

STATUTORY INSTRUMENTS.

S.I. No. 113 of 2022

EUROPEAN UNION (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2022

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I, DARRAGH O'BRIEN, Minister for Housing, Local Government and Heritage, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) and for the purpose of giving further effect to Directive 91/676/EEC of 12 December 1991¹, Directive 2000/60/EC of 23 October 2000², Directive 2003/35/EC of 26 May 2003³, Directive 2006/118/EC of 12 December 2006⁴ and Directive 2008/98/EC of 19 November 2008⁵ hereby make the following regulations:

¹ O.J. No. L 375/1, 31 December 1991.

² O.J. No. L 327/1, 22 December 2000.

³ O.J. No. L 156/17, 25 June 2003.

⁴ O.J. No. L 372/19, 27 December 2006.

⁵ O.J. No. L 312/3, 22 November 2008.

EUROPEAN UNION (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2022

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PART 1 PRELIMINARY

Citation, commencement and application

- 1. (a) These Regulations may be cited as the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.
 - (b) These Regulations shall apply to all holdings in the State.
 - (c) These Regulations shall apply to all movements of livestock manure in the State.
 - (d) These Regulations shall come into effect on 11th March 2022.

Purpose of Regulations

2. The purpose of these Regulations is to give effect to Ireland's Nitrates Action Programme pursuant to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural source.

Revocations

3. The European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2018, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2020, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) (Nos. 2 and 3) Regulations 2020, and the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2021 are hereby revoked.

Interpretation

- 4. (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;

"commonage" means a land parcel which is held by two or more persons in specified shares or jointly and originally purchased from the Irish Land Commission under the Land Purchase Acts, including land over which two or more persons have grazing rights or the right to take turf;

"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;

"eligible area" in relation to a holding and the grassland stocking rate, means the eligible 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;

"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;

"grass" means permanent grassland or temporary grassland (temporary implying leys of less than four years);

"grazing livestock" means cattle (with the exclusion of veal calves), sheep, deer, goats and horses.

"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);

"local authority shared service" means common or combined services provided to more than one local authority, the provision of which (to the local authorities concerned) enables, assists or facilitates the carrying out of any administrative task or process necessary for or incidental to the performance of a function assigned under these regulations to local authorities.

"the Minister" means the Minister for Housing, Local Government and Heritage;

"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;

"OSi" means Ordnance Survey Ireland established by Ordnance Survey Ireland Act, 2001 (No. 43 of 2001).

"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, spent mushroom compost, 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 shallow 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) or any amendment thereof in relation to the establishment of river basin districts;

"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, Food and the Marine 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;

"Teagasc" means the Agriculture and Food Development Authority established in September 1988 under the Agriculture (Research, Training and Advice) Act, 1988.

"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;

"watercourses" means any body of water that is marked on a modern 1:5,000 scale OSi map.

"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 subarticle, 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 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

- 5. (1) An occupier of a holding shall take all such steps, as far as is practicable 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 dungsteads, farmyard manure pits, silage pits or silage clamps and
 - (b) rainwater gutters and downpipes where required for the purposes of paragraph (a) are maintained in good working condition.
- (3) The spreading of soiled water to land is prohibited between the following dates:
 - (a) Between 21st December and 31st December for all milk producers from 2022,
 - (b) Between 10th December and 31st December for all milk producers from 2023,
 - (c) Between 1st December and 31st December from 2024 onwards for all milk producers with the exception of winter/liquid milk⁶ producers, and
 - (d) Between 1st December and 31st December from 1st January 2025 onwards for all milk producers including winter/liquid milk¹ producers

⁶ Holdings that produce milk during the winter and hold a winter/liquid milk contract with their milk processor.

Collection and holding of certain substances

- 6. (1) Livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps 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

- 7. (1) Storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps 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 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 subarticle (1), and
 - (b) comply with such construction specifications for those facilities as may be approved from time to time by the Minister for Agriculture, Food and the Marine.
- (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 article 6(2).
- (4) In this article "storage facilities" includes out-wintering pads, earthenlined 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

- 8. (1) The capacity of storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps 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 ensure to have 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 8 to 14, 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 10 to 14 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 rainwater, soiled water or other extraneous water which enters or is likely to enter the facilities.
- (5) The occupier of a holding shall only be eligible to avail of a derogation from the limits on the amount of livestock manure to be applied as specified in Article 20 if the capacity of storage facilities for livestock manure, effluent and soiled water on the holding is in accordance with Articles 8 and 9.
 - (6) Subject to sub-article (7), the spreading of all slurry must be applied by:
 - (a) 8th October from 2022;
 - (b) 1st October from 2023 onwards.
- (7) Notwithstanding sub-article (6), slurry may be spread between 8th and 15th October in 2022, and between 1st and 15th October from 2023 in accordance with criteria to be published by the Minister, in consultation with the Minister for Agriculture, Food and the Marine, by 1st September 2022.

