

2010 No. 411

ENVIRONMENTAL PROTECTION

**The Nitrates Action Programme Regulations (Northern Ireland)
2010**

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Coming into operation - *1st January 2011*

CONTENTS

PART 1

Preliminary

1. Citation and commencement
2. Territorial application
3. Interpretation

PART 2

General

4. Duty of the controller to prevent water pollution
5. Duty of the controller to comply with these Regulations

PART 3

Prevention of water pollution from the application of fertilisers

6. Periods when the land application of nitrogen fertiliser is prohibited
7. Requirements as to the manner of land application of nitrogen fertiliser to any agricultural land
8. Measures governing the limits on land application of nitrogen fertiliser to grassland
9. Measures governing the limits on land application of nitrogen fertiliser to land other than grassland
10. Derogation from the measures governing the limits on land application of livestock manure

PART 4

Storage requirements

11. General obligations as to storage facilities for livestock manure and silage effluent
12. Obligations as to livestock manure storage capacity on pig and poultry enterprises
13. Manner of storage of farmyard manure and location of storage facilities

14. Manner of storage of poultry litter and location of storage facilities
15. Manner of storage of dirty water
16. Calculation of livestock manure storage capacity

PART 5

Measures relating to land management

17. Cover in winter
18. Crop management
19. Crop management for derogated holdings

PART 6

Record keeping and compliance monitoring

20. Type of records required
21. Duty of the controller not to provide false or misleading information

PART 7

Enforcement

22. Enforcement
23. Notices
24. Appeals against notices requiring works etc.
25. Offences
26. Penalties

PART 8

Powers, duties and functions of the departments

27. Reporting
28. Reviewing

PART 9

Miscellaneous

29. Transitional provisions
30. Consequential amendments
31. Revocations

SCHEDULE

PART 1 — Criteria as to nutrient management

PART 2 — Criteria as to calculation of phosphorus balance

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

(a) S.I. 2008/301

Act 1972(a) in relation to the environment, acting jointly in exercise of the powers conferred upon them by that section and the Department of the Environment in exercise of the powers conferred on it by Article 32 of the Waste and Contaminated Land (Northern Ireland) Order 1997(b) and, in accordance with Article 32(3) of that Order, the Department of the Environment having published a notice indicating the effect of these Regulations and having taken into consideration the representations made to it in accordance with the notice, make the following Regulations.

PART 1

Preliminary

Citation and commencement

1. These Regulations may be cited as the Nitrates Action Programme Regulations (Northern Ireland) 2010 and shall come into operation on 1st January 2011.

Territorial application

2. These Regulations shall establish and apply an action programme throughout the territory of Northern Ireland as required under the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004(c).

Interpretation

3.—(1) The Interpretation Act (Northern Ireland) 1954(d) applies 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;

“adequate effluent collection facilities” means effluent collection facilities that meet the requirements of regulation 11(4);

“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(e);

“Appeals Commission” means the Water Appeals Commission for Northern Ireland as specified in Article 292 of the Water and Sewerage Services (Northern Ireland) Order 2006(f);

“appropriate person” means—

- (a) the controller;
- (b) any person permitted by the controller to carry out, on their behalf, any activity described in these Regulations;
- (c) the owner of any storage facility used for the storage of livestock manure and silage effluent; and

(a) 1972 c.68

(b) S.I. 1997/2778 (N.I. 19)

(c) S.R. 2004 No. 419

(d) 1954 c.33 (N.I.)

(e) 1949 c.2 (N.I.)

(f) S.I. 2006/3336 (N.I. 21)

(d) any person using such storage facilities for the storage of livestock manure and silage effluent;

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

“available nitrogen” means forms of nitrogen that can be taken up by a crop immediately or within a short period;

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

“Code of Good Agricultural Practice” means the “Code of Good Agricultural Practice for the Prevention of Pollution of Water, Air and Soil” published by the Department of Agriculture and Rural Development (as may from time to time be reissued);

“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 previous applications of livestock and other organic manure and any chemical fertilisers estimated as described in the fertiliser technical standards and regulations 8 and 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;

“derogated holding” means a holding over which a derogation has been granted;

