



STATUTORY INSTRUMENTS.

S.I. No. 610 of 2010



EUROPEAN COMMUNITIES (GOOD AGRICULTURAL PRACTICE
FOR PROTECTION OF WATERS) REGULATIONS 2010

(Prn. A10/1894)

EUROPEAN COMMUNITIES (GOOD AGRICULTURAL PRACTICE
FOR PROTECTION OF WATERS) REGULATIONS 2010

PART 1

ARTICLE PRELIMINARY

1. Citation, commencement and application
2. Revocations
3. Interpretation

PART 2

FARMYARD MANAGEMENT

4. Minimisation of soiled water
5. Collection and holding of certain substances
6. Provision and management of storage facilities
7. General obligations as to capacity of storage facilities
8. Capacity of storage facilities for effluents and soiled water
9. Capacity of storage facilities for pig manure
10. Capacity of storage facilities for poultry manure
11. Capacity of storage facilities for manure from deer, goats and sheep
12. Capacity of storage facilities for manure from cattle
13. Reduced storage capacity in certain circumstances
14. Operative date

PART 3

NUTRIENT MANAGEMENT

15. Interpretation, commencement etc.
16. Duty of occupier in relation to nutrient management

PART 4

PREVENTION OF WATER POLLUTION FROM FERTILISERS AND
CERTAIN ACTIVITIES

17. Distances from a water body and other issues
18. Requirements as to manner of application of fertilisers, soiled water etc
19. Periods when application of fertilisers is prohibited
20. Limits on the amount of livestock manure to be applied
21. Ploughing and the use of non-selective herbicides

PART 5

GENERAL

22. General duty of occupier
23. Keeping of records by occupier
24. False or misleading information
25. Authorised person
26. Offences and related matters

PART 6

FUNCTIONS OF PUBLIC AUTHORITIES

27. Minister for Agriculture, Fisheries and Food
28. Making and review of action programme by the Minister
29. Agency
30. Local authorities
31. Compliance with Data Protection Acts
32. Certificate in relation to nutrient content of fertiliser
33. Exemption for exceptional circumstances for research
34. Transitional provisions

SCHEDULE 1

SOIL TEST

SCHEDULE 2

CRITERIA AS TO STORAGE CAPACITY AND NUTRIENT MANAGEMENT

SCHEDULE 3

STORAGE PERIODS FOR LIVESTOCK MANURE

SCHEDULE 4

PERIODS WHEN APPLICATION OF FERTILISERS TO LAND IS PROHIBITED

SCHEDULE 5

CONDITIONS APPLYING IN RELATION TO DEROGATION

S.I. No. 610 of 2010

EUROPEAN COMMUNITIES (GOOD AGRICULTURAL PRACTICE
FOR PROTECTION OF WATERS) REGULATIONS 2010

WHEREAS, I, JOHN GORMLEY, Minister for the Environment, Heritage and Local Government, having regard to section 3(3) of the European Communities Act 1972 (as inserted by section 2 of the European Communities Act 2007) (hereinafter referred to as the Act of 1972), consider it necessary for the purpose of giving full effect to Directive 75/442/EEC of 15 July 1975¹, Directive 80/68/EEC of 17 December 1979², Directive 91/676/EEC of 12 December 1991³, Directive 2000/60/EC of 23 October 2000⁴, Directive 2003/35/EC of 26 May 2003⁵, Directive 2006/11/EC of 15 February 2006⁶, Directive 2006/12/EC of 5 April 2006⁷, Directive 2006/118/EC of 12 December 2006⁸ and Directive 2008/98/EC of 19 November 2008⁹ to make provision for offences under the following Regulations to be prosecuted on indictment:

AND WHEREAS, I consider that it is necessary, having further regard to section 3(3) of the Act of 1972, and for the purpose of ensuring that penalties in respect of an offence prosecuted in that manner under the following Regulations are effective, proportionate and have a deterrent effect, having regard to the acts or omissions of which the offence consists, to make such provision in the following Regulations:

AND WHEREAS, the Commission of the European Communities has, by decision of 22 October 2007, granted a derogation requested by Ireland pursuant to Council Directive 91/676/EEC of 12 December 1991;

NOW THEREFORE, I, JOHN GORMLEY, Minister for the Environment, Heritage and Local Government, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) as amended by the European Communities Act 2007 (No. 18 of 2007) and for the purpose of giving effect to Directive 75/442/EEC of 15 July 1975¹, Directive 80/68/EEC of 17 December 1979², Directive 91/676/EEC of 12 December 1991³, Directive 2000/60/EC of 23 October 2000⁴, Directive 2003/35/EC of 26 May 2003⁵, Directive 2006/11/EC of 15 February 2006⁶, Directive 2006/12/EC of 5 April 2006⁷, Directive 2006/118/EC of 12 December 2006⁸ and Directive 2008/98/EC of 19 November 2008⁹ hereby make the following Regulations:

¹O.J. No. L 194/39, 25 July 1975.

²O.J. No. L 20/43, 26 January 1980.

³O.J. No. L 375/1, 31 December 1991.

⁴O.J. No. L 327/1, 22 December 2000.

⁵O.J. No. L 156/17, 25 June 2003.

⁶O.J. No. L 64/52, 4 March 2006

⁷O.J. No. L 114/9, 27 April 2006.

⁸O.J. No. L 372/19, 27 December 2006.

⁹O.J. No. L 312/3, 22 November 2008.

*Notice of the making of this Statutory Instrument was published in
"Iris Oifigiúil" of 28th December, 2010.*

PART 1

PRELIMINARY

Citation, commencement and application

1. (a) These Regulations may be cited as the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.
- (b) These Regulations shall come into effect on 20 December 2010 save as is otherwise provided in relation to any particular provision.
- (c) These Regulations shall apply to all holdings in the State.

Revocations

2. The European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 are revoked with effect from 20 December 2010.

Interpretation

3. (1) In these Regulations, save where the context otherwise requires—

“Act of 1992” means the Environmental Protection Agency Act, 1992 (No. 7 of 1992);

“Agency” means the Environmental Protection Agency established under section 19 of the Act of 1992;

“agriculture” includes the breeding, keeping and sale of livestock (including cattle, horses, pigs, poultry, sheep and any creature kept for the production of food, wool, skins or fur), the making and storage of silage, the cultivation of land, and the growing of crops (including forestry and horticultural crops);

“application to land”, in relation to fertiliser, means the addition of fertiliser to land whether by spreading on the surface of the land, injection into the land, placing below the surface of the land or mixing with the surface layers of the land but does not include the direct deposition of manure to land by animals;

“aquifer” means a subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow either a significant flow of groundwater or the abstraction of significant quantities of groundwater;

“biochemical oxygen demand” for the purposes of sub-article (2)(b)(i) means a 5 day biochemical oxygen demand test done in accordance with method ISO 5815-1:2003, International Organisation for Standardization, or any update of that method;

“chemical fertiliser” means any fertiliser that is manufactured by an industrial process;

“Commission Decision of 22 October 2007” means the decision made by the Commission of the European Communities on 22 October 2007 granting a derogation requested by Ireland pursuant to the Nitrates Directive, or any subsequent amendment thereof;

“dry matter” for the purposes of sub-article (2)(b)(ii) means a test for total solids done in accordance with method 2540B, Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 21st Edition, 2005, or any update of that method;

“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;

“fertiliser” means any substance containing nitrogen or phosphorus or a nitrogen compound or phosphorus compound utilised on land to enhance growth of vegetation and may include livestock manure, the residues from fish farms and sewage sludge;

“groundwater” means all water that is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;

“holding” means an agricultural production unit and, in relation to an occupier, means all the agricultural production units managed by that occupier;

“livestock” means all animals kept for use or profit (including cattle, horses, pigs, poultry, sheep and any creature kept for the production of food, wool, skins or fur);

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

“local authority” means a city council or county council within the meaning of the Local Government Act, 2001 (No. 37 of 2001);

“the Minister” means the Minister for the Environment, Heritage and Local Government;

“net area”, in relation to a holding and the grassland stocking rate, means the gross area of the holding or the grassland as appropriate excluding areas under farm roads, paths, buildings, farmyards, woods, dense scrub, rivers, streams, ponds, lakes, sandpits, quarries, expanses of bare rock, areas of bogland not grazed, areas fenced off and not used for production, inaccessible areas and areas of forestry (including Christmas trees), or required to be totally destocked under a Commonage Framework Plan;

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

“occupier”, in relation to a holding, includes the owner, a lessee, any person entitled to occupy the holding or any other person having for the time being control of the holding;

“organic fertiliser” means any fertiliser other than that manufactured by an industrial process and includes livestock manure, dungstead manure, farmyard

manure, slurry, soiled water, silage effluent, non-farm organic substances such as sewage sludge, industrial by-products and sludges and residues from fish farms;

“ploughing” includes ploughing and primary cultivation, excluding light cultivation carried out to encourage natural regeneration;

“relevant local authority” means the local authority in whose administrative area a farm holding or part of a farm holding is situated;

“river basin district” means a river basin district established by the European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003);

“slurry” includes—

- (a) excreta produced by livestock while in a building or yard, and
- (b) a mixture of such excreta with rainwater, washings or other extraneous material 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 but does not include soiled water;

“soil test” means a soil sample taken in accordance with the soil sampling procedure set out in Schedule 1 and analysed in accordance with that Schedule, at a laboratory that meets the requirements of the Minister for Agriculture, Fisheries and Food for this purpose;

“soiled water” has the meaning assigned by sub-article (2);

“steep slope” means ground which has an average incline of 20% or more in the case of grassland or 15% or more in the case of other land;

“tidal waters” includes the sea and any estuary up to high water mark medium tide and any enclosed dock adjoining tidal waters;

“waters” includes—

- (a) any (or any part of any) river, stream, lake, canal, reservoir, aquifer, pond, watercourse, or other inland waters, whether natural or artificial,
- (b) any tidal waters, and
- (c) where the context permits, any beach, river bank and salt marsh or other area which is contiguous to anything mentioned in paragraph (a) or (b), and the channel or bed of anything mentioned in paragraph (a) which is for the time being dry, but does not include a sewer;

“waterlogged ground” means ground that is saturated with water such that any further addition will lead, or is likely to lead, to surface run-off;

and cognate words shall be construed accordingly.

- (2) (a) In these Regulations “soiled water” includes, subject to this sub-article, water from concreted areas, hard standing areas, holding areas for livestock and other farmyard areas where such water is contaminated by contact with any of the following substances—
- (i) livestock faeces or urine or silage effluent,
 - (ii) chemical fertilisers,
 - (iii) washings such as vegetable washings, milking parlour washings or washings from mushroom houses,
 - (iv) water used in washing farm equipment.
- (b) In these Regulations, “soiled water” does not include any liquid where such liquid has either—
- (i) a biochemical oxygen demand exceeding 2,500 mg per litre, or
 - (ii) a dry matter content exceeding 1% (10 g/L).
- (c) For the purposes of these Regulations, soiled water which is stored together with slurry or which becomes mixed with slurry is deemed to be slurry.
- (3) In these Regulations a reference to:—
- (a) an Article, Part or Schedule which is not otherwise identified is a reference to an Article, Part or Schedule of these Regulations,
 - (b) a sub-article or paragraph which is not otherwise identified is a reference to a sub-article or paragraph of the provision in which the reference occurs, and
 - (c) a period between a specified day in a month and a specified day in another month means the period commencing on the first-mentioned day in any year and ending on the second-mentioned day which first occurs after the first-mentioned day.
- (4) In these Regulations a footnote to a table in Schedule 2 shall be deemed to form part of the table.

