these Regulations shall come into operation in accordance with regulation 1 except that:

- (a) Regulation 6(3) will apply in the case of a holding without the prescribed storage capacity in place as required under regulations 11(3) and 12(1) to 12(3) from the date on which the

prescribed storage capacity as required under regulation 11(3) and 12(1) to 12(3) is put in place or at the latest by 31 December 2008;

- (b) Regulations 11(3) and 12(1) to 12(3) will apply from the date on which the prescribed storage capacity is put in place or at the latest by 31 December 2008;
- (c) Regulation 14(1) will apply from the operational date of these Regulations until 31 December 2008 only;
- (d) A notice served under regulation 4 of The Action Programme for Nitrate Vulnerable Zones Regulations (Northern Ireland) 1999(a) prior to their revocation in accordance with regulation 30 shall be deemed to be a notice served under these Regulations with the coming into operation of these Regulations.

Consequential amendments

29.—(1) The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 are amended as follows:

- (a) Before regulation 2(1) insert “2(1A) The definitions of “agricultural area”, “dirty water”, “controller”, “holding” and “slurry” shall have the same meaning as in regulation 3(2) of the Nitrates Action Programme Regulations (Northern Ireland) 2006.”
- (b) Delete from regulation 2(1) the definition of “slurry”.
- (c) Schedule 2 shall be amended as follows:

Delete paragraph 6 and replace with the following:

“6.—(1) Subject to sub-paragraph (2), the capacity of storage facilities for slurry of a holding shall be sufficient and adequate to provide for the storage of all the slurry which is likely to require storage on the holding for such period as may be necessary to ensure compliance with the Nitrates Action Programme Regulations (Northern Ireland) 2006.

(2) The matters to which regard is to be had under sub-paragraph (1) are—

- (a) the likely quantities of rainfall (including any fall of snow, hail or sleet) which may fall or drain into the slurry storage tank during the likely maximum storage period;
- (b) the need to make provision for not less than 750 millimetres of freeboard in the case of a tank with walls made of earth and 300 millimetres of freeboard in all other cases; and
- (c) soil quality in the vicinity of the slurry storage tank.”

(2) The Waste Management Licensing Regulations (Northern Ireland) 2003 Schedule 2 shall be amended as follows—

- (a) in Part I, paragraph 9, substitute sub-paragraph (3)(c) with “where the Nitrates Action Programme Regulations (Northern Ireland) 2006 applies treatment shall be carried out in accordance with those Regulations”;
- (b) in Part I, paragraph 10, substitute sub-paragraph (1)(c) with “where the Nitrates Action Programme Regulations (Northern Ireland) 2006 applies the spreading shall be carried out in accordance with those Regulations”;
- (c) in Part I, paragraph 11, substitute sub-paragraph (3)(e) with “where the Nitrates Action Programme Regulations (Northern Ireland) 2006 applies the spreading shall be carried out in accordance with those Regulations”;
- (d) in Part I, paragraph 25, sub-paragraph (1) substitute “sub-paragraphs (2) to (4A)” for “sub-paragraphs (2) to (4)”;
- (e) in Part I, paragraph 25, delete sub-paragraph (4A);
- (f) in Part I, delete paragraph 47A, sub-paragraph (1) and replace with the following:

(a) S.R. 1999 No. 156

“47A.—(1) The treatment of land used for agriculture with agricultural waste where such treatment results in benefit to agriculture or ecological improvement if—

- (a) the waste consists only of liquid milk;
- (b) before the treatment the waste is diluted with not less than an equal quantity of water or slurry;
- (c) in any period of 30 days the land is treated with no more than 50 cubic metres (tonnes) of diluted waste per hectare; and
- (d) the treatment shall be carried out in accordance with the Nitrates Action Programme Regulations (Northern Ireland) 2006.”

(g) in Part I, delete paragraph 47B and replace with the following:

“47B. The deposit of agricultural waste consisting of plant tissue at the place of production if—

- (a) there is no more than 250 cubic metres (tonnes) in any one deposit;
- (b) the deposit is not immediately adjacent to any other deposit made in reliance on this exemption; and
- (c) the deposit shall be carried out in accordance with the Nitrates Action Programme Regulations (Northern Ireland) 2006.”

(h) in Part III, substitute paragraph 2(b) with “for exempt activities to which the Nitrates Action Programme Regulations (Northern Ireland) 2006 apply the exempt activity shall be carried out in accordance with those Regulations.”