“derogation” means a derogation from the limit of livestock manure that can be applied to land each year as provided for in paragraph 2(b) of Annex III of the Directive granted by the Commission Decision 2007/863/EC(a) and approved by the Department which is valid for one calendar year;

“derogation application” means an application for derogation submitted by the controller using a form provided by the Department;

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

“dirty water” means water contaminated by organic 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 Table 2 of Part 1 of the Schedule;

“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;

“fertilisation account” means an account prepared in accordance with regulation 10(5);

“fertilisation plan” means a plan prepared in accordance with regulation 10(4);

“fertiliser technical standards” means the “DEFRA Fertiliser Manual (RB209) 8th Edition” (as may from time to time be reissued) and any supplementary guidance, and any other publication by DEFRA or the Departments substituting the standards set out in RB209 and any supplementary guidance;

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

(a) OJL 337, 21.12.2007, p. 122-126

(b) OJL 375, 31.12.91, p. 1-8

“grassland holding” means a holding where 80% or more of the agricultural area available for manure application is cultivated with grass;

“grazing livestock” means cattle (with the exclusion of veal calves), sheep, deer, goats and horses;

“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” means waste products excreted by livestock, or a mixture of litter and waste products excreted by livestock, even in processed form;

“midden” means a storage facility with an impermeable base for solid, stackable organic manure;

“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;

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

“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;

“Phosphorus Regulations” means the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006(b);

“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;

“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%;

“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

(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 Tables 1, 2 or 3 of Part 1 of the Schedule to 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(c);

“slurry” means—

(a) S.I. 1997/2778 (N.I. 19)

(b) S.R. 2006 No. 488

(c) S.R. 2003 No. 319

- (a) excreta produced by livestock whilst in a yard or building;
- (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 in the case of grassland or 15% or more in the case of other land;

“total nitrogen” means the sum of all nitrogen forms including nitrate, nitrite, ammonia and organic nitrogen;

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

“Waste Regulations” means the Waste Management Licensing Regulations (Northern Ireland) 2003(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; and

“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 cause or permit, directly or indirectly, the entry of nitrogen fertiliser into any waterway or water contained in any underground strata.

Duty of the controller to comply with these Regulations

5. In complying with any duty under these Regulations, the 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.I. 1999/662 (N.I. 6)

(b) S.R. 2003 No. 493

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 from 15 September in any year to 31 January of the following year.

(2) The land application of chemical fertiliser to any land shall not be permitted from 15 September in any year to 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 from 15 October in any year to 31 January of the following year.

(4) The land application of farmyard manure to any land shall not be permitted from 31 October in any year to 31 January of the following year.

(5) The land application of organic manure, to a derogated holding shall not be permitted from 15 October in any year to 31 January of the following year where the fertiliser plan indicates a proposal to disturb the soil as part of grass cultivation.

Requirements as to the manner of land application of nitrogen fertiliser to any agricultural land

7.—(1) The land application of nitrogen fertiliser shall be done in an accurate and uniform manner in accordance with paragraphs (2) to (10).

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

- (a) soil is waterlogged;
- (b) land is flooded or likely to flood;
- (c) the soil has been frozen for 12 hours or longer in the preceding 24 hours;
- (d) land is snow-covered;
- (e) heavy rain is forecast within 48 hours; or
- (f) the land is steeply sloping land and where, taking into account factors such as proximity to waterways, soil condition, ground cover, rainfall and, in the case of land other than grassland, the time taken to incorporate organic manure, 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 2 m of any waterway.

(5) The land application of organic manure shall not be permitted within—

- (a) 20m of lakes;
- (b) 50m of a borehole, spring or well;
- (c) 250m of a borehole used for a public water supply;
- (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 manure is spread by bandspreader, 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 8(1) and 9(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 per hectare at any one time provided this does not exceed the limits set out in regulation 8(1) and 9(3) and a period of at least 3 weeks shall be left between such land applications.

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

(9) 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.

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

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

8.—(1) Save where regulation 10 applies 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 of nitrogen per hectare per year when calculated in accordance with paragraphs (3) and (4).

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

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

(4) The total nitrogen from imported livestock manure is calculated in accordance with Table 2 of Part 1 of the Schedule for slurry and Table 3 of Part 1 of the Schedule for solid livestock manure.