PART 2

FARMYARD MANAGEMENT

Minimisation of soiled water

4. (1) An occupier of a holding shall take all such reasonable steps as are necessary for the purposes of minimising the amount of soiled water produced on the holding.

(2) Without prejudice to the generality of sub-article (1), an occupier of a holding shall ensure, as far as is practicable, that—

- (a) clean water from roofs and unsoiled paved areas and that flowing from higher ground on to the farmyard is diverted away from soiled yard areas and prevented from entering storage facilities for livestock manure and other organic fertilisers, soiled water, and effluents from dungsteeds, farmyard manure pits or silage pits and
- (b) rainwater gutters and downpipes where required for the purposes of paragraph (a) are maintained in good working condition.

Collection and holding of certain substances

5. (1) Livestock manure and other organic fertilisers, soiled water and effluents from dungsteeds, farmyard manure pits or silage pits arising or produced in a building or yard on a holding shall, prior to its application to land or other treatment, be collected and held in a manner that prevents the run-off or seepage, directly or indirectly, into groundwaters or surface waters of such substances.

(2) The occupier of a holding shall not cause or permit the entry to waters of any of the substances specified in sub-article (1).

Provision and management of storage facilities

6. (1) Storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteeds, farmyard manure pits or silage pits shall be maintained free of structural defect and be maintained and managed in such manner as is necessary to prevent run-off or seepage, directly or indirectly, into groundwater or surface water, of such substances.

(2) Storage facilities being provided on a holding on or after 31 March 2009 shall—

- (a) be designed, sited, constructed, maintained and managed so as to prevent run-off or seepage, directly or indirectly, into groundwater or surface water of a substance specified in sub-article (1), and
- (b) comply with such construction specifications for those facilities as may be approved from time to time by the Minister for Agriculture, Fisheries and Food.

(3) Storage facilities other than those referred to in sub-article (2) shall be of such construction and design and shall be maintained and managed in such a manner so as to comply with the requirements of sub-article (1) and sub-article 5(2).

(4) In this article “storage facilities” includes out-wintering pads, earthen-lined stores, integrated constructed wetlands and any other system used for the holding or treatment of livestock manure or other organic fertilisers.

General obligations as to capacity of storage facilities

7. (1) The capacity of storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteeds, farmyard manure pits or silage pits on a holding shall be adequate to provide for the storage of all such substances as are likely to require storage on the holding for such period as may be necessary as to ensure compliance with these Regulations and the avoidance of water pollution.

(2) For the purposes of sub-article (1) an occupier shall have due regard to the storage capacity likely to be required 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 or soiled water is precluded.

(3) For the purposes of Articles 7 to 13, the capacity of storage facilities on a holding shall be disregarded insofar as the occupier does not have exclusive use of those facilities.

(4) For the purposes of Articles 9 to 13 the capacity of facilities required in accordance with these Regulations for the storage of manure from livestock of the type specified in Tables 1, 2 or 3 of Schedule 2 shall be determined by reference to the criteria set out in the relevant table and the rainfall criteria set out in Table 4 of that schedule and shall include capacity for the storage for such period as may be necessary for compliance with these Regulations of rain-water, soiled water or other extraneous water which enters or is likely to enter the facilities.

Capacity of storage facilities for effluents and soiled water

8. Without prejudice to the generality of Article 7, the capacity of facilities for the storage on a holding of—

- (a) effluent produced by ensiled forage and other crops shall equal or exceed the capacity specified in Table 5 of Schedule 2, and
- (b) soiled water shall equal or exceed the capacity required to store all soiled water likely to arise on the holding during a period of 10 days.

Capacity of storage facilities for pig manure

9. (1) Without prejudice to the generality of Article 7, the capacity of facilities for the storage on a holding of livestock manure produced by pigs shall, subject to sub-article (2) and Article 13, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of 26 weeks.

(2) The period specified in Schedule 3 shall, in substitution for that prescribed by sub-article (1), apply in relation to livestock manure produced by pigs on a holding where all the following conditions are met—

- (a) the number of pigs on the holding does not at any time exceed one hundred pigs, and

- (b) the holding comprises a sufficient area of land for the application in accordance with these Regulations of all livestock manure produced on the holding.

Capacity of storage facilities for poultry manure

10. (1) Without prejudice to the generality of Article 7, the capacity of facilities for the storage on a holding of livestock manure produced by poultry shall, subject to sub-article (2) and Article 13, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of 26 weeks.

(2) The period specified in Schedule 3 shall, in substitution for that prescribed by sub-article (1), apply in relation to livestock manure produced by poultry on a holding where all the following conditions are met—

- (a) tillage or grassland farming is carried out on the holding,
- (b) the number of poultry places on the holding does not exceed 2,000 places, and
- (c) the holding comprises a sufficient area of land for the application in accordance with these Regulations of all livestock manure produced on the holding.

Capacity of storage facilities for manure from deer, goats and sheep

11. Without prejudice to the generality of Article 7, the capacity of facilities for the storage on a holding of livestock manure produced by deer, goats and sheep shall, subject to Article 13, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of six weeks.

Capacity of storage facilities for manure from cattle

12. Without prejudice to the generality of Article 7, the capacity of facilities for the storage on a holding of livestock manure produced by cattle shall, subject to Article 13, equal or exceed the capacity required to store all such livestock manure produced on the holding during the period specified in Schedule 3.

Reduced storage capacity in certain circumstances

13. (1) The capacity of facilities for the storage of livestock manure on a holding may, to such extent as is justified in the particular circumstances of the holding, be less than the capacity specified in Article 9, 10, 11 or 12, as appropriate, in the case of a holding where—

- (a) the occupier of the holding has a contract providing exclusive access to adequate alternative storage capacity located outside the holding,
- (b) the occupier has a contract for access to a treatment facility for livestock manure, or
- (c) the occupier has a contract for the transfer of the manure to a person authorised under and in accordance with the Waste Management Acts

1996 to 2003 or the Environmental Protection Agency Acts 1992 to 2007 to undertake the collection, recovery or disposal of the manure.

(2) Subject to sub-article (3), the capacity of facilities for the storage of livestock manure may be less than the capacity specified in Article 11 or 12, as appropriate, in relation to—

- (a) deer, goats or sheep which are out-wintered at a grassland stocking rate which does not exceed 130 kg nitrogen at any time during the period specified in Schedule 4 in relation to the application of organic fertiliser other than farmyard manure, or
- (b) livestock (other than dairy cows, deer, goats or sheep) which are out-wintered at a grassland stocking rate which does not exceed 85 kg nitrogen at any time during the period specified in Schedule 4 in relation to the application of organic fertiliser other than farmyard manure.

(3) Sub-article (2) shall apply only in relation to a holding where all the following conditions are met—

- (a) all the lands used for out-wintering of the livestock are comprised in the holding,
- (b) the out-wintered livestock have free access at all times to the required lands,
- (c) the amount of manure produced on the holding does not exceed an amount containing 140kg of nitrogen per hectare per annum,
- (d) severe damage to the surface of the land by poaching does not occur, and
- (e) the reduction in storage capacity is proportionate to the extent of out-wintered livestock on the holding.

(4) In this article, 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 nutrient excretion rates for livestock specified in Table 6 of Schedule 2.

Operative date

14. (1) In the case of the storage capacity requirements prescribed by Articles 8, 9, 10, 11 or 12, the relevant article and Article 7 shall be in effect on the commencement of these Regulations.

PART 3

NUTRIENT MANAGEMENT

Interpretation, commencement etc

15. (1) In this Part, “crop requirement”, in relation to the application of fertilisers to promote the growth of a crop, means the amounts and types of fertilisers which are reasonable to apply to soil for the purposes of promoting the growth of the crop having regard to the foreseeable nutrient supply available to the crop from the fertilisers, the soil and from other sources.

(2) The amount of nitrogen or phosphorus specified in Table 7 or 8 of Schedule 2, as the case may be, in relation to a type of livestock manure or other substance specified in the relevant table shall for the purposes of this Part be deemed to be the amount of nitrogen or phosphorus, as the case may be, contained in that type of manure or substance except as may be otherwise specified in a certificate issued in accordance with Article 32.

(3) The amount of nitrogen or phosphorus available to a crop from a fertiliser of a type which is specified in Table 9 of Schedule 2 in the year of application of that fertiliser shall, for the purposes of this Part, be deemed to be the percentage specified in that table of the amount of nitrogen or phosphorus, as the case may be, in the fertiliser.

(4) The amount of nitrogen or phosphorus available to a crop from an organic fertiliser of a type which is not specified in Table 9 of Schedule 2 shall be deemed to be the amount specified in the table in relation to cattle manure or, where supported by the necessary analysis, the amount of nitrogen estimated on the basis of the C:N ratio of the compost in accordance with Table 9A unless a different amount has been determined in relation to that fertiliser by, or with the agreement of, the relevant local authority or the Agency, as the case may be.

(5) A reference in this Part to the “nitrogen index” or the “phosphorus index” in relation to soil is a reference to the index number assigned to the soil in accordance with Table 10 or 11 of Schedule 2, as the case may be, to indicate the level of nitrogen or phosphorus available from the soil.

Duty of occupier in relation to nutrient management

16. (1) An occupier of a holding shall take all such reasonable steps as are necessary for the purposes of preventing or minimising the application to land of fertilisers in excess of crop requirement on the holding.

(2) (a) For the purposes of this article the phosphorus index for soil shall be deemed to be phosphorus index 3 unless a soil test indicates that a different phosphorus index is appropriate in relation to that soil.

(b) The soil test to be taken into account for the purposes of paragraph (a) in relation to soil shall, subject to paragraph (c), be the soil test most recently taken in relation to that soil.

- (c) Where a period of six years or more has elapsed after the taking of a soil test in relation to soil the results of that test shall be disregarded for the purposes of paragraph (a) except in a case where that soil test indicates the soil to be at phosphorus index 4.

(3) Without prejudice to the generality of sub-article (1) and subject to sub-article (4), the amount of available nitrogen or available phosphorus applied to promote the growth of a crop specified in Table 12, 13, 14, 15, 16, 17, 18, 19, 20 or 21 of Schedule 2 shall not exceed the amount specified in the table in relation to that crop having regard to the relevant nitrogen index or phosphorus index, as the case may be, for the soil on which the crops are to be grown.

(4) In the case of a holding on which grazing livestock are held, the amount of available phosphorus supplied to the holding by the concentrated feedstuff shall be the amount fed to such livestock in the previous calendar year and the phosphorus content of such concentrated feedstuff shall in the absence of a known phosphorus content or phosphorus content provided by the supplier be deemed to be 0.5 kg phosphorus in respect of each 100 kg of such concentrated feedstuff.