Capacity of storage facilities for effluents and soiled water

- 9. Without prejudice to the generality of Article 8, 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,
 - (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,
 - (c) soiled water being provided on a holding shall equal or exceed the capacity required to store all soiled water likely to arise on the holding during a period of 15 days, and
 - (d) From 1st December 2023, a minimum of 3 weeks' storage capacity shall be in place on the holding and from 1st December 2024, a minimum of 4 weeks' storage capacity shall be in place on the holding except for winter/liquid milk producers where this storage must be in place by 1st December 2025.

Capacity of storage facilities for pig manure

10. (1) Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by pigs

shall, subject to sub-article (2) and Article 14, 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

- 11. (1) Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by poultry shall, subject to sub-article (2) and Article 14, 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

12. Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by deer, goats and sheep shall, subject to Article 14, 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

13. Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by cattle shall, subject to Article 14, 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

- 14. (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 10, 11, 12 or 13, 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 live-stock manure, or
 - (c) the occupier has a contract for the transfer of the manure to a person registered under and in accordance with the European Communities (Transmissible Spongiform Encephalopathies and Animal By-products) Regulations 2008 (S.I. No. 252 of 2008) to undertake the transport of manure.
- (2) Subject to sub-article (3), the capacity of facilities for the storage of live-stock manure may be less than the capacity specified in Article 12 or 13, 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 until 31st December 2024 and 100 kg nitrogen from 1st January 2025 onwards 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.
 - The requirement for full storage for those holdings stocked between 100 kg N/ha and 130 kg N/ha applies from 1st January 2025.
- (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 130 kg of nitrogen per hectare per annum until 31st December 2024 and 100 kg of nitrogen per hectare per annum from 1st January 2025 onwards,
 - (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, 100 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, 100 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.

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 based on the relevant tables in Schedule 2 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.
- (6) From 11th March 2022, on holdings with grassland stocking rates of 130 kg nitrogen per hectare from grazing livestock manure (dairy cows and other bovines two years old and over) or above prior to export of livestock

manure from the holding, a maximum crude protein content of 15% is permissible in concentrate feedstuff fed to grazing livestock on the holding between 15th April and 30th September. Records of crude protein content of concentrate feedstuff shall be kept in accordance with Article 23(1)(j).

- (7) On holdings with grassland stocking rates of 170 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding, a liming programme shall be prepared and must establish the following:-
 - (a) A calculation of liming requirements for each parcel to achieve optimum pH;
 - (b) A lime application programme for the farm.
- (8) The stocking rate allowance for commonage land shall not exceed 50 kg organic nitrogen per hectare.
 - (9) Chemical fertiliser shall not be spread on commonage land.

Duty of occupier in relation to nutrient management

- 16. (1) An occupier of a holding shall take as far as is practicable all such steps for the purposes of preventing the application to land of fertilisers in excess of crop requirement on the holding.
- (2) For the purposes of the determination of the grassland stocking rate in tables 12, 13A and 13B the previous calendar year's stocking rate data shall be used.
 - (3) (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 subject to paragraph (e).
 - (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 four years or more has elapsed after the taking of a soil test, 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.
 - (d) The phosphorus fertilisation rate for soils with more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions of paragraph (e).
 - (e) For the purposes of paragraph (d), soils shall be deemed to have an organic matter content of 20% as defined on a Teagasc-EPA Indicative Soils map unless otherwise determined in soil tests carried out in accordance with this article.
 - (f) From 11th March 2022 all occupiers of holdings that have a grassland stocking rate of 170 kg N/ha or above prior to export

of livestock manure, shall take soil tests and shall assume P index 4 until soil tests are taken. From 1st January 2023 all occupiers of holdings with a grassland stocking rate above 130 kg N/ha shall take soil tests and shall assume P index 4 until soil tests are taken. From 1st January 2023 all occupiers of holdings on all arable land shall take soil tests.