(5) The total nitrogen content per tonne of other organic manure, excluding livestock manure, shall be as declared in accordance with the Waste 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 Table 6 of Part 1 of the Schedule.

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

(8) Any controller wishing to deviate from the values set out in Tables 1, 2 or 3 of Part 1 of the Schedule 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 24.

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

9.—(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) Save where regulation 10 applies, 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 of nitrogen per hectare per year when calculated in accordance with paragraphs (4) and (5).

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

(5) The total nitrogen from imported livestock manure is calculated in accordance with Table 2 of Part 1 of the Schedule for slurry and Table 3 of Part 1 of the Schedule for solid livestock manure.

(6) The total nitrogen content per tonne of other organic manure, excluding livestock manure, shall be as declared in accordance with the Waste Regulations.

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

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

(9) Any controller wishing to deviate from the values set out in Tables 1, 2 or 3 of Part 1 of the Schedule 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 24.

Derogation from the measures governing the limits on land application of livestock manure

10.—(1) Where the Department approves a derogation for a grassland holding in accordance with this regulation, the total nitrogen in livestock manure from grazing livestock applied to that derogated holding shall not exceed 250kg of nitrogen per hectare per year when calculated in accordance with regulation 8(3) and (4).

(2) For the purposes of this provision “applied” means applied both by land application and by the animals themselves.

(3) With regards to derogation applications—

- (a) a controller seeking a derogation shall submit a derogation application annually accompanied by a fertilisation account in accordance with 10(5) to the Department no later than 1 March for that calendar year;
- (b) the Department shall grant or refuse a derogation application within 28 days from its receipt and where no response is received prior to the expiry of that period the derogation shall be deemed to have been granted;
- (c) the deemed approval of a derogation application shall not preclude service by the Department of a notice under regulation 23; and
- (d) the controller may appeal the refusal by the Department of the derogation application under paragraph (b) in accordance with the procedure set out in regulation 24.

(4) With regards to fertilisation plans—

- (a) the controller of a derogated holding shall prepare and keep a fertilisation plan describing crop rotation and the planned application of nitrogen and phosphorus fertilisers to its agricultural area;

- (b) fertilisation plans shall be made available on the derogated holding every year no later than 1 March for that calendar year;
 - (c) fertilisation plans shall include—
 - (i) the number of livestock on the derogated holding;
 - (ii) a description of livestock housing and livestock manure storage systems, including the volume of livestock manure storage available on the derogated holding;
 - (iii) the amount of nitrogen from livestock manure produced on the derogated holding calculated in accordance with Table 1 of Part 1 of the Schedule;
 - (iv) the amount of phosphorus from livestock manure produced on the derogated holding calculated in accordance with Table 7 of Part 1 of the Schedule;
 - (v) the crop rotation and area of each crop, including a sketch map indicating the location of the area of each crop;
 - (vi) the derogated holding's foreseeable nitrogen and phosphorus crop requirement in accordance with fertiliser technical standards;
 - (vii) the quantity of each type of organic manure moved on or off the derogated holding;
 - (viii) the results of soil analysis relating to nitrogen and phosphorus soil status if available;
 - (ix) the amount of nitrogen from nitrogen fertilisers applied in each area of the derogated holding under the same cropping regime and soil type calculated in accordance with Tables 1 to 6 of Part 1 of the Schedule;
 - (x) the amount of nitrogen from other organic manure, excluding livestock manures, applied in each area of the derogated holding under the same cropping regime and soil type, as declared under regulation 8(5) and calculated in accordance with regulation 8(7);
 - (xi) the amount of phosphorus from phosphorus fertilisers applied in each area of the derogated holding under the same cropping regime and soil type calculated in accordance with Table 7 of Part 1 of the Schedule of these Regulations and Schedule 2 Table 1 of the Phosphorus Regulations;
 - (xii) the amount of phosphorus from other organic manure, excluding livestock manures, applied in each area of the derogated holding under the same cropping regime, as declared in accordance with regulation 2(3) of the Phosphorus Regulations; and
 - (d) where changes in agricultural practices necessitate changes in the fertilisation plan of a derogated holding the controller shall revise the plan within seven days of such changes taking effect.
- (5) With regards to fertilisation accounts—
- (a) the controller of a derogated holding shall submit fertilisation accounts for the calendar year to the Department by 1 March of the following year; and
 - (b) fertilisation accounts shall include—
 - (i) an account of the nitrogen crop requirement of the derogated holding;
 - (ii) an account of the nitrogen fertiliser applied to the derogated holding;
 - (iii) information relating to the derogated holding's management of dirty water; and
 - (iv) information to allow the calculation of the derogated holding's phosphorus balance.
- (6) At least every four years the controller of a derogated holding shall undertake nitrogen and phosphorus soil analysis of every four hectares of the agricultural area of the derogated holding under the same cropping regime and soil type.
- (7) The phosphorus balance of a derogated holding calculated in accordance with paragraph 1 and Tables 8 and 9 of Part 2 of the Schedule shall not exceed a surplus of 10kg phosphorus per hectare per year.