Revocations

30.—(1) In accordance with the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004 the following statutory provisions shall be revoked in their entirety upon the coming into operation of these Regulations:

- (a) The Action Programme for Nitrate Vulnerable Zones Regulations (Northern Ireland) 1999; and
- (b) The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2003(a).

(2) The Protection of Water Against Agricultural Nitrate Pollution (Amendment) Regulations (Northern Ireland) 2005(b) shall be revoked in their entirety upon the coming into operation of these Regulations.

Sealed with the Official Seal of the Department of Agriculture and Rural Development on 1st December 2006.



David Small

A senior officer of the Department of Agriculture and Rural Development

(a) S.R. 2003 No. 259
(b) S.R. 2005 No. 306

Sealed with the Official Seal of the Department of the Environment on 1st December 2006.



Wesley Shannon
A senior officer of the Department of the Environment

SCHEDULE 1

CRITERIA AS TO NUTRIENT MANAGEMENT

Table 1 – Regulations 9(3), 10(4) and 16(6)

The nitrogen excretion rate for livestock

<i>Unit of livestock category</i>	<i>Production period or Age range</i>	<i>Body Weight kg</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual Nitrogen Production kg N</i>
Cattle				
Dairy Cow		575	100	91
Dairy heifer replacement	>2 years old	500	100	54
Beef suckler cow ⁽²⁾	> 2 years old	500	100	54
Bull beef	6-13.5 months	300	60	23
Grower fattener	> 2 years old	500	100	54
Grower fattener	12-24 months	400	100	47
Grower fattener	6-12 months	180	50	12
Calf	0-6 months	100	50	7
Calf to 12 months	12 months	180	100	19
Sheep				
Adult ewe/ram	>1 year old	50-70	100	9
Lamb	0-6 months	4-40	50	1.2
Lamb	6-12 months	30-50	50	3.2
Lamb to 1 year	12 months	4-50	100	4.4
Pigs				
Maiden gilt ⁽³⁾		90-130	100	13.0
Boar		130-250	100	16
1 sow place, includes litter to 7 kg ⁽⁴⁾	12 months	130-225	100	19.5
Weaner	3-7.5 weeks	7-18	90	3.0
Grower, dry meal	7.5-11 weeks	18-35	90	6.1
Light cutter, meal fed	11-20 weeks	35-85	90	9.4
Baconer, dry meal fed	11-23 weeks	35-105	90	10.5
Baconer, liquid fed @ 4:1	11-23 weeks	35-105	90	10.5
Poultry				
1000 Laying hens		2200	98	607
1000 Broiler places ⁽⁵⁾	40 days	2000	73	255
1000 Broiler breeders	0-60 weeks	4000	91	878
1000 Broiler breeders	18-60 weeks	4000	87.5	945

<i>Unit of livestock category</i>	<i>Production period or Age range</i>	<i>Body Weight kg</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual Nitrogen Production kg N</i>
(Laying)				
1000 Broiler breeder replacements ⁽⁶⁾	0-18 weeks	2000	46	142
1000 Replacement pullets ⁽⁷⁾	17 weeks	1600	38	113
1000 Turkeys (male) ⁽⁸⁾	140 days	12000	80	1284
1000 Turkeys (female) ⁽⁸⁾	120 days	8000	80	871
1000 Ducks	50 days	3400	85	834
Goat				9
Deer (red)	6mths – 2 years			13
Deer (red)	>2 years			25
Deer (fallow)	6mths – 2 years			7

⁽¹⁾ For individual farms where occupancy values differ from those given, nitrogen excretion values should be altered accordingly.

⁽²⁾ Use the suckler cow data for beef and dairy bulls.

⁽³⁾ Maiden gilts, assuming all year round accommodation.

⁽⁴⁾ Sows based on 2.3 lactations, covering 23 per cent of year and dry period 77 per cent of year. Combined output 19.5 kg N/sow/year.

⁽⁵⁾ Broilers, output per 6.6 crops/year, 40 day cycle (73 per cent occupancy).

⁽⁶⁾ Broiler breeder replacements, output/24week cycle. Where there is more than one cycle per year adjust the output figures proportionately.

⁽⁷⁾ Replacement pullets, output per 20 week cycle. Where there is more than one cycle per year adjust the output figures proportionately.