- (4) Without prejudice to the generality of sub-article (1) and subject to sub-article (5), the amount of available nitrogen or available phosphorus applied to promote the growth of a crop specified in Table 12, 13A, 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. In the case of crops not identified in the tables listed above, fertilisers shall be applied in accordance with Teagasc guidance as approved by the Minister for Agriculture, Food and the Marine.
- (5) Increased phosphorus build-up on grassland on farms with grassland stocking rates of 130 kg nitrogen per hectare and above shall only be permitted in accordance with the rates contained in Table 13B provided that the following conditions are met:
 - (a) Soil analysis is carried out for soil phosphorus and soil organic matter contents; Soils shall be deemed to have an organic matter content of 20% as defined on a Teagasc-EPA Indicative Soils map unless otherwise determined in soil tests carried out in accordance with this article.
 - (b) An occupier availing of the phosphorus build-up programme shall engage the services of a Department of Agriculture, Food and the Marine approved Farm Advisory System Advisor.
 - (c) A detailed farm nutrient plan for the holding shall be submitted in a format specified by the Minister for Agriculture, Food and the Marine.
 - (d) The occupier shall participate in an appropriate training programme specified by the Minister for Agriculture, Food and the Marine for the purpose of meeting the requirements of these regulations.
- (6) In the case of a holding on which grazing livestock are held, the amount of available phosphorus supplied to the holding by concentrated feedstuff shall be the amount fed to such livestock in excess of 300 kg per 89 kg livestock manure nitrogen 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.
- (7) The nitrogen and phosphorus maximum limits in Tables 12, 13A and 13B are in addition to the nitrogen and phosphorus contained in grazing livestock manure produced on 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 or a turlough likely to flood,
 - (e) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),
 - (f) subject to sub-article (12), 5m of any surface waters (other than a lake or surface waters specified at paragraph (a) or (b)), or
 - (g) the distance specified in sub-article 2(f) shall be increased to 10m for a period of two weeks preceding and two weeks following the periods specified in Schedule 4.
- (3) Notwithstanding the requirements of sub-articles (2)(a), (2)(b) and (2)(c), organic fertiliser or soiled water may be applied to land within:
 - (a) 30m from the abstraction point in the case of any surface waters, bore-hole, 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, or
 - (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),

where the provisions of sub-article (4) are complied with.

(4) Organic fertiliser or soiled water may only be applied to land in accordance with sub-article (3) where a local authority or Irish Water (as the case may be) 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, in consultation with Irish Water, where relevant, 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, following consultation with Irish Water, where relevant, 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.
- (6) A local authority may, in the case of any particular abstraction point and following consultation with the Agency and, where relevant, Irish Water, specify a greater distance than that specified in sub-articles (2) or (3) where, following prior investigations by Irish Water or the local authority (as the case may be), the local 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, following prior investigations by Irish Water or the local authority (as the case may be) and following consultation with the Agency and, where relevant, Irish Water, 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, within a timeframe to be agreed with the Agency and, where relevant, Irish Water, where—
 - (a) on the basis of the results of monitoring carried out for the purposes of Article 7 of the European Communities (Drinking Water) Regulations 2014 (S.I. No. 122 of 2014), 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 following consultation with the Agency and, where relevant, Irish Water, 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 Irish Water 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), (5), (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 sub-stances 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), (5), (6) or (7) the authority shall, as soon as may be—
 - (a) notify the affected landowners, Irish Water, the Agency and the Department of Agriculture, Food and the Marine 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 Agency may issue advice or direction to Irish Water or 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 Irish Water or a local authority (as the case may be) shall comply with any such advice or direction given.
- (12) Notwithstanding sub-article (2)(f), 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.
- (13) 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 or a turlough likely to flood,
- (d) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),
- (e) 20m of any surface waters (other than a lake or surface waters specified at paragraph (a)).
- (14) Organic fertiliser shall not be held in a field at any time during the periods specified in Schedule 4 as applicable to that substance.
- (15) Silage bales shall not be stored outside of farmyards within 20m of surface waters or a drinking water abstraction point in the absence of adequate facilities for the collection and storage of any effluent arising.
- (16) No cultivation shall take place within 2m of a watercourse identified on a modern 1:5,000 scale OSi mapping or better, except in the case of grassland establishment or the sowing of grass crops.
- (17) Supplementary feeding points shall not be located within 20m of waters and shall not be located on bare rock.
- (18) In the case of livestock holdings with grassland stocking rates of 170 kg nitrogen per hectare from livestock manure or above prior to export of livestock manure, bovine livestock shall not be permitted to drink directly from watercourses identified on the modern 1:5,000 scale OSi mapping or better. Where bovine livestock have direct access to watercourses on the holding, a fence shall be placed at least 1.5m from the top of the riverbank or water's edge (as the case may be). It will be permissible to move livestock across a watercourse to an isolated land parcel where necessary, provided that both sides of the watercourse are fenced.
- (19) In the case of holdings identified in sub-Article 18, supplementary drinking points may not be located within 20m of surface waters.
- (20) There shall be no direct runoff of soiled water from farm roadways to waters. The occupier of a holding shall comply with any specification for farm roadways specified by the Minister for Agriculture, Food and the Marine pursuant to this requirement.
- (21) There shall be no direct runoff of soiled waters to waters resulting from the poaching of land on the holding.
- (22) For late harvested crops and late harvested spring cereal crops, a minimum buffer of 6m shall be put in place to protect any intersecting watercourses.