(5) (a) In the case of a holding on which grazing livestock are held, the amount of available nitrogen and available phosphorus supplied to the holding by manure from such livestock shall (save insofar as such manure is exported from the holding) be deemed to be the relevant proportion of the amount of available nitrogen and available phosphorus contained in the total manure produced by such livestock.

(b) In paragraph (a), the “relevant proportion” means the proportion of a year as is represented by the storage period specified in Schedule 3 in relation to the holding.

PART 4

PREVENTION OF WATER POLLUTION FROM FERTILISERS AND CERTAIN ACTIVITIES

Distances from a water body and other issues

17. (1) Chemical fertiliser shall not be applied to land within 2m of any surface waters.

(2) Organic fertiliser or soiled water shall not be applied to land within—

(a) 200m of the abstraction point of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 100m³ or more of water per day or serving 500 or more persons,

(b) 100m of the abstraction point (other than an abstraction point specified in paragraph (a)) of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water

scheme supplying 10m³ or more of water per day or serving 50 or more persons,

- (c) 25m of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (a) or (b),
- (d) 20m of a lake shoreline,
- (e) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features), or
- (f) subject to sub-articles (13) and (14), 5m of any surface waters (other than a lake or surface waters specified at paragraph (a) or (b)).

(3) Notwithstanding the requirements of sub-articles (2)(a), (2)(b) and (2)(c), the following distances shall apply from 12 January 2011 (in the case of drinking water abstractions located in counties Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford, Wexford and Wicklow), from 15 January 2011 (in the case of drinking water abstractions located in counties Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath) and from 31 January 2011 (in the case of drinking water abstractions located in counties Cavan, Donegal, Leitrim and Monaghan) or as soon as may be thereafter-

- (a) 30m from the abstraction point in the case of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 10m³ or more of water per day or serving 50 or more persons,
- (b) 15m from the abstraction point in the case of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (a).

(4) Sub-article (3) shall only apply in situations where a local authority has completed a technical assessment of conditions in the vicinity of the abstraction point, including taking into account variation in soil and subsoil conditions, the landspreading pressures in the area, the type of abstraction, available water quality evidence and the likely risk to the water supply source and the local authority has determined that the distance does not give rise to a risk to the water supply and a potential danger to human health.

(5) A local authority may decide to apply the landspreading restriction to the upstream catchment area and to the close proximity downstream of the abstraction point in the case of any surface waters referred to in sub-article (3)(a).

(6) A local authority may, in the case of any particular abstraction point and following consultation with the Agency, specify a greater distance to that specified in sub-articles (2) or (3) where, following prior investigations, the authority is satisfied that such distance is appropriate for the protection of waters being abstracted at that point. The distance so specified shall be determined by the

local authority using an evidence-based approach which takes into account the natural vulnerability of the waters to contamination from land spreading, the potential risk to human health arising from the landspreading activity as well as the water quality evidence, including information on water quality trends.

(7) Notwithstanding the provisions of sub-articles (2), (3) and (6) a local authority shall as soon as may be practicable, following prior investigations and following consultation with the Agency, specify an alternative distance, including a landspreading exclusion area where necessary, in the case of a water abstraction for human consumption in a scheme supplying 10m³ or more of water per day, or serving 50 or more persons, where—

- (a) on the basis of the results of monitoring carried out for the purposes of Article 7 of the European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278 of 2007), the quality of water intended for human consumption does not meet the parametric values specified in Part I of the Schedule of those Regulations or the quality of water constitutes a potential danger to human health, and it appears to the local authority that this is due to the landspreading of organic fertilisers or soiled water in the vicinity of the abstraction point, or
- (b) investigations undertaken by a water services authority as part of the management of a water supply scheme indicate that the landspreading activity presents a significant risk to the drinking water supply or a potential danger to human health having regard to catchment factors in the vicinity of the abstraction point including but not limited to slope, vulnerability, and hydrogeology, the scale and intensity of land spreading pressures, the type of water supply source and water quality evidence, including information on water quality trends.

(8) A distance specified by a local authority in accordance with sub-articles (3), (6) and (7) may be described as a distance or distances from an abstraction point, a hydrogeological boundary or topographical feature or as an area delineated on a map or in such other way as appears appropriate to the authority.

(9) In relation to sub-articles (6) and (7), "prior investigations" means, in relation to an abstraction point, an assessment of the susceptibility of waters to contamination in the vicinity of the abstraction point having regard to—

- (a) the direction of flow of surface water or groundwater, as the case may be,
- (b) the slope of the land and its runoff potential,
- (c) the natural geological and hydrogeological attributes of the area including the nature and depth of any overlying soil and subsoil and its effectiveness in preventing or reducing the entry of harmful substances to water, and

- (d) where relevant, the technical specifications set out in the document "Groundwater Protection Schemes" published in 1999 (ISBN 1-899702-22-9) or any subsequent published amendment of that document.

(10) Where a local authority specifies a distance in accordance with either of sub-articles (3), (6) or (7) the authority shall, as soon as may be—

- (a) notify the affected landowners, the Agency and the Department of Agriculture, Fisheries and Food of the distance so specified,
- (b) send to the Agency a summary of the report of any investigations undertaken and the reasons for specifying the alternative distance,
- (c) make an entry in the register maintained in accordance with Article 30(6), and
- (d) publish and maintain on the local authority website an updated schedule of setback distances specified for each drinking water supply.

(11) The requirements under sub-article (10) shall apply in the case of each local authority water supply and all other supplies for which the local authority has supervisory authority.

(12) The Agency may issue advice and/or direction to a local authority in relation to any requirements including requirements for technical assessments and prior investigations arising under sub-articles (2), (3), (4), (5), (6), (7), (8) or (9) and a local authority shall comply with any such advice or direction given.

(13) The distance of 5m specified in sub-article (2)(f) may be reduced to 3m where one of the following conditions is met—

- (a) the water in question is an open drain, or
- (b) the area of land adjacent to the water is a narrow parcel of land not exceeding one hectare in area and not more than 50m in width.

(14) Notwithstanding sub-articles (2)(f) and (13), organic fertiliser or soiled water shall not be applied to land within 10m of any surface waters where the land has an average incline greater than 10% towards the water.

(15) Where farmyard manure is held in a field prior to landspreading it shall be held in a compact heap and shall not be placed within-

- (a) 250m of the abstraction point of any surface waters or borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 10m³ or more of water per day or serving 50 or more persons,
- (b) 50m of any other borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified at paragraph (a),

- (c) 20m of a lake shoreline,
- (d) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),
- (e) 10m of any surface waters (other than a lake or surface waters specified at paragraph (a)).

(16) Farmyard manure shall not be held in a field at any time during the periods specified in Schedule 4 as applicable to that substance.

(17) Silage bales shall not be stored outside of farmyards within 20m of a surface watercourse or drinking water abstraction point in the absence of adequate facilities for the collection and storage of any effluent arising.

Requirements as to manner of application of fertilisers, soiled water etc

18. (1) Livestock manure and other organic fertilisers, effluents and soiled water shall be applied to land in as accurate and uniform a manner as is practically possible.

(2) Fertilisers or soiled water shall not be applied to land in any of the following circumstances—

- (a) the land is waterlogged;
- (b) the land is flooded or likely to flood;
- (c) the land is snow-covered or frozen;
- (d) heavy rain is forecast within 48 hours, or
- (e) the ground slopes steeply and, taking into account factors such as proximity to waters, soil condition, ground cover and rainfall, there is significant risk of causing water pollution.

(3) A person shall, for the purposes of sub-article (2)(d), have regard to weather forecasts issued by Met Éireann.

(4) Organic fertilisers or soiled water shall not be applied to land—

- (a) by use of an umbilical system with an upward-facing splashplate,
- (b) by use of a tanker with an upward-facing splashplate,
- (c) by use of a sludge irrigator mounted on a tanker, or
- (d) from a road or passageway adjacent to the land irrespective of whether or not the road or passageway is within or outside the curtilage of the holding.

(5) Subject to sub-article (6), soiled water shall not be applied to land—

- (a) in quantities which exceed in any period of 42 days a total quantity of 50,000 litres per hectare, or
- (b) by irrigation at a rate exceeding 5 mm per hour.

(6) In an area which is identified on maps compiled by the Geological Survey of Ireland as “Extreme Vulnerability Areas on Karst Limestone Aquifers”, soiled water shall not be applied to land—

- (a) in quantities which exceed in any period of 42 days a total quantity of 25,000 litres per hectare, or
- (b) by irrigation at a rate exceeding 3 mm per hour

unless the land has a consistent minimum thickness of 1m of soil and subsoil combined.

(7) For the purposes of sub-article (6), it shall be assumed until the contrary is shown that areas so identified as “Extreme Vulnerability Areas on Karst Limestone Aquifers” do not have a consistent minimum thickness of 1m of soil and subsoil combined.

Periods when application of fertilisers is prohibited

19. (1) Subject to this article, the application of fertiliser to land is prohibited during the periods specified in Schedule 4.

- (2) Sub-article (1) shall not apply in relation to the application to land of—
 - (a) soiled water, or
 - (b) chemical fertilisers to meet the crop requirements of Autumn-planted cabbage or of crops grown under permanent cover, or
 - (c) fertilisers whose application rate or usage rate is less than 1kg per hectare of available nitrogen or phosphorus.

Limits on the amount of livestock manure to be applied

20. (1) Subject to this article, the amount of livestock manure applied in any year to land on a holding, together with that deposited to land by livestock, shall not exceed an amount containing 170 kg of nitrogen per hectare.

(2) For the purposes of sub-article (1), the amount of nitrogen produced by livestock and the nitrogen content of livestock manure shall be calculated in accordance with Tables 6, 7 and 8 of Schedule 2 except in the case of pig manure or poultry manure where a different amount is specified in a certificate issued in accordance with Article 32 in relation to that manure.

(3) For the purposes of sub-article (1), the area of a holding shall be deemed to be the net area of the holding.

(4) The application to land on a holding in any year of livestock manure in excess of the amount specified in sub-article (1) shall be deemed not to be a contravention of that sub-article where all of the following conditions are met—

- (a) the occupier of the holding has made application in respect of that year to the Minister for Agriculture, Fisheries and Food for authorisation of a derogation from the requirements of that sub-article;
- (b) the application under paragraph (a) is duly completed in the form and on or before the date specified for the time being by that Minister;
- (c) the application under paragraph (a) is accompanied by an undertaking in writing by the occupier to comply with all the conditions specified in Schedule 5, and
- (d) all the conditions set out in Schedule 5 are met by the occupier in relation to the holding.

(5) Where an application is made to the Minister for Agriculture, Fisheries and Food in accordance with sub-article (4) that Minister shall consider the application and, where that Minister considers that the application does not comply with the conditions therein, shall issue a notice of refusal to the occupier.

Ploughing and the use of non-selective herbicides

21. (1) Where arable land is ploughed between 1 July and 30 November the necessary measures shall be taken to provide for emergence, within 6 weeks of ploughing, of green cover from a sown crop. A rough surface shall be maintained prior to a crop being sown in the case of lands ploughed between 1 December and 15 January.