⁽⁸⁾ Turkeys, assuming 2.1 or 2.4 crops per year, for male and female birds respectively.

Table 2 – Regulations 9(4) and 10(5)

Total nitrogen content of slurry and dirty water on a fresh weight basis

<i>Livestock type</i>	<i>DM content (%)⁽¹⁾</i>	<i>Total nitrogen (kg/ m³)⁽¹⁾</i>
Dairy Cattle	2	1.5
	6	3.0
	10	4.0
Beef Cattle	2	1.0
	6	2.3
	10	3.5
Pigs	2	3.0
	4	4.0
	6	5.0
Separated cattle slurries (liquid portion)		
Strainer box	1.5	1.5
Weeping wall	3	2
Mechanical separator	4	3
Dirty Water	<1	0.3

⁽¹⁾ Figures in bold – most common values

Table 3 – Regulations 9(4) and 10(5)

Total nitrogen contained in 1 tonne of solid organic manures

<i>Livestock type</i>	<i>DM content (%)</i>	<i>Total nitrogen (kg)</i>
Poultry manure		
Broilers	60	30.0
Layers	30	16.0
Turkeys	60	30.0
Ducks	25	6.5
Cattle FYM	25	6.0
Sheep FYM	25	6.0
Pig FYM	25	7.0

Table 4 – Regulation 9(2)

Annual nitrogen application standards for grassland crops

	<i>Year</i>	<i>*Dairy Cattle</i>	<i>*Other Livestock</i>
Balance of crop nitrogen requirement (kg N/ha/year) (e.g. from chemical fertiliser or organic nitrogen supply other than livestock manure)	2007	289	239
	2009	281	231
	2010	272	222
This table does not imply any departure from regulation 9(2) or 10(3) which prohibit the application to the agricultural area on a holding of livestock manure in amounts which exceed 170kg N/ha/year, including that deposited by the animals themselves.			
* The Dairy Cattle figures (dairy cows and heifer replacements) apply where it can be demonstrated that more than 50% of the livestock manure applied to the agricultural area, both by land application and by the animals themselves arises from dairy cattle. In all other cases the figures for Other Livestock will apply.			

Table 5 – Regulation 16(3)

Livestock manure production figures

<i>Type of livestock</i>	<i>Slurry produced per animal per week (m³)⁽¹⁾</i>	
Cattle	V	
Dairy cow	575kg	0.37
Suckler Cow	500kg	0.23
Cattle > 2 years	500kg	0.23
Cattle 1 – 2 years	400kg	0.18
Cattle 0.5 – 1 year	180kg	0.09
Calf	100kg	0.05
Sheep		
Adult ewe	65kg	0.03
Fattening Lamb	35kg	0.01
Pigs		
Gilt	90 – 130kg	0.05
1 Sow & litter	130 – 225kg	0.08

<i>Type of livestock</i>		<i>Slurry produced per animal per week (m³)⁽¹⁾</i>
1 Weaner (Stage 1)	7 – 18kg	0.01
1 Grower (Stage 2)	18 – 35kg	0.02
1 Finisher meal fed (Stage 3)	35 – 105kg	0.03
1 Finisher liquid fed (Stage 3)	35 – 105kg	0.05
Poultry		
1000 laying hens		0.81

⁽¹⁾ The standard figures for slurry produced by animals do not include water for cleaning buildings.

Table 6 – Regulations 9(6), 9(7), 10(7) and 10(8)

Nitrogen availability in livestock manures and chemical fertilisers

<i>Fertiliser</i>	<i>Availability (%) in year of application</i>		
	Nitrogen		
	From 1 Jan 07	From 1 Jan 09	From 1 Jan 10
Chemical	100	100	100
Pig Manure	35	45	50
Poultry litter	20	24	30
Farmyard manure	20	25	30
Cattle and other livestock manure	30	35	40

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations give further effect to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources and Council Directive 2003/35/EC on public participation in respect of the drawing up of certain plans and programmes relating to the environment. They revoke and replace The Action Programme for Nitrate Vulnerable Zones Regulations (Northern Ireland) 1999, The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2003, and The Protection of Water Against Agricultural Nitrate Pollution (Amendment) Regulations (Northern Ireland) 2005.

Regulation 2 establishes and introduces an action programme that is applicable to all farmers across Northern Ireland.

Regulation 4 imposes an obligation on the controller of a holding to prevent water pollution.