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

- 18. (1) (a) Livestock manure, other organic fertilisers, effluents, soiled water and chemical fertilisers shall be applied to land in as accurate and uniform a manner as is practically possible.
 - (b) Low emission slurry spreading equipment must be used for the application of slurry on holdings with grassland stocking rates of:
 - *i*. 170 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding.
 - *ii.* 150 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2023.
 - *iii.* 130 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2024.
 - *iv.* 100 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2025.
 - v. slurry produced by pigs on any holding from 1st January 2023.
 - (c) From 1st January 2023, low emission equipment shall be used to apply livestock manure to arable land or the livestock manure shall be incorporated within 24 hours.
- (2) Organic and chemical 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 there is a risk of water pollution having regard to factors such as surface runoff pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover.
- (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, subject to Article 5(3), or
 - (b) chemical fertilisers to meet the crop requirements of Autumnplanted 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) 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. The amount considered to be applied to commonage shall not exceed 50 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 eligible area of the holding.

Ploughing and the use of non-selective herbicides

- 21. (1) Where arable land is ploughed between 1st July and 30th November the necessary measures, shall be taken within 14 days of ploughing to provide for emergence of green cover. A rough surface shall be maintained prior to a crop being sown in the case of lands ploughed between 1st December and 15th January.
- (2) Where grassland is ploughed between 1st July and 15th October the necessary measures shall be taken within 14 days of ploughing to provide for emergence of green cover from a sown crop.
- (3) Grassland shall not be ploughed between 16^{th} October and 30^{th} November.
 - (4) (a) When a non-selective herbicide is applied to arable land or to grassland in the period between 1st July and 30th 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.
 - (b) When a non-selective herbicide is applied to land after 15th October, the requirement in sub-article 4 (a) shall be reduced to 75% of the relevant cereal area where a contract is in place for seed crops or crops producing grain destined for human consumption which prohibits the application of a non-selective herbicide preharvest.
- (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 1st 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 applies 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.
- (7) Shallow cultivation or sowing of a crop must take place within 7 days of baling of straw post harvest. Where straw is chopped shallow cultivation or sowing a crop must take place within 7 days of harvest. In all circumstances, shallow cultivation or sowing of a crop must take place within 14 days of harvesting. In certain weather conditions, the Minister, in discussion with the Minister for Agriculture, Food and the Marine, may advise when this should not apply.

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 and/or directions which may be issued from time to time for the purposes of these Regulations by the Minister, the Minister for Agriculture, Food and the Marine 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) eligible 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, in a format specified by the Minister for Agriculture, Food and the Marine,
 - (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 dungsteads, farmyard manure pits, silage pits or silage clamps, including an assessment of compliance with Articles 9 to 14,
 - (j) the quantities and types of concentrated feedstuff fed to grazing live-stock 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 31st 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, Food and the Marine, a local authority 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 (11) 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 or
 - (b) 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 know-ledge 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) A person may be appointed as an authorised person for the purposes of these Regulations by the Minister, the Minister for Agriculture, Food and the Marine or the Agency.

(12) 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 and Schedule 5 of these Regulations, excluding Article 17(5), (6), (7), (10) and (11), is guilty of an offence and shall be liable—
 - (a) on summary conviction to a Class A fine or to imprisonment for a term not exceeding 3 months or both 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 a summary offence under these Regulations may be taken by a local authority or the Agency.
- (5) A prosecution for a summary 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) and Article 29(6).