(2) Where grassland is ploughed between 1 July and 15 October the necessary measures shall be taken to provide for emergence by 1 November of green cover from a sown crop.

(3) Grassland shall not be ploughed between 16 October and 30 November.

(4) When a non-selective herbicide is applied to arable land or to grassland in the period between 1 July and 30 November the necessary measures shall be taken to provide for the emergence within 6 weeks of the application, of green cover from a sown crop or from natural regeneration.

(5) Where green cover is provided for in compliance with this article, the cover shall not be removed by ploughing or by the use of a non-selective herbicide before 1 December unless a crop is sown within two weeks of its removal.

(6) In the case of land which is ploughed in the course of a ploughing competition under the auspices of the National Ploughing Association, a temporary exemption in the form of an extension to the time period specified in sub-article (1) or (2) for establishment of green cover after the land is ploughed may be granted to a person by the Minister for Agriculture, Fisheries and Food where it can be shown that conditions are such that an extension is necessary.

(7) A temporary exemption in accordance with sub-article (6) shall be granted by way of letter of authorisation issued to a person by the Minister for Agriculture, Fisheries and Food and shall be subject to such conditions as are specified therein.

PART 5

GENERAL

General duty of occupier

22. (1) An occupier of a holding shall ensure compliance with the provisions of these Regulations in relation to that holding.

(2) An occupier of a holding shall comply with any advice or guidelines which may be issued from time to time for the purposes of these Regulations by the Minister, the Minister for Agriculture, Fisheries and Food or the Agency.

Keeping of records by occupier

23. (1) Records shall be maintained for each holding which shall indicate—

- (a) total area of the holding,
- (b) net area of the holding,
- (c) cropping regimes and their individual areas,
- (d) livestock numbers and type,
- (e) an estimation of the annual fertiliser requirement for the holding and a copy of any Nutrient Management Plan prepared in relation to the holding,
- (f) quantities and types of chemical fertilisers moved on to or off the holding, including opening stock, records of purchase and closing stock,
- (g) livestock manure and other organic fertilisers moved on to or off the holding including quantities, type, dates and details of exporters and importers, as the case may be,
- (h) the results of any soil tests carried out in relation to the holding,
- (i) the nature and capacity of facilities on the holding for the storage of livestock manure and other organic fertilisers, soiled water and effluents from dungsteeds, farmyard manure pits or silage pits including an assessment of compliance with Articles 8 to 13,
- (j) the quantities and types of concentrated feedstuff fed to grazing livestock on the holding, and
- (k) the location of any abstraction point of water used for human consumption from any surface waters, borehole, spring or well.

(2) Where fertiliser is used on a holding and a certificate of the type mentioned in Article 15 or 20 was issued in relation to that fertiliser in accordance with Article 32, a copy of the certificate shall be retained and be available for inspection on the holding for a period of not less than five years from the expiry of validity of the certificate.

(3) Records shall be prepared for each calendar year by 31 March of the following year and shall be retained for a period of not less than five years.

(4) Notwithstanding sub-paragraphs (1), (2) and (3), an occupier shall, where requested by the Minister, the Minister for Agriculture, Fisheries and Food, or the Agency, provide such information as is requested relating to the movement of organic fertilisers on or off the holding.

False or misleading information

24. A person shall not compile information which is false or misleading to a material extent or furnish any such information in any notice or other document for the purposes of these Regulations.

Authorised person

25. (1) In this article, “authorised person” means—

- (a) a person who is an authorised person for the purposes of section 28 of the Local Government (Water Pollution) Act, 1977 (No. 1 of 1977), or
- (b) a person appointed under sub-article (12) to be an authorised person for the purposes of these Regulations.

(2) An authorised person may for any purpose connected with these Regulations—

- (a) enter and inspect any premises for the purposes of performing a function under these Regulations or of obtaining any information which he or she may require for such purposes,
- (b) at all reasonable times, or at any time if he or she has reasonable grounds for believing that there is or may be a risk to the environment, or that an offence under these Regulations is being or is about to be committed, arising from the carrying on of an activity at a premises, enter any premises and bring onto those premises such other persons (including a member of the Garda Síochána) or equipment as he or she may consider necessary, or
- (c) at any time if he or she has reasonable grounds for suspecting there may be a risk to the environment, or that an offence under these Regulations is being or is about to be committed, involving the use of any vehicle halt and board the vehicle and require the driver of the vehicle to take it to a place designated by the authorised person, and such a vehicle may be detained at that place by the authorised person for such period as he or she may consider necessary.

(3) An authorised person shall not enter into a private dwelling under this article unless one of the following conditions applies—

- (a) the entry is effected with the consent of the occupier,
- (b) the authorised person has given the occupier not less than 24 hours notice in writing of the intended entry, or
- (c) the entry is authorised by a warrant issued under sub-article (7).

(4) Whenever an authorised person enters any premises or boards any vehicle, under this article, he or she may—

- (a) take photographs and carry out inspections, record information on data loggers, make tape, electrical, video or other recordings,
- (b) carry out tests and make copies of documents (including records kept in electronic form) found therein and take samples,
- (c) monitor any effluent, including trade effluent or other matter, which is contained in or discharged from a premises,
- (d) carry out surveys, take levels, make excavations and carry out examinations of depth and nature of subsoil,
- (e) require that the premises or vehicle or any part of the premises or anything in the premises or vehicle shall be left undisturbed for a specified period,
- (f) require information from an occupier of the premises of any occupant of the vehicle or any person employed on the premises or any other person on the premises,
- (g) require the production of, or inspect, records (including records held in electronic form) or documents, or take copies of or extracts from any records or documents, and
- (h) remove and retain documents and records (including documents held in electronic form) for such period as may be reasonable for further examination,

which the authorised person, having regard to all the circumstances, considers necessary for the purposes of exercising any function under these Regulations.

- (5) (a) An authorised person who, having entered any premises or boarded any vehicle pursuant to these Regulations, considers that a risk, to the environment arises from the carrying on of an activity at the premises or involving the use of the vehicle, may direct the owner or occupier of the premises or the driver of the vehicle to take such measures as are considered by that authorised person to be necessary to remove that risk.

- (b) If the owner, occupier or driver referred to in paragraph (a) fails to comply with a direction of an authorised person under this subsection, the authorised person may do all things as are necessary to ensure that the measures required under the direction are carried out and the costs incurred by him or her in doing any such thing shall be recoverable from the owner or occupier by him or her, or the person by whom he or she was appointed.
- (6) A person shall not—
- (a) refuse to allow an authorised person to enter any premises or board any vehicle or to bring any person or equipment with him or her in the exercise of his or her powers,
 - (b) obstruct or impede an authorised person in the exercise of any of his or her powers,
 - (c) give to an authorised person information which is to his or her knowledge false or misleading in a material respect, or
 - (d) fail or refuse to comply with any direction or requirement of an authorised person.
- (7) (a) Where an authorised person in the exercise of his or her powers under this article is prevented from entering any premises, or if the authorised person has reason to believe that evidence related to a suspected offence under these Regulations may be present in any premises and that the evidence may be removed therefrom or destroyed, or if the authorised person has reason to believe that there is a significant immediate risk to the environment, the authorised person or the person by whom he or she was appointed may apply to the District Court for a warrant under this article authorising the entry by the authorised person onto or into the premises.
- (b) If, on application being made to the District Court under this article, the District Court is satisfied, on the sworn information of the authorised person that he or she has been prevented from entering a premises, the Court may issue a warrant authorising that person, accompanied, if the Court deems it appropriate by another authorised person or a member of the Garda Síochána, as may be specified in the warrant, at any time or times within one month from the date of the issue of the warrant, on production if so requested of the warrant, to enter, if need be by force, the premises concerned and exercise the powers referred to in sub-article (4) or (5).
- (8) An authorised person may, in the exercise of any power conferred on him or her by these Regulations involving the bringing of any vehicle to any place, or where he or she anticipates any obstruction in the exercise of any other power conferred on him or her by these Regulations, request a member of the Garda Síochána to assist him or her in the exercise of such a power and any member

of the Garda Síochána to whom he or she makes such a request shall comply with this request.

(9) Any certificate or other evidence given, or to be given, in respect of any test, examination or analysis of any sample shall, in relation to that sample, be evidence, without further proof, of the result of the test, examination or analysis unless the contrary is shown.

(10) When exercising any power conferred on him or her by these Regulations an authorised person shall, if requested by any person affected, produce a certificate or other evidence of his or her appointment as an authorised person.

(11) Where a member of the Garda Síochána has reasonable cause to suspect that a person has committed an offence under these Regulations the member may without warrant arrest the person.

(12) A person may be appointed as an authorised person for the purposes of these Regulations by the Minister, the Minister for Agriculture, Fisheries and Food or the Agency.

(13) In this article “premises” includes land whether or not there are any structures on the land.

Offences and related matters

26. (1) A person who contravenes a provision of Parts 2 to 5 of these Regulations is guilty of an offence and shall be liable—

(a) on summary conviction to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 3 months or,

(b) on conviction on indictment to a fine not exceeding €500,000 or to imprisonment for a term not exceeding one year or to both such fine and such imprisonment.

(2) Where an offence under these Regulations has been committed by a body corporate and it is proved to have been so committed with the consent or connivance of or to be attributable to any neglect on the part of any person who, when the offence was committed, was a director, manager, secretary or other officer of the body corporate, or a person purporting to act in any such capacity, that person, as well as the body corporate, is guilty of an offence and liable to be proceeded against and punished as if guilty of the first-mentioned offence.

(3) Where the affairs of a body corporate or unincorporated body are managed by its members, sub-article (2) shall apply to the acts and defaults of a member in connection with the functions of management as if such a member were a director or manager of the body.

(4) A prosecution for an offence under these Regulations may be taken by a local authority or the Agency.

(5) A prosecution for an offence may be taken by a local authority whether or not the offence is committed in the functional area of the authority.

(6) Where a court imposes a fine or affirms or varies a fine imposed by another court for an offence under these Regulations, prosecuted by the Agency or a local authority, it shall, on the application of the Agency or local authority concerned (made before the time of such imposition, affirmation or variation), provide by order for the payment of the amount of the fine to the Agency or local authority, as the case may be, and such payment may be enforced by the Agency or local authority, as the case may be, as if it were due to it on foot of a decree or order made by the court in civil proceedings.

(7) Where a person is convicted of an offence under these Regulations the court shall, unless it is satisfied that there are special and substantial reasons for not so doing, order that person to pay to the Agency or local authority concerned the costs and expenses, measured by the court, reasonably incurred by the Agency or local authority in relation to the investigation, detection and prosecution of the offence, including costs incurred in the taking of samples, the carrying out of tests, examinations and analyses and in respect of the remuneration and other expenses of employees, consultants and advisers.

(8) (a) Where a local authority has reason to believe that an offence has been or is being committed in relation to a holding the authority may by notice require the person who appears to the authority to be the occupier to provide such information as is specified in the notice in relation to the alleged offence and it shall be the duty of that person to provide such information within the time frame specified in the notice insofar as is known to him or her.