PART 4

Storage requirements

General obligations as to storage facilities for livestock manure and silage effluent

11.—(1) Subject to paragraphs (2) and (3) and regulations 13, 14, 15 and 16, the capacity of storage facilities for livestock manure and silage effluent of a holding shall be sufficient and adequate to provide for the storage of all the livestock manure and silage effluent 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 organic 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 and be managed 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(a).

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

12.—(1) Subject to paragraphs (2) and (3), on holdings where there is a pig or poultry enterprise or both the total livestock manure storage capacity on holdings shall be sufficient for at least 26 weeks storage.

(2) On holdings with less than 10 breeding sow places or 150 finishing pig places and holdings with less than 500 poultry places the total livestock manure storage capacity on holdings shall be sufficient for at least 22 weeks storage.

(3) On holdings where there is—

- (a) a pig enterprise;
- (b) a poultry enterprise; or
- (c) both a pig and poultry enterprise,

in addition to another livestock enterprise the livestock manure storage capacity on holdings shall be sufficient for at least 26 weeks storage for the pig or poultry enterprise and at least 22 weeks storage for the other livestock enterprise.

Manner of storage of farmyard manure and location of storage facilities

13.—(1) Prior to land application, farmyard manure shall only be stored on a holding—

- (a) in a midden which shall have adequate effluent collection facilities; or
- (b) subject to paragraphs (2), (3) (4) and (5), in the field where land application will take place up to a maximum of 180 days from placement in that field.

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

(3) Where stored in a field, farmyard manure must not be stored where—

- (a) the soil is waterlogged; or

(a) S.R. 2003 No. 319

(b) the land is flooded or likely to flood.

(4) Where stored in a field, farmyard manure must be stored in a compact heap and such heaps must not be placed within—

- (a) 50m of lakes;
- (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;
- (c) 50m around a borehole, spring or well;
- (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) From 31 December 2012 the length of time farmyard manure may be stored in a field in accordance with paragraph (1)(b) shall be limited to a maximum of 120 days.

Manner of storage of poultry litter and location of storage facilities

14.—(1) Prior to land application, poultry litter shall only be stored on a holding—

- (a) in a midden which shall have adequate effluent collection facilities; or
- (b) until 30 September 2011 and subject to paragraphs (2), (3) and (4), in the field where land application will take place up to a maximum of 180 days from placement in that field.

(2) Where stored in a field, poultry litter must not be stored in the same location of the field in consecutive years.

(3) Where stored in a field, poultry litter must be stored in a compact heap and such heaps must not be placed within—

- (a) 50m of lakes;
- (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;
- (c) 50m around a borehole, spring or well;
- (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).

(4) Where stored in a field, poultry litter must be covered with an impermeable membrane within 24 hours of placement in the field.

Manner of storage of 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 stored in a midden or field prior to land application in accordance with regulation 13;
- (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;
- (d) any valid contract the holding has with a manure processing facility or demonstrable access to an approved treatment or recovery outlet; and
- (e) the quantity of poultry litter stored in a midden or field prior to land application in accordance with regulation 14.

(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 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);
- (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 of nitrogen per hectare per year, as calculated in accordance with regulation 8; and
- (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 Table 5 of Part 1 of the Schedule; 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 Table 1 of Part 1 of the Schedule.

(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 to 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;
- (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.