PART 6

FUNCTIONS OF PUBLIC AUTHORITIES

Minister for Agriculture, Food and the Marine

- 27. (1) The Minister for Agriculture, Food and the Marine 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, Food and the Marine 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, Food and the Marine shall prepare and keep updated a register of all holdings and shall, on request, make a copy of the register available to the Minister, the Agency or a local authority.
- (4) The Minister for Agriculture, Food and the Marine shall make available to the Minister, a local authority or the Agency a report of an inspection or inspections carried out for the purposes of these Regulations 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.
- (5) The Minister for Agriculture, Food and the Marine shall make available, upon written request, information in relation to any holding or holdings, as the case may be, where such transfer of data is necessary for the purposes of carrying out any functions set out in these regulations, including for the purpose of promoting compliance with these Regulations. Such information may be requested by the following:-
 - (a) the Minister,
 - (b) an individual local authority,
 - (c) a representative local authority under a local authority shared service established for the purpose of carrying out functions set out in these regulations including for the purpose of promoting compliance with these Regulations,
 - (d) Teagasc for the purpose of promoting compliance with these Regulations,
 - (e) the Agency.
- (6) The Minister for Agriculture, Food and the Marine shall ensure compliance with the Data Sharing and Governance Act, No. 5 of 2019 in making available any information under sub-article (5) above.

Making and review of action programme by the Minister

- 28. (1) The Minister shall, following consultation with the Minister for Agriculture, Food and the Marine and other interested parties in accordance with this Article, prepare and publish not later than 31st December 2025 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. An interim review of this action programme shall be undertaken by the Minister starting within the second year of the programme.
- (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) 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.
- (2) The Agency shall undertake a review of progress made in implementing these Regulations and shall submit a report to the Minister by 30th June 2025 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, Food and the Marine and the co-ordinating local authority in each river basin district, and such other persons as it considers appropriate.
- (4) The Department of Agriculture, Food and the Marine, the relevant local authorities and Irish Water 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 make recommendations and shall, where considered necessary, give directions to each 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. The Agency may revise such recommendations and directions at such times thereafter as the Agency considers appropriate.
- (7) 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 groundwater 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, Food and the Marine.
- (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, Food and the Marine, the Agency, Irish Water and such other persons as it considers appropriate, and
 - (b) have full 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 follow any protocol established by the Minister for furnishing a report of an inspection or inspections to the Department of Agriculture, Food and the Marine and such other persons as it considers appropriate for the purposes of these Regulations where non-compliance has been detected.
- (6) A local authority shall maintain a register of all prior investigations carried out by the local authority itself or by Irish Water within its jurisdiction, 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, Food and the Marine in accordance with Article 27, 29 or 30 of these Regulations shall not be a breach of the Data Protection Acts, 1988, 2003 and 2018.

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, Food and the Marine 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, Food and the Marine 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 the person carrying out the research by the Agency or the Minister for Agriculture, Food and the Marine 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.

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, Food and the Marine for this purpose.

The analysis for phosphorus and, where appropriate, organic matter content and soil pH, 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. A review of this soil test methodology for phosphorus availability will be undertaken for the mid-term review of this programme.

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 preweighed 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.

Analysis of soil pH

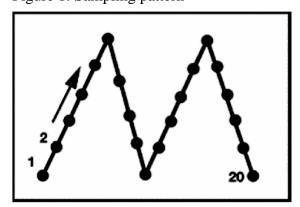
Soil pH shall be determined by measuring pH in a soil:water suspension of 1:2 ratio. Place 10 ml of dried sieved soil and 20 mls of deionised water into a suitable container. Mix thoroughly and allow to stand for at least 10 minutes. Stir for 30 seconds, and allow to settle immediately before recording the pH on a meter calibrated using buffer solutions of pH 4.0 and 7.0

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 5 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

Article 8

CRITERIA AS TO STORAGE CAPACITY AND NUTRIENT MANAGEMENT

Table 1 Slurry storage capacity required for sows and pigs

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

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%	0.81
DM)	

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 (m³/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	0.23	0.02
old)		
Cattle (12-18 months	0.13	0.01
old)		
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

Article 9

Table 5 Storage capacity required for effluent produced by ensiled forage

Crop	Minimum storage	$(m^3/100 \text{ tonnes})$
	requirement	
	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.