(b) A notice issued in accordance with paragraph (a) shall set out the provisions of Articles 22(1) and 24 and of sub-article (1).

(9) Where a local authority considers that an offence under these Regulations has been or is being committed in relation to a holding the authority shall take such enforcement measures as are warranted by the circumstances and as are necessary to ensure satisfactory compliance with these Regulations and which, save in the case of a trivial or insignificant offence or specific mitigating circumstances, shall include prosecution for the alleged offence.

(10) (a) Where on application by motion by the Agency or a local authority to the District Court, Circuit Court or the High Court, the court hearing the application is satisfied that a person has failed or is failing to comply with a provision of Parts 2 to 5 of these Regulations, the court may by order—

(i) direct the person to comply with the provisions,

(ii) make such other provision, including provision in relation to the payment of costs, as the court considers appropriate, and

(iii) make such interim or interlocutory order as it considers appropriate.

(b) An application for an order under this article may be made whether or not there has been a prosecution for an offence under these Regulations in relation to the relevant failure of compliance and shall not prejudice the initiation of a prosecution for an offence under these Regulations in relation to the failure of compliance.

(11) The powers, duties and functions assigned to a local authority or the Agency by this article are additional to, and not in substitution for, the powers, duties and functions assigned by the Local Government (Water Pollution) Acts 1977 and 1990 or any other statute.

(12) A local authority shall maintain a register of inspections undertaken of farm holdings and information received for the purposes of Article 26(8) and shall keep updated a record of all enforcement measures undertaken in accordance with the requirements of Article 26(9).

PART 6

FUNCTIONS OF PUBLIC AUTHORITIES

Minister for Agriculture, Fisheries and Food

27. (1) The Minister for Agriculture, Fisheries and Food shall carry out, or cause to be carried out, such monitoring and evaluation programmes in relation to farm practices as may be necessary to determine the effectiveness of measures being taken in accordance with these Regulations.

(2) The Minister for Agriculture, Fisheries and Food shall, in relation to each year, make the overall results of monitoring and evaluations carried out in accordance with sub-article (1) available to the Agency, to the Minister and, on request, to a local authority.

(3) The Minister for Agriculture, Fisheries and Food shall prepare and keep updated a register of all holdings and shall, on request, make a copy of the register available to the Agency or a local authority.

(4) The Minister for Agriculture, Fisheries and Food shall carry out, or arrange for the carrying out of, such monitoring, controls and reporting as are necessary for the purposes of Articles 8 (except Article 8(5)), 9 and 10 of the Commission Decision of 22 October 2007 or the related Articles in any subsequent Commission Decision.

(5) The Minister for Agriculture, Fisheries and Food shall make available to a local authority and/or the Agency a report of an inspection or inspections carried out for the purposes of these Regulations and/or upon written request other information in relation to any holding or holdings as the case may be where such transfer of data is necessary for the purposes of ensuring compliance with these Regulations.

Making and review of action programme by the Minister

28. (1) The Minister shall, following consultation with the Minister for Agriculture, Fisheries and Food and other interested parties in accordance with this article, prepare and publish not later than 31 December 2013 and every four years thereafter, a programme of measures (hereafter in this article referred to as “an action programme”) for the protection of waters against pollution from agriculture.

(2) An action programme required by sub-article (1) shall include all such measures as are necessary for the purposes of Article 5 of the Nitrates Directive and shall contain a review of the action programme most recently made for those purposes and of such additional measures and reinforced actions as may have been taken.

(3) The Minister shall ensure that all interested parties are given early and effective opportunities to participate in the preparation, review and revision of an action programme required by this article and for this purpose shall—

- (a) inform interested parties by public notices or other appropriate means including electronic media, in relation to any proposals for the preparation, review or revision of an action programme,
- (b) make available to interested parties information in relation to the proposals referred to in paragraph (a) including information about the right to participate in decision-making in relation to those proposals,
- (c) provide an opportunity for comment by interested parties before any decision is made on the establishment, review or revision of an action programme,
- (d) in making any such decision, take due account of the comments made by interested parties and the results of the public participation, and
- (e) having examined any comments made by interested parties, make reasonable efforts to inform those parties of the decisions taken and the reasons and considerations on which those decisions are based, including information on the public participation process.

(4) The Minister shall ensure that such reasonable time is allowed as is sufficient to enable interested parties to participate effectively.

(5) Where the Minister publishes any information in accordance with this article, the Minister shall—

- (a) do so in such manner as the Minister considers appropriate for the purpose of bringing that information to the attention of the public, and
- (b) make copies of that information accessible to interested parties free of charge through a website or otherwise.

(6) The Minister shall specify by way of public notice on a website 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.

(7) In this article “interested parties” includes persons who—

- (a) are carrying on any business which relies upon the water environment or which is affected, or likely to be affected, by the action programme, or
- (b) are carrying on any activities which have or are likely to have an impact on water status, or
- (c) have an interest in the protection of the water environment whether as users of the water environment or otherwise.

Agency

29. (1) (a) The Agency shall prepare at four-yearly intervals a report in accordance with Article 10 of the Nitrates Directive and shall submit such report to the Minister.

(b) The Agency shall prepare annually a report of the results of the monitoring carried out by local authorities for the purposes of Article 8(5) of the Commission Decision of 22 October 2007 (or the related Article in any subsequent Commission Decision) together with a concise report on water quality evolution and evaluation practice for the purposes of Article 10(1) (or the related Article in any subsequent Commission Decision) of that Decision and shall make such reports available to the Minister for Agriculture, Fisheries and Food by June in every year.

(2) The Agency shall undertake a review of progress made in implementing these Regulations and shall submit a report to the Minister by 30 June 2013 and every four years thereafter with the results of that review and with recommendations as to such additional measures, if any, as appear to be necessary to prevent and reduce water pollution from agricultural sources.

(3) In preparing the reports required under sub-articles (1) and (2) the Agency shall consult with the Department of Agriculture, Fisheries and Food and the co-ordinating local authority in each river basin district, and such other persons as it considers appropriate.

(4) The Department of Agriculture, Fisheries and Food and the relevant local authorities shall provide the Agency with such information appropriate to their functions as may be requested by the Agency for the purposes of these Regulations.

(5) Each monitoring programme prepared by the Agency for the purposes of Article 10 of European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003) shall include provision for such monitoring as is necessary for the purposes of these Regulations.

(6) The Agency shall, as soon as may be but not later than 8 April 2009, make recommendations and give directions to a local authority in relation to the monitoring and inspections to be carried out, or other measures to be taken, by the authority for the purposes of these Regulations and may revise such recommendations and directions at such times thereafter as the Agency considers appropriate.

(7) The Agency shall make such recommendations and give such directions to a local authority in relation to the monitoring of water quality as are necessary for the purposes of Article 8(5) of the Commission Decision of 22 October 2007 or the related Articles in any subsequent Commission Decision.

(8) The powers, duties and functions assigned to the Agency by these Regulations are additional to, and not in substitution for, the powers, duties and functions assigned to the Agency by section 63 of the Environmental Protection Agency Act, 1992 (No. 7 of 1992) or any other statute.

Local authorities

30. (1) A local authority shall carry out, or cause to be carried out, such monitoring of surface waters and groundwaters at selected measuring points within its functional area as makes it possible to establish the extent of pollution in the waters from agricultural sources and to determine trends in the occurrence and extent of such pollution.

(2) A local authority shall carry out or cause to be carried out such inspections of farm holdings as is necessary for the purposes of these Regulations and shall aim to co-ordinate its inspection activities with inspections carried out by other public authorities.

(3) For the purposes of sub-article (2) a local authority shall aim to develop co-ordination arrangements with other public authorities with a view to promoting consistency of approach in inspection procedures and administrative efficiencies between public authorities and to avoid any unnecessary duplication of administrative procedures and shall have regard to any inspection protocol which may be developed by the Minister, following consultation with the Minister for Agriculture, Fisheries and Food.

(4) A local authority shall, in the exercise of its functions for the purposes of these Regulations—

- (a) consult to such extent as it considers appropriate with the Minister, the Minister for Agriculture, Fisheries and Food, the Agency, the co-ordinating local authority in the relevant river basin district and such other persons as it considers appropriate, and

(b) have regard to any recommendations made, and comply with any direction given, to the authority by the Agency in accordance with Article 29.

(5) A local authority shall furnish to the Department of Agriculture, Fisheries and Food and such other persons as it considers appropriate a report of an inspection or inspections carried out for the purposes of these Regulations where non-compliance has been detected.

(6) A local authority shall maintain a register of prior investigations carried out, and distances specified, for the purposes of Article 17.

Compliance with Data Protection Acts

31. The provision of information by a local authority, the Agency or the Minister for Agriculture, Fisheries and Food in accordance with Article 27, 29 or 30 of these Regulations shall not be a breach of the Data Protection Acts, 1988 and 2003.

Certificate in relation to nutrient content of fertiliser

32. (1) A certificate of the type specified in Article 15 or 20 may be issued by a competent authority where the authority is satisfied that the nutrient content of the fertiliser in question has been assessed on the basis of appropriate methodologies based on net farm balance and is as specified in the certificate.

(2) A certificate issued under this article shall be valid for such period, not exceeding twelve months, as shall be specified in the certificate.

(3) In this article “competent authority” means—

(a) the Agency in relation to fertiliser arising in an activity in relation to which there is in force a licence under Part IV of the Act of 1992, and

(b) the Minister for Agriculture, Fisheries and Food in relation to any other fertiliser.

(4) Notice of the methodologies used for the purposes of sub-article (1) shall be notified to the European Commission by the competent authority.

Exemption for exceptional circumstances for research

33. (1) A temporary exemption from a requirement of these Regulations may be granted to a person by the Agency or the Minister for Agriculture, Fisheries and Food in the case of exceptional circumstances relating to research.

(2) A temporary exemption for the purposes of sub-article (1) shall be granted by way of certificate issued to a person by the Agency or the Minister for Agriculture, Fisheries and Food and shall be subject to such conditions, if any, as are specified in the certificate.

(3) A certificate issued for the purposes of this article shall specify the nature, extent and duration of the exemption to which the certificate relates and a copy of the certificate shall be sent as soon as may be to the relevant local authority.

Transitional provisions

34. (1) A holding on which the application of fertilisers is carried out in accordance with a nutrient management plan approved on or before 1 December 2006 for the purposes of the Rural Environmental Protection Scheme shall be deemed to be compliant with the requirements of Article 16 for the duration of that plan.

(2) The application to land in any year prior to 1 January 2007 of livestock manure in excess of the amount specified in Article 20(1) of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2006 shall be deemed not to be a contravention of that provision.

(3) Notwithstanding Articles 16 and 26 and sub-article (2), the application to land of phosphorus in excess of the quantities prescribed by Article 16 shall not be an offence for the purposes of Article 16 in a case where—

- (a) the excess arises from the application of spent mushroom compost or manure produced by pigs or poultry, and
- (b) the excess amount does not exceed the amounts specified in Schedule 2, Table 22 of these Regulations from the prescribed dates, and
- (c) such compost or manure, as the case may be, is produced on a holding on which activities were being carried out which gave rise to spent mushroom compost or manure from pigs or poultry and there has not been an increase in the scale of such activities on the holding since 1 August 2006, and
- (d) suppliers of spent mushroom compost or manure produced by pigs and poultry retain records of the movement of such fertilisers off the holding in accordance with the requirements of Article 23, and
- (e) the occupier of the holding on which the phosphorus is applied to land holds records which demonstrate compliance with paragraphs (a), (b), (c) and (d).