Crop management for derogated holdings

19. In addition to the measures mentioned in regulations 17 and 18, where regulation 10 applies the controller of a derogated holding shall carry out the following measures—

- (a) temporary grassland shall be ploughed in spring;
- (b) ploughed grass on all soil types shall be followed immediately by a crop with high nitrogen demand; and
- (c) crop rotation shall not include leguminous or other plants fixing atmospheric nitrogen except for grassland with less than 50% clover and to areas with cereals and pea undersown with grass.

PART 6

Record keeping and compliance monitoring

Type of records required

20.—(1) On all holdings the controller shall keep sufficient records available for inspection by the Department as detailed in paragraphs (2) to (4).

(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 8(5) and 9(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 paragraph (2) of 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.

(4) The controller of a derogated holding shall retain the fertilisation plan and fertilisation account for each calendar year for that derogated holding for 5 years from the date upon which they were prepared or submitted to the Department, whichever is the later.

Duty of the controller not to provide false or misleading information

21. 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

22.—(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

23.—(1) Where the Department is of the opinion that the appropriate person 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 that person in accordance with this regulation.

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

- (a) require the person upon whom it is served to carry out such works or to take such precautions and other steps as the Department specify in the notice as appropriate to remedy, or to prevent the continuation or repetition of, any breach to which the notice relates;
- (b) state the period within which any such requirement is to be complied with; and
- (c) inform the person on whom the notice is served of their right to appeal under paragraph (4).

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

(4) A notice served pursuant to this regulation may be appealed in accordance with regulation 24.

(5) Where an appeal is brought under regulation 24, the notice shall be of no effect pending the final determination or the withdrawal of the appeal.

(6) The Department may at any time—

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

Appeals against notices requiring works etc.

24.—(1) Any appropriate person upon whom a notice is served under regulation 23 may, within the period of 28 days from the day on which the notice is served, appeal against the notice to the Appeals Commission;

(2) Appeals under regulations 8(9), 9(10), 10(3)(d) and 23(4) shall be determined by the Appeals Commission in accordance with the procedure pursuant to Article 293 of the Water and Sewerage Services (Northern Ireland) Order 2006(a) and for the purposes of appeals under these Regulations references to the Department in Article 293 shall have the same meaning as under these Regulations.

Offences

25.—(1) It shall be an offence for the controller to fail to comply without reasonable excuse with regulation 4, 8(1), 9(3), 10(1), 10(6) or 10(7).

(2) It shall be an offence for the appropriate person to fail to comply without reasonable excuse with regulation 6(3), 6(4), 6(5), 7(2), 7(3), 7(6), 7(7), 7(8) or 13(3).

(3) It shall be an offence for the controller to fail to comply with regulation 8(2), 8(8), 9(1), 9(2), 9(9), 10(4), 10(5), 11(1), 11(3), 12, 15, 17, 19, 20 or 21.

(4) It shall be an offence for the appropriate person to fail to comply with regulation 6(1), 6(2), 7(1), 7(4), 7(5), 7(9), 7(10), 11(4), 13(1), 13(2), 13(4), 13(5), 14 or 18.

(5) It shall be an offence for the appropriate person to fail to comply without reasonable excuse with any requirement of a notice issued under regulation 23.

Penalties

26. Any person guilty of an offence under regulation 25 shall be liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum 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

27.—(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 2011 and every four years thereafter.

(3) The Departments shall prepare and submit a report to the European Commission in accordance with Article 10 of the Commission Decision 2007/863/EC(b).

(a) S.I. 2006/3336 (N.I. 21)

(b) OJL 337, 21.12.2007, p. 122-126

Reviewing

28.—(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 in accordance with Article 2 of Directive 2003/35/EC^(a) the public is given early and effective opportunity to participate in the preparation, review or revision of an action programme; 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 such as is sufficient to enable the public to participate effectively.

(5) In carrying out their 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

Transitional provisions

29.—(1) A notice served under regulation 22 (notices) of the Nitrates Action Programme Regulations (Northern Ireland) 2006^(b) shall, notwithstanding the revocation of those

(a) OJL 156, 25.6.2003, p. 17–25

(b) S.R. 2006 No. 489

Regulations, be deemed to be a notice served under regulation 23 (notices) with the coming into operation of these Regulations.