Article 14 and 20

Table 6 Annual nutrient excretion rates for livestock

Livestock type	Total Nitrogen	Total Phosphorus
	kg/year	kg/year
Dairy cow ⁷ (2022 only)	89	13
Dairy cow band 18 (from	80	12
2023)		
Dairy cow band 2 ⁹ (from	92	13.6
2023)		
Dairy cow band 3 ¹⁰	106	15.8
(from 2023)		
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	13	2
years		

 $^{^7}$ In 2022 the N excretion rate for the dairy cow is 89 kg N/ha and from 2023 onwards the N excretion rate will be determined by the milk yield per annum (for the 3 preceding years) as explained in footnote 8, 9 and 10

⁸ <4,500 kg milk yield per annum

 $^{^9}$ 4,501 - 6,500 kg milk yield per annum

¹⁰ >6,500 kg milk yield per annum

Deer (red) > 2 years	25	4
Deer (fallow) 6 months	7	1
— 2 years		
Deer (fallow) > 2 years	13	2
Deer (sika) 6 months —	6	1
2 years		
Deer (sika) > 2 years	10	2
Breeding unit (per sow	35	8
place)		
Integrated unit (per sow	87	17
place)		
Finishing unit (per pig	9.2	1.7
place)		
Laying hen per bird place	0.56	0.12
Broiler per bird place	0.24	0.09
Turkey per bird place	1	0.4

Article 15 and 20

Table 7 Amount of nutrient contained in 1m³ of slurry

Livestock type	Total Nitrogen (kg)	Total Phosphorus (kg)
Cattle	2.4	0.8
Pig	4.2	0.8
Sheep	10.2	1.5
Poultry — layers 30%	13.7	2.9
DM		

For the purposes of calculation, assume that $1 \text{ m}^3 = 1,000 \text{ litres} = 1 \text{ tonne} = 1000 \text{ kg}$.

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

Livestock type		Total Nitrogen	Total Phosphorus	
		(kg)	(kg)	
Poultry manure	broilers/deep litter	28.0	6.0	
	layers 55% dry	23.0	5.5	
	matter			
	turkeys	28.0	13.8	
Dungstead		3.5	0.9	
manure				
(cattle)				
Farmyard manure		4.5	1.2	
Spent mushroom		8	1.5	
compost				
Sewage sludge		Total nitrogen an	Total nitrogen and total phosphorus	
		content per tonne	shall be declared	
		• • •	accordance with	
		the Waste Manag	gement (Use of	
		Sewage Sludge in		
		Regulations,1998 to 2001 and any		
		subsequent amendments thereto and		
		this must be subn	nitted to the local	
		authority.		
Dairy processing residues and other		Total nitrogen and total phosphorus		
products not listed	above	content		
		per tonne based of	on certified analysis	
		shall be provided	by the supplier.	

Article 15

Table 9 Nutrient availability in fertilisers

Fertiliser	Availability (%)		
	Nitrogen Phosphorus		sphorus
		Soil Index 1&	Soil Index 3 & 4
		2	
Chemical	100	100	100
Pig and poultry manure	50	50	100
Farmyard manure	30	50	100
Spent mushroom	20	50	100
compost			
Cattle and other	40	50	100
livestock manure			
(including that produced			
on the holding)			

Table 9A Nutrient availability in compost

Compost C:N ratio ¹	N availability (%)	
<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, Food and the Marine

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	The 3rd or 4th tillage	The 1st or 2nd tillage	The 1st or 2nd tillage		
following permanent	crop following	crop following	crop following very		
pasture. For	permanent pasture. If	permanent pasture	good permanent		
subsequent tillage	original permanent	(see also Index 4). If	pasture which was		
crops use the	pasture was cut only,	original permanent	grazed only.		
continuous tillage	use index 1.	pasture was cut only,			
table.		use index 2.			
Continuo	us tillage: — crops that t	follow short leys (1-4 year	ars) or tillage crops		
	Prev	ious crop			
Index 1	Index 2	Index 3	Index 4		
Cereals	Sugar beet				
Maize	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	Vegetables receiving				
less than 200 kg/ha	more than 200 kg/ha				
nitrogen	nitrogen				
	1	1	•		

Table 11 Phosphorus index system

Soil phosphorus	Soil phosphorus ranges (mg/l)		
index			
	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 nitrogen on grassland

Grassland stocking rate ¹	Available Nitrogen ²
(kg/ha/year)	(kg/ha)
≤130	114
131-170	185
Grassland stocking rate	greater than 170 kg/ha/year ^{3, 4}
171-210	254
211-250	225
>250	225 ⁵

¹Total annual nitrogen (kg) excreted by grazing livestock averaged over the eligible 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 eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding. Where a derogation applies on the holding derogation rates apply based on stocking rate of the holding. For a new derogation applicant they may apply the derogation rate of 225 kg/ha for the 1st year only and from year 2 onwards must use rates as per stocking rate on 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 170 kg nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted, in accordance with the Nitrates Directive).