SCHEDULE 1

SOIL TEST

A soil test refers to the results of an analysis of a soil sample carried out by a soil-testing laboratory that meets the requirements of the Minister for Agriculture, Fisheries and Food for this purpose.

The analysis for phosphorus and, where appropriate, organic matter content and the taking of soil samples shall be carried out in accordance with the procedures below.

Analysis for Phosphorus

The Morgan's extractable P test as detailed below shall be used to determine the Soil P Index.

Preparation of soil sample

The soil shall be dried at 40°C for at least 24 hours (longer if necessary to ensure complete drying) in a forced draught oven with moisture extraction facilities. It shall then be sieved through a 2 mm mesh screen to remove stones and plant debris. After thorough mixing, it shall be sub-divided to obtain a representative sample. Where large samples are received at the laboratory, the entire sample shall be dried and sieved prior to sub-sampling for analysis.

Morgan's Extracting Solution

Constituents:— 1,400 ml of 40% NaOH in approximately 15 litres of water. Add 1,440 ml of Glacial Acetic Acid. Make up to 20 litres with water and adjust pH to 4.8. The pH of the solution must be checked regularly and adjusted as necessary before use. A volume ratio of one part sieved soil to five parts of solution must be used, e.g. 6 ml of the prepared soil sample is extracted with a 30 ml volume of Morgan's Extracting Solution. The sample shall be shaken for 30 minutes to get a suitable mix and permit intended reaction, after which it is filtered through a No. 2 Whatman filter paper into vials for analysis. The filtered extract shall be analysed using standard laboratory techniques.

Results shall be reported in mg per litre.

Analysis of organic matter

Organic Matter content shall be determined by loss on ignition.

Place a quantity of the prepared soil sample in an oven for 16 hours at 105°C. Remove and cool in a desiccator. Put approximately 4g of this soil into a pre-weighed crucible and determine the weight of the soil (initial weight). Place in a muffle furnace at 500°C for 16 hours for ashing. Remove the crucible, cool in a desiccator and determine the weight of the ash (final weight).

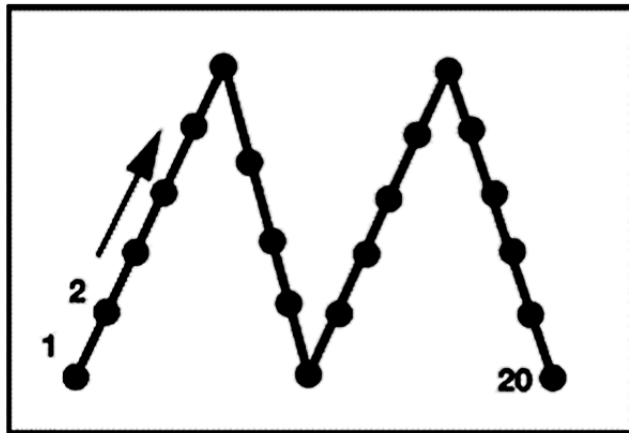
The organic matter of the soil is the difference in weight between the initial and final weights expressed as a percentage of the initial weight.

Soil Sampling Procedure

The soil sample shall be taken in accordance with the procedure as specified below:

- (a) The sampling area shall not exceed 4 hectares. Exceptionally, where soil types and cropping of lands were similar during the previous five years, a sample area of up to 8 hectares shall be deemed acceptable.
- (b) Separate samples shall be taken from areas that are different in soil type, previous cropping history, slope, drainage or persistent poor yields.
- (c) Any unusual spots such as old fences, ditches, drinking troughs, dung or urine patches or where fertiliser or lime has been heaped or spilled shall be avoided.
- (d) A field shall not be sampled for phosphorus until 3 months after the last application of any fertiliser containing this nutrient (chemical or organic).
- (e) The sampling pattern shown in the figure below shall be followed. A soil core shall be taken to the full 100 mm depth. 20 cores shall be taken from the sampling area and placed in the soil container to make up the sample. Ensure the container is full of soil.
- (f) The field and sample numbers shall be written/attached onto the soil container.

Figure 1: Sampling pattern



SCHEDULE 2

CRITERIA AS TO STORAGE CAPACITY AND NUTRIENT MANAGEMENT

Table 1 Slurry storage capacity required for sows and pigs

| Unit type | m ³ /week ¹ | | | | |
|--|-----------------------------------|-------|-------|-------|-------|
| | 2.0:1 | 2.5:1 | 3.0:1 | 3.5:1 | 4.0:1 |
| Water:meal ratio changing for finishers only | | | | | |
| Breeding unit (per sow place) | - | - | - | - | 0.174 |
| Integrated unit (per sow place) | 0.312 | 0.355 | 0.398 | 0.441 | 0.483 |
| Finishing unit (per pig) | 0.024 | 0.031 | 0.039 | 0.046 | 0.053 |

¹An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks. Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 2 Slurry storage capacity required for cattle, sheep and poultry

| Livestock type | m ³ /week ¹ |
|--|-----------------------------------|
| Dairy cow | 0.33 |
| Suckler cow | 0.29 |
| Cattle > 2 years | 0.26 |
| Cattle (18-24 months old) | 0.26 |
| Cattle (12-18 months old) | 0.15 |
| Cattle (6-12 months old) | 0.15 |
| Cattle (0-6 months old) | 0.08 |
| Lowland ewe | 0.03 |
| Mountain ewe | 0.02 |
| Lamb-finishing | 0.01 |
| Poultry — layers per 1000 birds (30% DM) | 0.81 |

¹An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks. Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 3 Storage capacity required for dungstead manure

| Livestock type | Solid fraction (m ³ /week) | Seepage fraction (m ³ /week) ¹ |
|---------------------------|---------------------------------------|--|
| Dairy cow | 0.28 | 0.04 |
| Suckler cow | 0.25 | 0.03 |
| Cattle > 2 years | 0.23 | 0.02 |
| Cattle (18-24 months old) | 0.23 | 0.02 |
| Cattle (12-18 months old) | 0.13 | 0.01 |
| Cattle (6-12 months old) | 0.13 | 0.01 |
| Cattle (0-6 months old) | 0.07 | 0.01 |

¹Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 4 Average net rainfall during the specified storage period.

| County | Millimetres per week |
|-----------|----------------------|
| Carlow | 24 |
| Cavan | 27 |
| Clare | 32 |
| Cork | 37 |
| Donegal | 38 |
| Dublin | 17 |
| Galway | 34 |
| Kerry | 45 |
| Kildare | 18 |
| Kilkenny | 23 |
| Laois | 22 |
| Leitrim | 33 |
| Limerick | 26 |
| Longford | 23 |
| Louth | 20 |
| Mayo | 40 |
| Meath | 19 |
| Monaghan | 23 |
| Offaly | 20 |
| Roscommon | 26 |
| Sligo | 32 |
| Tipperary | 27 |
| Waterford | 31 |
| Westmeath | 21 |
| Wexford | 25 |
| Wicklow | 33 |

Table 5 Storage capacity required for effluent produced by ensiled forage *Article 8*

| Crop | Minimum storage requirement (m ³ /100 tonnes) | |
|-----------------|---|--------------|
| | Short Term Storage ¹ | Full Storage |
| Grass | 7 | 21 |
| Arable silage | 7 | 21 |
| Maize | 4 | 10 |
| Sugar beet tops | 15 | 50 |

¹Only permitted where a vacuum tanker or an irrigation system is available on the holding.

Table 6 Annual nutrient excretion rates for livestock

| Livestock type | Total Nitrogen | Total Phosphorus |
|----------------------------------|----------------|------------------|
| | kg/year | kg/year |
| Dairy cow | 85 | 13 |
| Suckler cow | 65 | 10 |
| Cattle (0-1 year old) | 24 | 3 |
| Cattle (1-2 years old) | 57 | 8 |
| Cattle > 2 years | 65 | 10 |
| Mountain ewe & lambs | 7 | 1 |
| Lowland ewe & lambs | 13 | 2 |
| Mountain hogget | 4 | 0.6 |
| Lowland hogget | 6 | 1 |
| Goat | 9 | 1 |
| Horse (>3 years old) | 50 | 9 |
| Horse (2-3 years old) | 44 | 8 |
| Horse (1-2 years old) | 36 | 6 |
| Horse foal (< 1 year old) | 25 | 3 |
| Donkey/small pony | 30 | 5 |
| Deer (red) 6 months — 2 years | 13 | 2 |
| Deer (red) > 2 years | 25 | 4 |
| Deer (fallow) 6 months — 2 years | 7 | 1 |
| Deer (fallow) > 2 years | 13 | 2 |
| Deer (sika) 6 months — 2 years | 6 | 1 |
| Deer (sika) > 2 years | 10 | 2 |
| Breeding unit (per sow place) | 35 | 8 |
| Integrated unit (per sow place) | 87 | 17 |
| Finishing unit (per pig place) | 9.2 | 1.7 |
| Laying hen per bird place | 0.56 | 0.12 |
| Broiler per bird place | 0.24 | 0.09 |
| Turkey per bird place | 1 | 0.4 |

Table 7 Amount of nutrient contained in 1m³ of slurry

| Livestock type | Total Nitrogen (kg) | Total Phosphorus (kg) |
|-------------------------|---------------------|-----------------------|
| Cattle | 5.0 | 0.8 |
| Pig | 4.2 | 0.8 |
| Sheep | 10.2 | 1.5 |
| Poultry — layers 30% DM | 13.7 | 2.9 |

For the purposes of calculation, assume that 1m³ = 1,000 litres = 1 tonne.