(2) Records required to be retained under regulation 19 (type of records required) of the Nitrates Action Programme Regulations (Northern Ireland) 2006 shall, notwithstanding the revocation of those Regulations, be deemed to be records required to be retained under regulation 20 (type of records required) with the coming into operation of these Regulations.

Consequential amendments

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

- (a) in regulation 2(1A), substitute ‘2010’ for ‘2006’; and
- (b) in Schedule 2, paragraph 6(1), substitute ‘2010’ for ‘2006’.

(2) Schedule 2 to the Waste Management Licensing Regulations (Northern Ireland) 2003^(b) shall be amended as follows—

- (a) in Part I, paragraphs 9, 10 and 11, sub-paragraphs (3)(c), (1)(c) and (3)(e) respectively, substitute ‘2010’ for ‘2006’;
- (b) in Part I, paragraph 47A, sub-paragraph (1)(d) substitute ‘2010’ for ‘2006’;
- (c) in Part I, paragraph 47B, sub-paragraph (c) substitute ‘2010’ for ‘2006’; and
- (d) in Part III, paragraph 2(b) substitute ‘2010’ for ‘2006’.

Revocations

31.—(1) The following Regulations are revoked—

- (a) the Nitrates Action Programme Regulations (Northern Ireland) 2006^(c);
- (b) the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2008^(d); and
- (c) the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009^(e).

Sealed with the Official Seal of the Department of Agriculture and Rural Development on 8th December 2010



Colette McMaster
A senior officer of the Department of Agriculture and Rural Development

Sealed with the Official Seal of the Department of the Environment on 8th December 2010



Denis McMahon
A senior officer of the Department of the Environment

(a) S.R. 2003 No. 319
(b) S.R. 2003 No. 493
(c) S.R. 2006 No. 489
(d) S.R. 2008 No. 196
(e) S.R. 2009 No. 360

SCHEDULE

PART 1

Criteria as to nutrient management

Table 1

Regulations 8(3), 9(4), 10(4) and 16(6) - The nitrogen (N) excretion rate for livestock

<i>Livestock type</i>	<i>Production period or age range</i>	<i>Body weight (kg)</i>	<i>Occupancy % year⁽¹⁾ of</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	11.1
Boar		130-250	100	17.5
1 sow place, includes litter to 7 kg ⁽⁴⁾	12 months	130-225	100	15.9
Weaner (Stage 1)	3-7.5 weeks	7-18	71	1.1
Weaner (Stage 2)	7.5-11 weeks	18-35	82	4.2
Grower	11-20 weeks	35-65	89	6.1
Finisher	11-23 weeks	35-105	86	8.3

<i>Livestock type</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>
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 (laying)	18-60 weeks	4000	87.5	945
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
Other				
Goat				9
Deer (red)	6 months–2 years			13
Deer (red)	>2 years			25
Deer (fallow)	6 months–2 years			7
Deer fallow	>2 years			13
Deer (sika)	6 months-2 years			6
Deer (sika)	>2 years			10
Horse	>3 years			50
Horse	2–3 years old			44
Horse	1–2 years old			36
Horse foal	< 1 year old			25
Donkey/small pony				30

⁽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 15.9 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 8(4), 9(5) and 10(4) - Total nitrogen content of slurry and dirty water on a fresh weight basis**

<i>Slurry type</i>	<i>Dry matter 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	1.3
	4	1.7
	6	2.1
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 are the most common values.**Table 3****Regulations 8(4), 9(5) and 10(4) - Total nitrogen contained in 1 tonne of solid organic manures**

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

Table 4**Regulation 8(2) and 10(4) - Nitrogen application standards for grassland crops**

	<i>Dairy cattle</i> ⁽²⁾	<i>Other livestock</i> ⁽²⁾
Balance of crop nitrogen requirement (kg N/ha/year) (e.g. from chemical fertiliser or organic nitrogen supply other than livestock manure) ⁽¹⁾	272	222

⁽¹⁾ This table does not imply any departure from regulation 8(1) or 9(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, or, in the case of grassland holdings granted a derogation in accordance with regulation 10, 250kg of N/ha/year, including that deposited by the animals themselves.