Regulation 5 imposes obligations on the owner and/or controller of a holding to comply with these Regulations and in doing so to have regard to any guidance issued by the Department of the Environment and/or the Department of Agriculture and Rural Development and the Code of Good Agricultural Practice issued by the Department of Agriculture and Rural Development.

Regulation 6 establishes closed periods for the land application of chemical fertiliser to grassland and non grassland crops and closed periods for the land application of organic manure, excluding farmyard manure and dirty water.

Regulations 7 and 8 establish the manner of application and spreading of nitrogen fertiliser (including dirty water) including the minimum distances from waterways, the weight and volume of solid organic manure and slurry that may be applied and the period of time to be left between applications.

Regulations 9 and 10 limit the land application of nitrogen fertiliser to 170kg N/ha/year and set limits for the amount of chemical fertiliser and organic manures that may be applied in relation to crop requirement for grass and other crops. These limits are currently calculated by using the values set out in DEFRA's Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) 2000 7th Edition, Schedule 1 of these Regulations and the Waste Management Licensing Regulations (Northern Ireland) 2003. Regulations 9 and 10 also allow for a scientific case to be presented to deviate from the values set in Schedule 1 Tables 1, 2 or 3 to the Regulations in respect of nitrogen excretion values, total nitrogen content of slurry, dirty water and solid organic manures.

Regulations 11 to 14 detail the requirements for the provision of livestock manure storage and establish the type of storage, how the different manures are to be stored, the location of the storage and the duration of storage, including the minimum duration required. Regulation 15 sets out how to store dirty water.

Regulation 16 advises how to calculate storage capacity and on farm practices, including out-wintering of livestock (other than dairy cows), that may be taken into account when calculating such capacity.

Regulations 17 and 18 prescribe soil cover and detail crop management in order to minimise soil erosion and nutrient run-off.

Regulation 19 imposes an obligation on the controller of a holding to keep detailed records sufficient to ascertain the identity of the controller of the holding for the calendar year, the total agricultural area of the holding, the crop regime for individual areas within the holding, the number of livestock on the holding, the livestock manure storage capacity and storage arrangements of the holding and the quantity of nitrogen fertiliser moved on and off the holding. These records must be ready for inspection and held for 5 years. Regulation 20 prescribes that these records must be accurate and not misleading.

Regulation 21 establishes the Department of the Environment as the enforcement authority and its authority to carry out these functions in accordance with the Waste and Contaminated Land (Northern Ireland) Order 1997.

Regulation 22 prescribes how the Department of the Environment may serve a notice if a controller of a holding is in breach of the Regulations and the requirements to be met when the notice is served.

Regulation 23 creates a right of appeal to the Water Appeals Commission against any notice issued under regulation 22. It also provides the procedures for an appeal against a refusal for a deviation under regulations 9 and 10.

Regulations 24 and 25 set out offences and defences for failing to comply with the Regulations and their corresponding penalties.

Regulation 26 establishes the duty on the Departments to submit a report to the European Commission in accordance with Article 10 of the Nitrates Directive within 6 months of the end of the reporting cycle which ends on 31 December 2007 and every four years thereafter.

Regulation 27 imposes a duty on the Departments to review the action programme, through a consultative process, every four years.

Regulation 28 creates an exemption from the requirement to comply with the closed periods where the required storage capacity for livestock manure is not in place from the operational date of these Regulations until the storage is in place or 31 December 2008 at the latest. In the case of poultry litter this regulation limits the storage in a field until 31 December 2008. It also deems notices served under regulation 4 of The Action Programme for Nitrate Vulnerable Zones Regulations (Northern Ireland) 1999 to be notices under these Regulations from 1 January 2007.

Regulation 29 makes consequential amendments to The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 and The Waste Management Licensing Regulations (Northern Ireland) 2003 to maintain consistency with these Regulations.

Regulation 30 provides for the revocation of a number of statutory provisions consequent upon the coming into operation of these Regulations.

Copies of the Code of Good Agricultural Practice for the Prevention of Pollution of Water, Air and Soil, referred to in regulation 5, may be obtained from the Department of Agriculture and Rural Development's website: <http://www.dardni.gov.uk>

Copies of the Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) may be obtained from the Department for Environment, Food and Rural Affairs website: <http://www.defra.gov.uk>

Copies of Council Directive 91/676/EEC may be obtained from the Stationery Office, 16 Arthur Street, Belfast, BT1 4GD.