⁴ these fertilisation rates are only applicable where the fertiliser type specified by the Minister for Agriculture, Food and the Marine is used.

⁵The application of nitrogen from livestock manure (including that deposited by the animals themselves) to the eligible grassland area shall not exceed 250 kg nitrogen per hectare per year.

Table 13A Annual maximum fertilisation rates of phosphorus on grassland

Grassland stocking rate ¹ (kg/ha/year)		Phosph	norus Index			
	1	2	3	4		
		Available Phos	sphorus (kg/ha	2,3,6		
<85	27	17	7	0		
86-130	30	20	10	0		
131-170	33	23	13	0		
Grassla	Grassland stocking rate greater than 170 kg/ha/year ^{4,5}					
171-210	36	26	16	0		
211-250	39	29	19	0		
>250	39	29	19	0		

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

 $^{^{2}}$ The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions in Article 16(3)(f).

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 eligible 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

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 170 kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted in accordance with the Nitrates Directive).

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 13B Annual maximum fertilisation rates of phosphorus on grassland adopting increased P build-up application rates

Grassland stocking rate ¹ (kg/ha/year)	Phosphorus Index				
	1	2	3	4	
	Available Phosphorus (kg/ha) ^{2,3,6}				
131-170	63 43 13 0				
Grassla	and stocking rat	te greater than	170 kg/ha/year	r ^{4,5}	
171-210	66	46	16	0	
211-250	69	49	19	0	
>250	69	49	19	0	

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

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

	Available nitrogen (kg/ha)
1st cut	112
Subsequent cuts	90
Hay	72

Table 15 Annual maximum fertilisation rates of phosphorus on grassland cut only

Phosphorus Index						
	1	2	3	4		
Available Phosphorus (kg/ha) ^{1,2,3}						
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, subject to the provisions in Article 16(3)(f).

²The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions in Article 16(3)(f)..

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 eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.

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 170 kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted in accordance with the Nitrates Directive).

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.

² The fertilisation rates apply to grassland where there is no grazing livestock on the holding.

³The fertilisation rates in this table apply to those areas of farms where hay or silage is produced for sale off the holding on farms stocked <85 kg grassland stocking rate.

Table 16 Maximum fertilisation rates of nitrogen on tillage crops

Crop	Nitrogen Index				
-	1 2 3				
		Available	Nitrogen (kg	/ha)	
Winter Wheat ^{1,2}	210	180	120	80	
Spring Wheat ^{1,2}	160	130	95	60	
Winter Barley ¹	180	155	120	80	
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	250	190	170	140	
Crop, >120 days ⁴					
Potatoes:	270	230	210	180	
Maincrop/seed,					
90-120 days ⁴					
Potatoes: Early,	210	170	150	120	
60-90 days ⁴					
Potatoes: Salad,	140	120	100	60	
<60 days ⁴					
Maize	180	140	110	75	
Field Peas/Beans	0	0	0	0	
Oil Seed Rape	225	180	160	140	
Linseed	75	50	35	20	
Swedes/Turnips	90	70	40	20	
Kale	150	130	100	70	
Forage Rape	130	120	110	90	

 $^{^{1}}$ Where proof of higher yields is available, an additional 20 kg 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.

 $^{^2}$ Where 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.

⁴Length of growing season

Table 17 Maximum fertilisation rates of phosphorus on tillage crops

Crop	Phosphorus Index					
	1	1 2 3				
	Ava	Available Phosphorus (kg/ha) ¹				
Winter Wheat ^{2,3,5}	45					
Spring Wheat ^{2,3}	45	35	25	0		
Winter Barley ^{2,3,5}	45	35	25	0		
Spring Barley ^{2,3}	45	35	25	0		
Winter Oats ^{2,3,5}	45	35	25	0		
Spring Oats ^{2,3}	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/Salad	125	115	100	85		
Maize	70	50	40	20^{4}		
Field Peas	40	25	20	0		
Field Beans	50	40	20	0		
Oil Seed Rape	55	45	35	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 3.8 kg P/ha may be applied on soils at phosphorus 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.

³Where pH is greater than or equal to 7, 20 kg P/ha may be applied on soils at phosphorus index 4.

⁴Must be incorporated prior to or during sowing.

⁵ For winter cereals on soils of P index 1 and 2, 20 kg of the maximum P fertilisation rate may be applied up to 31st October, which must be incorporated prior to or during sowing.