⁽²⁾ 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 10(4) and 16(3) - Livestock manure production figures**

<i>Livestock type</i>	<i>Body weight (kg)</i>	<i>Volume of excreta produce per animal per week (m³)</i> ⁽¹⁾
Cattle		
Dairy cow	575	0.37
Suckler cow	500	0.23
Cattle > 2 years	500	0.23
Cattle 1 – 2 years	400	0.18
Cattle 0.5 – 1 year	180	0.09
Calf	100	0.05
Sheep		
Adult ewe	65	0.03
Fattening lamb	35	0.01
Pigs		
Gilt	90 – 130	0.05
1 Sow and litter	130 – 225	0.08
1 Weaner (Stage 1)	7 – 18	0.01
1 Grower (Stage 2)	18 – 35	0.02
1 Finisher meal fed (Stage 3)	35 – 105	0.03
1 Finisher liquid fed (Stage 3)	35 – 105	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 8(6), 8(7), 9(7), 9(8) and 10(4) - Nitrogen availability in livestock manures and chemical fertilisers**

<i>Fertiliser</i>	<i>Nitrogen availability (%)</i>
Chemical	100
Pig manure	50
Poultry litter	30
Farmyard manure	30
Cattle and other livestock manure	40

Table 7**Regulation 10(4) - Phosphorus (P) excretion values**

<i>Livestock type</i>	<i>P excretion (kg per annum)</i>
Cattle	
Dairy cow	16.6
Suckler cow	10.1
Breeding bull	10.1
Cattle over 2 years	10.1
Cattle 1-2 years	7.9
Bull beef (0-13 months)	7.5
Calf 6 months to 1 year	3.0
Calf under 6 months	1.7
Sheep	
Adult ewe/ram	1.0
Fattening lamb	0.3
Pigs	
Boar	4.2
Maiden gilt	5.7
Sow and litter up to weaning	8.7
Pigs 18 kg -35 kg	2.0
Pigs 18 kg – 105 kg	5.3
Pigs 35 kg -105 kg	3.3
Poultry	
Broilers (1000)	189.7
Male turkeys (1000)	534.1

<i>Livestock type</i>	<i>P excretion (kg per annum)</i>
Cattle	
Female turkeys (1000)	250.7
Fattening ducks (1000)	392.4
Broiler breeders (1000)	319.3
Pullets (1000)	41.1
Layers (1000)	237.6
Other	
Horse (>3 years old)	9
Horse (2-3 years old)	8
Horse (1-2 years old)	6
Horse foal (< 1 year old)	3
Donkey/small pony	5
Goat	1
Deer (red) 6 months - 2 years	2
Deer (red) > 2 years	4
Deer (fallow) 6 months - 2 years	1
Deer (fallow) > 2 years	2
Deer (sika) 6 months - 2 years	1
Deer (sika) > 2 years	2

PART 2

Criteria as to calculation of phosphorus balance

1.—(1) Phosphorus balance is the difference between phosphorus inputs to the farm less the total of phosphorus outputs leaving the farm. It is calculated per unit area of agricultural land on the holding for each calendar year.

(2) Phosphorus inputs include, when imported on to the farm—

- (a) the total amount of phosphorus in chemical fertiliser;
- (b) the total amount of phosphorus in feedstuffs (calculated using values from Table 8); and
- (c) the total amount of phosphorus in organic manure (calculated using values from Table 9).

(3) Phosphorus outputs include, when exported from the farm—

- (a) the total amount of phosphorus in produce, for example, meat, milk and crops (calculated using values from Table 8); and
- (b) the total amount of phosphorus in organic manure (calculated using values from Table 9).

(4) Inputs of phosphorus to agricultural land in precipitation and losses of phosphorus from the farm to surface or groundwaters are excluded from the balance calculation.