Table 8 Amount of nutrients contained in 1 tonne of organic fertilisers other than slurry

| Livestock type | | Total Nitrogen (kg) | Total Phosphorus (kg) |
|---|-----------------------|---|-----------------------|
| Poultry manure | broilers/deep litter | 11.0 | 6.0 |
| | layers 55% dry matter | 23.0 | 5.5 |
| | turkeys | 28.0 | 13.8 |
| Dungstead manure (cattle) | | 3.5 | 0.9 |
| Farmyard manure | | 4.5 | 1.2 |
| Spent mushroom compost | | 8 | 2.5 |
| Sewage sludge | | Total nitrogen and total phosphorus content per tonne shall be as declared by the supplier in accordance with the Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 to 2001 and any subsequent amendments thereto. | |
| Dairy processing residues and other products not listed above | | Total nitrogen and total phosphorus content per tonne based on certified analysis shall be provided by the supplier. | |

Table 9 Nutrient availability in fertilisers

Article 15

| Fertiliser | Availability ¹ (%) | | |
|--|-------------------------------|---------------------|---------------------|
| | Nitrogen | | Phosphorus |
| | From January 1 2010 | From January 1 2011 | From January 1 2007 |
| Chemical | 100 | 100 | 100 |
| Pig and poultry manure | 50 | 50 | 100 |
| Farmyard manure | 30 | 30 | 100 |
| Spent mushroom compost | 45 | 20 | 100 |
| Cattle and other livestock manure (including that produced on the holding) | 40 | 40 | 100 |

¹Refers to year of application

Table 9A

| Compost C:N ratio ¹ | N availability (%) ² |
|--------------------------------|---------------------------------|
| <10 | 25 |
| 12.5 | 17.5 |
| 15.0 | 10 |
| 17.5 | 5.5 |
| >20 | 0.0 |

¹The determination of the C:N ratio shall be based on a methodology agreed with the Agency or the Minister for Agriculture, Fisheries and Food

²Refers to year of application

Table 10 Determining nitrogen index for tillage crops

| Tillage crops that follow permanent pasture | | | |
|--|---|--|--|
| Nitrogen Index | | | |
| Index 1 | Index 2 | Index 3 | Index 4 |
| The 5th tillage crop following permanent pasture. For subsequent tillage crops use the continuous tillage table. | The 3rd or 4th tillage crop following permanent pasture. If original permanent pasture was cut only, use index 1. | The 1st or 2nd tillage crop following permanent pasture (see also Index 4). If original permanent pasture was cut only, use index 2. | The 1st or 2nd tillage crop following very good permanent pasture which was grazed only. |
| Continuous tillage: — crops that follow short leys (1-4 years) or tillage crops | | | |
| Previous crop | | | |
| Index 1 | Index 2 | Index 3 | Index 4 |
| Cereals Maize | Sugar beet Fodder beet Potatoes Mangels Kale Oil seed rape, Peas, Beans | | |
| | Leys (1-4 years) grazed or cut and grazed. | | |
| | Swedes removed | Swedes grazed in situ | |
| Vegetables receiving less than 200 kg/ha nitrogen | Vegetables receiving more than 200 kg/ha nitrogen | | |

Table 11 Phosphorus index system

| Soil phosphorus index | Soil phosphorus ranges (mg/l) | |
|-----------------------|-------------------------------|-------------|
| | Grassland | Other crops |
| 1 | 0.0-3.0 | 0.0-3.0 |
| 2 | 3.1-5.0 | 3.1-6.0 |
| 3 | 5.1-8.0 | 6.1-10.0 |
| 4 | > 8.0 | >10.0 |

Table 12 Annual maximum fertilisation rates of available nitrogen on grassland

Article 16

| Grassland stocking rate ¹ (kg/ha/year) | Available nitrogen ² (kg/ha) |
|--|--|
| ≤ 170 | 226 |
| Grassland stocking rate greater than 170 kg/ha/year ³ | |
| 171-210 | 306 |
| 211-250 | 279 |
| >250 | 279 ⁴ |

¹Total annual nitrogen (kg) excreted by grazing livestock averaged over the net grassland area (ha) (grazing and silage area). Stocking rate refers to grassland area only.

²The maximum nitrogen fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the net area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.

³This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250kg in the case of a derogated holding).

⁴The application of Nitrogen from livestock manure (including that deposited by the animals themselves) to the net grassland area shall not exceed 250 kg Nitrogen per hectare per year.

Table 13 Annual maximum fertilisation rates of phosphorus on grassland

| Grassland stocking rate ¹ (kg/ha/year) | Phosphorus Index | | | |
|---|---|----|----|---|
| | 1 | 2 | 3 | 4 |
| | Available Phosphorus (kg/ha) ^{2, 3, 6} | | | |
| ≤ 130 | 35 | 25 | 15 | 0 |
| 131-170 | 39 | 29 | 19 | 0 |
| Grassland stocking rate greater than 170 kg/ha/year ^{4, 5} | | | | |
| 171-210 | 44 | 34 | 24 | 0 |
| 211-250 | 49 | 39 | 29 | 0 |
| >250 | 49 | 39 | 29 | 0 |

¹Total annual nitrogen (kg) excreted by grazing livestock averaged over the net grassland area (grazing and silage area). Stocking rate refers to grassland area only.

²The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

³Manure produced by grazing livestock on a holding may be applied to Index 4 soils on that holding in a situation where there is a surplus of such manure remaining after the phosphorus fertilisation needs of all crops on soils at phosphorus indices 1, 2 or 3 on the holding have been met by the use only of such manure produced on the holding.

⁴The maximum phosphorus fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the net area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.

⁵This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250kg in the case of a derogated holding).

⁶An additional 15 kg of phosphorus per hectare may be applied on soils at phosphorus indices 1, 2, or 3 for each hectare of pasture establishment undertaken.

Table 14 Annual maximum fertilisation rates of available nitrogen on grassland (cut only, no grazing livestock on holding)

| | Available nitrogen (kg/ha) |
|---------------------|----------------------------|
| 1 st cut | 125 |
| Subsequent cuts | 100 |
| Hay | 80 |

Table 15 Annual maximum fertilisation rates of phosphorus on grassland (cut only, no grazing livestock on holding)

| | Phosphorus Index | | | |
|-----------------|---|----|----|---|
| | 1 | 2 | 3 | 4 |
| | Available Phosphorus (kg/ha) ¹ | | | |
| First cut | 40 | 30 | 20 | 0 |
| Subsequent cuts | 10 | 10 | 10 | 0 |

¹The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

Table 16 Maximum fertilisation rates of nitrogen on tillage crops

| Crop | Nitrogen Index | | | |
|------------------------------|----------------------------|-----|-----|-----|
| | 1 | 2 | 3 | 4 |
| | Available Nitrogen (kg/ha) | | | |
| Winter Wheat ^{1,2} | 210 | 180 | 120 | 80 |
| Spring Wheat ^{1,2} | 140 | 110 | 75 | 40 |
| Winter Barley ¹ | 160 | 135 | 100 | 60 |
| Spring Barley ^{1,3} | 135 | 100 | 75 | 40 |
| Winter Oats ¹ | 145 | 120 | 85 | 45 |
| Spring Oats ¹ | 110 | 90 | 60 | 30 |
| Sugar Beet | 195 | 155 | 120 | 80 |
| Fodder Beet | 195 | 155 | 120 | 80 |
| Potatoes: Main crop | 170 | 145 | 120 | 95 |
| Potatoes: Early | 155 | 130 | 105 | 80 |
| Potatoes: Seed | 155 | 130 | 105 | 80 |
| Maize | 180 | 140 | 110 | 75 |
| Field Peas/Beans | 0 | 0 | 0 | 0 |
| Oilseed Rape | 225 | 180 | 160 | 140 |

| Crop | Nitrogen Index | | | |
|----------------|----------------|-----|-----|----|
| | 75 | 50 | 35 | 20 |
| Linseed | 75 | 50 | 35 | 20 |
| Swedes/Turnips | 90 | 70 | 40 | 20 |
| Kale | 150 | 130 | 100 | 70 |
| Forage Rape | 130 | 120 | 110 | 90 |

¹Where proof of higher yields is available, an additional 20kg N/ha may be applied for each additional tonne above the following yields:

Winter Wheat — 9.0 tonnes/ha Spring Wheat — 7.5 tonnes/ha

Winter Barley — 8.5 tonnes/ha Spring Barley — 6.5 tonnes/ha

Winter Oats — 7.5 tonnes/ha Spring Oats — 6.5 tonnes/ha

The higher yields shall be based on the best yield achieved in any of the three previous harvests, at 20% moisture content.

²Where milling wheat is grown under a contract to a purchaser of milling wheat, an extra 30 kg N/ha may be applied.

³Where malting barley is grown under a contract to a purchaser of malting barley, an extra 20 kg N/ha may be applied where it is shown on the basis of agronomic advice that additional nitrogen is needed to address a proven low protein content in the grain.

Table 17 Maximum fertilisation rates of phosphorus on tillage crops

| Crop | Phosphorus Index | | | |
|----------------------------|---|-----|-----|----|
| | 1 | 2 | 3 | 4 |
| | Available Phosphorus (kg/ha) ¹ | | | |
| Winter Wheat ² | 45 | 35 | 25 | 0 |
| Spring Wheat ² | 45 | 35 | 25 | 0 |
| Winter Barley ² | 45 | 35 | 25 | 0 |
| Spring Barley ² | 45 | 35 | 25 | 0 |
| Winter Oats ² | 45 | 35 | 25 | 0 |
| Spring Oats ² | 45 | 35 | 25 | 0 |
| Sugar Beet | 70 | 55 | 40 | 20 |
| Fodder Beet | 70 | 55 | 40 | 20 |
| Potatoes: Main crop | 125 | 100 | 75 | 50 |
| Potatoes: Early | 125 | 115 | 100 | 50 |
| Potatoes: Seed | 125 | 115 | 100 | 85 |
| Maize | 70 | 50 | 40 | 0 |
| Field Peas | 40 | 25 | 20 | 0 |
| Field Beans | 50 | 40 | 20 | 0 |
| Oil Seed Rape | 35 | 30 | 20 | 0 |
| Linseed | 35 | 30 | 20 | 0 |
| Swedes/Turnips | 70 | 60 | 40 | 40 |
| Kale | 60 | 50 | 30 | 0 |
| Forage Rape | 40 | 30 | 20 | 0 |

¹The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

²Where proof of higher yields is available, an additional 3.8kg P/ha may be applied on soils at phosphorus indices 1, 2, or 3 for each additional tonne above a yield of 6.5 tonnes/ha. The higher yields shall be based on the best yield achieved in any of the three previous harvests, at 20% moisture content.