Table 18 Maximum fertilisation rates of nitrogen on vegetable crops

Crop		Nitroge	Maximum additional supplementation (Top dressing)		
	1	2	3	4	
	Avai	lable Nitro	ogen		
		(kg/ha)			
Asparagus (Establishment)	140	115	95	70	
Asparagus (After harvest)	0	0	0	0	70
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	115	100	90	120
Cauliflower	75	50	25	0	150
(Winter and					
Spring)					
Cauliflower	120	85	65	40	120
(Summer and					
Autumn)					
Carrots	90	70	40	0	
Celery	120	85	65	50	180
Courgettes	140	125	105	90	
Leeks	150	130	100	80	150
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	70
Peas (Market)	0	0	0	0	
Rhubarb	100	90	80	70	200
Spinach	140	125	105	90	100
Swede	70	45	25	20	30
(Horticultural)					
Swede	90	60	30	0	
(Transplanted					
crops)					

Table 19 Maximum fertilisation rates of phosphorus on vegetable crops

Crop	Phosphorus Index				
	1 2 3 4				
	Available Phosphorus (kg/ha) ¹				
Asparagus (Establishment)	65	45	35	20	
Asparagus (After harvest)	27	22	15	10	
Broad Beans	65	45	35	20	
French Beans	65	45	35	20	
Beetroot	65	45	35	20	
Brussels Sprouts	65	45	35	20	
Spring Cabbage	65	45	35	20	
Other Cabbage	65	45	35	20	
Broccoli	65	45	35	20	
Cauliflower (Winter and	65	45	35	20	
Spring)					
Cauliflower (Summer and	65	45	35	20	
Autumn)					
Carrots	65	45	35	20	
Celery	88	65	55	28	
Courgettes	65	45	35	20	
Leeks	65	45	35	20	
Lettuce	80	60	40	20	
Onions	65	45	35	20	
Scallions	65	45	35	20	
Parsley	65	45	35	20	
Parsnip	65	45	35	20	
Peas (Market)	65	45	35	20	
Rhubarb	65	45	35	20	
Spinach	65	45	35	20	
Swede (Horticultural)	70	60	45	35	
Swede (Transplanted	70	60	45	35	
crops)					

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

			Phospho	rus
Index				
	1	2	3	4
			Available	е
Phosphorus (kg/ha) ¹				
Apples (Dessert)	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.

SCHEDULE 3

Articles 10, 11, 13 and 16

STORAGE PERIODS FOR LIVESTOCK MANURE

- 1. The storage period specified for the purposes of Articles 10(2), 11(2), 13 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.
 - 1. 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

Articles 14, 17 and 19

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 in the period from—

- (a) 15th September to 26th January in the case of the application of chemical fertiliser and not withstanding sub-paragraph (4)
- (b) 8th October¹¹ to 12th January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding sub-paragraph (5)
- (c) 1st November to 12th January in the case of the application of farmyard manure.

 $^{^{11}}$ From $1^{\rm st}$ January 2023 the date for beginning of prohibited period will be $1^{\rm st}$ October

- 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) 15th September to 29th January in the case of the application of chemical fertiliser and not withstanding sub paragraph (4)
 - (b) 8th October⁶ to 15th January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding subparagraph (5)
 - (c) 1st November to 15th 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) 15th September to 14th February in the case of the application of chemical fertiliser and not withstanding sub-paragraph (4)
 - (b) 8th October⁶ to 31st January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding subparagraph (5)
 - (c) 1st November to 31st January in the case of the application of farmyard manure.
- 4. In relation to the prohibited periods for spreading chemical fertiliser, the Minister shall by 1st September 2022, following consultation with the Minister for Agriculture, Food and the Marine, publish criteria for the application of slurry from the 15th January. The spreading of all chemical fertiliser shall be in accordance with these criteria from the 15th January.
- 5. In relation to the commencement of the closed period for slurry application, the Minister shall by 1st September 2022, following consultation with the Minister for Agriculture, Food and the Marine, publish criteria for the application of slurry from 1st October to the 15th October. The spreading of all slurry shall be in accordance with these criteria from the 8th October to the 15th October 2022 and from 1st October to the 15th October in subsequent years.



GIVEN under my Official Seal, 9 March, 2022.

DARRAGH O'BRIEN, Minister for Housing, Local Government and Heritage.

EXPLANATORY NOTE

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

These Regulations, which give effect to Ireland's Fifth 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 European 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).

The Regulations revoke the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2017 and other subsequent amending regulations.

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