Table 8**Regulation 10(7) - Phosphorus (P) content of agricultural products and feedstuffs**

<i>Agricultural product</i>	<i>Phosphorus content (% fresh weight)</i>
Poultry concentrate	0.5 (or actual declared content)
Pig concentrate	0.48 (or actual declared content)
Ruminant concentrate	0.55 (or actual declared content)
All other concentrates	0.58 (or actual declared content)
Cattle	0.66
Milk	0.10
Sheep	0.54
Wool	0.04
Pigs	0.50
Poultry	0.58
Eggs	0.22
Straw	0.10
Silage	0.06
Hay	0.30
Potatoes	0.04
Oats	0.29
Barley	0.30
Wheat	0.26
Maize	0.25
Full fat soya	0.45
Linseed	0.81
Rape	1.10
Soya	0.68
Sunflower	0.93
Gluten	0.96
Citrus	0.1
Wheat distillers	0.77
Corn distillers	0.77
Peas	0.44
Palm kernal	0.63
Pollard	1.00
Soya hulls	0.14

<i>Agricultural product</i>	<i>Phosphorus content (% fresh weight)</i>
Sugar beet	0.1

Table 9

Regulation 10(7) - Phosphorus (P) content of organic manures

<i>Livestock manure type</i>	<i>Dry matter content (%)⁽¹⁾</i>	<i>Phosphorus content (kg P/m³)⁽²⁾</i>
Dairy cattle slurry	2	0.26
	6	0.52
	10	0.87
Beef cattle	2	0.26
	6	0.52
	10	0.87
Pig slurry	2	0.44
	4	0.87
	6	1.31
Separated cattle slurries (liquid portion)		
Strainer box	1.5	0.13
Weeping wall	3	0.22
Mechanical separator	4	0.52
	<i>Dry matter content (%)</i>	<i>Phosphorus content (kg P/t)</i>
Cattle farmyard manure	25	1.53
Pig farmyard manure	25	3.05
Sheep farmyard manure	25	0.87
Duck manure	25	2.40
Layer manure	30	5.67
Broiler / turkey	60	10.91

⁽¹⁾ Figures in bold are the most common values.

⁽²⁾ For calculation purposes assume 1m³ of slurry weighs 1 tonne.

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 Nitrates Action Programme Regulations (Northern Ireland) 2006, the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2008 and the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009.

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 controller of a holding in complying with these Regulations to have regard to any guidance issued by the Department of the Environment or jointly by the Department of the Environment and 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 dirty water.

Regulation 7 establishes 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 8 and 9 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 Manual (RB209) 8th Edition, the Schedule of these Regulations and the Waste Management Licensing Regulations (Northern Ireland) 2003. Regulations 8 and 9 also allow for a scientific case to be presented to deviate from the values set in Tables 1, 2 or 3 of Part 1 of the Schedule to the Regulations in respect of nitrogen excretion values, total nitrogen content of slurry, dirty water and solid organic manures.

Regulation 10 prescribes the requirements to be complied with for grassland holdings with an approved derogation from the measures governing the limits on land application of livestock manure, in accordance with Commission Decision 2007/863/EC.

Regulation 11 establishes general obligations for the storage of livestock manure and silage effluent, including capacities and standards for storage facilities and the requirement to maintain and manage these facilities to prevent water pollution.

Regulation 12 further details the livestock manure storage capacity required for different types of enterprises.

Regulations 13 to 15 prescribe how farmyard manure, poultry litter and dirty water are to be stored.

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 details further crop management practices for grassland holdings with an approved derogation.

Regulation 20 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 21 prescribes that these records must be accurate and not misleading.

Regulation 22 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 23 prescribes how the Department of the Environment may serve a notice if any appropriate person is in breach of the Regulations and the requirements to be met when the notice is served.

Regulation 24 creates a right of appeal to the Appeals Commission against any notice issued under regulation 23. It also provides the procedures for an appeal against a refusal for a deviation under regulations 8, 9 and 10.

Regulations 25 and 26 set out offences and defences for failing to comply with the Regulations and their corresponding penalties.

Regulation 27 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 2011 and every four years thereafter.

Regulation 28 imposes a duty on the Departments to review the action programme, through a consultative process, every four years.

Regulation 29 deems notices served under regulation 23 of the Nitrates Action Programme Regulations (Northern Ireland) 2006 to be notices under these Regulations from 1 January 2011 and records to be retained under regulation 19 of the Nitrates Action Programme Regulations (Northern Ireland) 2006 to be records to be retained under these Regulations from 1 January 2011.

Regulation 30 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 31 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 DEFRA Fertiliser Manual (RB209) 8th Edition 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 or the European Commission website: http://ec.europa.eu/environment/water/water-nitrates/index_en.html