Table 18 Maximum fertilisation rates of nitrogen on vegetable crops

| Crop | Nitrogen Index | | | | Maximum additional supplementation (Top dressing) |
|---------------------------------|----------------------------|-----|-----|-----|---|
| | 1 | 2 | 3 | 4 | |
| | Available Nitrogen (kg/ha) | | | | |
| Asparagus (Establishment) | 140 | 115 | 95 | 70 | |
| Asparagus (After harvest) | 100 | 100 | 100 | 100 | |
| Broad Beans | 0 | 0 | 0 | 0 | |
| French Beans | 90 | 85 | 75 | 70 | |
| Beetroot | 140 | 125 | 105 | 90 | |
| Brussels Sprouts | 120 | 115 | 105 | 100 | 180 |
| Spring Cabbage | 50 | 35 | 15 | 0 | 250 |
| Other Cabbage | 150 | 135 | 115 | 100 | 100 |
| Broccoli | 120 | 110 | 100 | 90 | 20 |
| Cauliflower (Winter and Spring) | 75 | 50 | 25 | 0 | 150 |
| Cauliflower (Summer and Autumn) | 120 | 80 | 40 | 0 | 120 |
| Carrots | 90 | 75 | 55 | 40 | |
| Celery | 120 | 85 | 65 | 50 | 180 |
| Courgettes | 140 | 125 | 105 | 90 | |
| Leeks | 100 | 90 | 80 | 70 | 100 |
| Lettuce | 100 | 90 | 80 | 70 | 50 |
| Onions | 70 | 60 | 50 | 40 | 70 |
| Scallions | 90 | 80 | 70 | 60 | 60 |
| Parsley | 100 | 80 | 60 | 40 | 150 |
| Parsnip | 100 | 85 | 70 | 50 | 50 |
| Peas (Market) | 0 | 0 | 0 | 0 | |
| Rhubarb | 100 | 90 | 80 | 70 | 200 |
| Spinach | 140 | 125 | 105 | 90 | 100 |
| Swede (Horticultural) | 70 | 45 | 25 | 0 | |
| Swede (Transplanted crops) | 80 | 52 | 29 | 0 | |

Table 19 Maximum fertilisation rates of phosphorus on vegetable crops

| Crop | Phosphorus Index | | | |
|---------------------------------|---|----|----|----|
| | 1 | 2 | 3 | 4 |
| | Available Phosphorus (kg/ha) ¹ | | | |
| Asparagus (Establishment) | 40 | 25 | 15 | 10 |
| Asparagus (Maintenance) | 27 | 17 | 10 | 7 |
| Broad Beans | 60 | 45 | 35 | 20 |
| French Beans | 60 | 45 | 35 | 20 |
| Beetroot | 60 | 45 | 35 | 20 |
| Brussels Sprouts | 60 | 45 | 35 | 20 |
| Spring Cabbage | 60 | 45 | 35 | 20 |
| Other Cabbage | 60 | 45 | 35 | 20 |
| Broccoli | 60 | 45 | 35 | 20 |
| Cauliflower (Winter and Spring) | 60 | 45 | 35 | 20 |
| Cauliflower (Autumn) | 60 | 45 | 35 | 20 |
| Carrots | 60 | 45 | 35 | 20 |
| Celery | 88 | 65 | 55 | 28 |
| Courgettes | 60 | 45 | 35 | 20 |
| Leeks | 60 | 45 | 35 | 20 |
| Lettuce | 60 | 45 | 35 | 20 |
| Onions | 60 | 45 | 35 | 20 |
| Scallions | 60 | 45 | 35 | 20 |
| Parsley | 60 | 45 | 35 | 20 |
| Parsnip | 60 | 45 | 35 | 20 |
| Peas (Market) | 60 | 45 | 35 | 20 |
| Rhubarb | 60 | 45 | 35 | 20 |
| Spinach | 60 | 45 | 35 | 20 |
| Swede | 70 | 60 | 45 | 35 |

¹The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

Table 20 Annual maximum fertilisation rates of nitrogen on fruit/soft fruit crops

| | Available Nitrogen (kg/ha) |
|-------------------|----------------------------|
| Apples (Dessert) | 125 |
| Apples (Culinary) | 125 |
| Pears | 50 |
| Cherries | 70 |
| Plums | 70 |
| Blackcurrants | 80 |
| Gooseberries | 40 |
| Raspberries | 60 |
| Strawberries | 50 |
| Redcurrants | 60 |
| Loganberries | 50 |
| Blackberries | 50 |

Table 21 Annual maximum fertilisation rates of phosphorus on fruit/soft fruit crops

| | Phosphorus Index | | | |
|-------------------|---|----|----|---|
| | 1 | 2 | 3 | 4 |
| | Available Phosphorus (kg/ha) ¹ | | | |
| Apples (Desert) | 25 | 16 | 12 | 8 |
| Apples (Culinary) | 20 | 12 | 10 | 8 |
| Pears | 16 | 8 | 4 | 0 |
| Cherries | 16 | 8 | 4 | 0 |
| Plums | 16 | 8 | 4 | 0 |
| Blackcurrants | 20 | 16 | 12 | 8 |
| Gooseberries | 20 | 16 | 12 | 8 |
| Raspberries | 20 | 16 | 12 | 8 |
| Strawberries | 16 | 8 | 4 | 0 |
| Redcurrants | 20 | 16 | 12 | 8 |
| Loganberries | 20 | 16 | 12 | 8 |
| Blackberries | 20 | 16 | 12 | 8 |

¹The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

Table 22 Phosphorus excess limits

Article 34(3)

| Date | Total available phosphorus (kg/ha) |
|------------------|------------------------------------|
| 20 December 2010 | Not applicable |
| 1 January 2013 | 5 |
| 1 January 2015 | 3 |
| 1 January 2017 | 0 |

SCHEDULE 3

STORAGE PERIODS FOR LIVESTOCK MANURE

1. The storage period specified for the purposes of Articles 9(2), 10(2), 12 and 16(5)(b) is—

- (a) 16 weeks in relation to holdings in counties Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford, Wexford and Wicklow;
- (b) 18 weeks in relation to holdings in counties Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath;
- (c) 20 weeks in relation to holdings in counties Donegal and Leitrim, and
- (d) 22 weeks in relation to holdings in counties Cavan and Monaghan.

2. Where 20% or more of a holding lies within one or more counties of higher storage requirement as specified in paragraph 1, the holding shall be deemed for the purposes of this Schedule to lie wholly within the county in relation to which the longest storage period is specified.

SCHEDULE 4

PERIODS WHEN APPLICATION OF FERTILISERS TO LAND IS
PROHIBITED

1. In counties Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford, Wexford and Wicklow, the period during which the application of fertilisers to land is prohibited is the period from—

- (a) 15 September to 12 January in the case of the application of chemical fertiliser
- (b) 15 October to 12 January in the case of the application of organic fertiliser (other than farmyard manure)
- (c) 1 November to 12 January in the case of the application of farmyard manure.

2. In counties Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath, the period during which the application of fertilisers to land is prohibited is the period from—

- (a) 15 September to 15 January in the case of the application of chemical fertiliser
- (b) 15 October to 15 January in the case of the application of organic fertiliser (other than farmyard manure)
- (c) 1 November to 15 January in the case of the application of farmyard manure.

3. In counties Cavan, Donegal, Leitrim and Monaghan, the period during which the application of fertilisers to land is prohibited is the period from—

- (a) 15 September to 31 January in the case of the application of chemical fertiliser
- (b) 15 October to 31 January in the case of the application of organic fertiliser (other than farmyard manure)
- (c) 1 November to 31 January in the case of the application of farmyard manure.

SCHEDULE 5

CONDITIONS APPLYING IN RELATION TO DEROGATION

The following are the conditions for the purposes of Article 20(4) of these Regulations in relation to the application to land on a holding in any year of livestock manure in excess of the amount specified in Article 20(1).

Application of manure and other fertilisers

1. The amount of livestock manure from grazing livestock applied to the land each year on grassland holdings, including by the animals themselves, shall not exceed the amount of manure containing 250 kg nitrogen per hectare, subject to the conditions laid down in paragraphs 2 to 7.

2. The total nitrogen inputs shall not exceed the crop requirement (within the meaning of Article 15). Total nitrogen application shall be differentiated on the basis of stocking rate and grassland productivity.

3. A fertilisation plan shall be kept for the holding describing the crop rotation of the farmland and the planned application of manure and nitrogen and phosphorus chemical fertilisers. The fertilisation plan shall be available on the holding by 1 March at the latest and shall include the following:

- (a) the number of livestock, a description of the housing and storage system, including the volume of manure storage available;
- (b) a calculation of manure nitrogen (less losses in housing and storage) and phosphorus produced on the holding;
- (c) the crop rotation and area of each crop, including a sketch map indicating location of individual fields;
- (d) the foreseeable nitrogen and phosphorus crop requirements;
- (e) the amount and the type of manure delivered outside the holding or to the holding;
- (f) the results of soil analysis related to nitrogen and phosphorus soil status if available;
- (g) nitrogen and phosphorus application from manure over each field (parcels of the holding homogeneous regarding cropping and soil type), and
- (h) application of nitrogen and phosphorus with chemical and other fertilisers over each field.

A plan in relation to the holding shall be revised no later than seven days following any changes in agricultural practice on the holding to ensure consistency between the plan and actual agricultural practice on the holding.

4. Fertilisation accounts, including information related to management of soiled water, shall be kept in relation to the holding and shall be submitted to the Minister for Agriculture, Fisheries and Food each year in the format and by the date specified by that Minister.

5. The application made under Article 20, the fertilisation plan and the fertilisation accounts may be subject to control by the competent authority.

6. Nitrogen and phosphorus analysis in soil shall be performed for the holding at least every four years for each homogeneous area of the holding, with regard to crop rotation and soil characteristics. At least one analysis per five hectares of land shall be required.

7. Livestock manure shall not be spread in the autumn i.e. from 1 August to 15 October before grass cultivation.

Land management

8. An area not less than 80% of the net area available for application on the holding of livestock manure shall be grass and the following measures shall be carried out:

- (a) temporary grassland shall not be ploughed except in spring (i.e. from 1 February to 30 April);
- (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 in the case of clover in grassland with less than 50% clover and of cereal and pea mixtures undersown with grass).

Definitions

9. In this schedule, the following definitions shall apply:

- (a) “grassland holding” means a holding where 80% or more of the net area available for application of livestock manure is grass;
- (b) “grazing livestock” means cattle (with the exclusion of veal calves), sheep, deer, goats and horses, and
- (c) “grass” means permanent grassland or temporary grassland (temporary implying leys of less than four years).



GIVEN under the Official Seal of the Minister for the Environment,
Heritage and Local Government,
20 December 2010.

JOHN GORMLEY,
Minister for the Environment, Heritage and Local
Government.

EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation)

These Regulations revoke, and re-enact with amendments, the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2009. These Regulations come into effect on 20 December 2010.

These Regulations, which give effect to Ireland's 2nd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources and include measures such as-

- periods when land application of fertilisers is prohibited
- limits on the land application of fertilisers
- storage requirements for livestock manure, and
- monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.

The Regulations give further effect to several EU Directives including Directives in relation to protection of waters against pollution from agricultural sources ("the Nitrates Directive"), dangerous substances in water, waste management, protection of groundwater, public participation in policy development and water policy (the Water Framework Directive).

BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach díreach ón
OIFIG DHÍOLTA FOILSEACHÁN RIALTAIS,
TEACH SUN ALLIANCE, SRÁID THEACH LAIGHEAN, BAILE ÁTHA CLIATH 2,
nó tríd an bpost ó
FOILSEACHÁIN RIALTAIS, AN RANNÓG POST-TRÁCHTA,
AONAD 20 PÁIRC MIONDÍOLA COIS LOCHA, CLÁR CHLAINNE MHUIRIS,
CONTAE MHAIGH EO,
(Teil: 01 - 6476834 nó 1890 213434; Fax: 094 - 9378964 nó 01 - 6476843)
nó trí aon díoltóir leabhar.

DUBLIN
PUBLISHED BY THE STATIONERY OFFICE
To be purchased directly from the
GOVERNMENT PUBLICATIONS SALE OFFICE
SUN ALLIANCE HOUSE, MOLESWORTH STREET, DUBLIN 2,
or by mail order from
GOVERNMENT PUBLICATIONS, POSTAL TRADE SECTION,
UNIT 20 LAKESIDE RETAIL PARK, CLAREMORRIS, CO. MAYO,
(Tel: 01 - 6476834 or 1890 213434; Fax: 094 - 9378964 or 01 - 6476843)
or through any bookseller.

€11.43

