
STATUTORY RULES OF NORTHERN IRELAND

2012 No. 231

ENVIRONMENTAL PROTECTION

**The Nitrates Action Programme (Amendment)
Regulations (Northern Ireland) 2012**

Made - - - - *1st June 2012*

Coming into operation *22nd June 2012*

The Department of the Environment and the Department of Agriculture and Rural Development, being Departments designated⁽¹⁾ for the purposes of section 2(2) of the European Communities Act 1972⁽²⁾ in relation to the environment, acting jointly in exercise of the powers conferred upon them by that section and the Department of the Environment in exercise of the powers conferred on it by Article 32 of the Waste and Contaminated Land (Northern Ireland) Order 1997⁽³⁾ and, in accordance with Article 32(3) of that Order, the Department of the Environment having published a notice indicating the effect of these Regulations and having taken into consideration the representations made to it in accordance with the notice, make the following Regulations.

Citation and commencement

1. These Regulations may be cited as the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2012 and shall come into operation on 22nd June 2012.

Interpretation

2.—(1) The Interpretation Act (Northern Ireland) 1954⁽⁴⁾ applies to these Regulations as it applies to an Act of the Assembly.

(2) In these Regulations “the principal Regulations” means the Nitrates Action Programme Regulations (Northern Ireland) 2010⁽⁵⁾.

Amendments to the Nitrates Action Programme Regulations (Northern Ireland) 2010

3. The principal Regulations are amended in accordance with regulations 4 to 8.

(1) [S.I. 2008/301](#)
(2) [1972 c.68](#)
(3) [S.I. 1997/2778 \(N.I. 19\)](#)
(4) [1954 c.33 \(N.I.\)](#)
(5) [S.R. 2010 No. 411](#) as amended by [S.R. 2011 No. 388](#)

Amendment of regulation 14

4. For regulation 14 (manner of storage of poultry litter and location of storage facilities) substitute—

“Manner of storage of poultry litter and location of storage facilities

- 14.**—(1) Prior to land application, poultry litter shall only be stored on a holding—
- (a) in a midden which shall have adequate effluent collection facilities; or
 - (b) subject to paragraphs (2) to (6), in the field where land application will take place up to a maximum of 180 days from placement in that field.
- (2) From 1st August 2012 poultry litter shall not be stored in a field heap except under and to the extent granted by an authorisation from the Department in accordance with paragraphs (3) to (6). With regard to such an authorisation—
- (a) an application by an appropriate person for authorisation shall be made on a form provided by the Department for the purpose and accompanied by such information in such form as the Department may reasonably require;
 - (b) the Department shall authorise or refuse an application within 28 days from its receipt; and
 - (c) an authorisation of an application for storage of poultry litter in a field heap shall not preclude service by the Department of a notice under regulation 23.
 - (d) the appropriate person may, within the period of 28 days from the day on which a refusal is made, appeal the refusal by the Department of the application for authorisation under paragraph (b) in accordance with the procedure set out in regulation 24.
- (3) Where stored in a field, poultry litter shall not be—
- (a) placed on soil that is waterlogged; or
 - (b) stored in a location that is flooded or likely to flood.
- (4) Where stored in a field, poultry litter shall not be stored in the same location of the field in consecutive years.
- (5) Where stored in a field, poultry litter shall be stored in a compact heap and such heaps shall not be placed within—
- (a) 100m of lakes;
 - (b) 40m of any waterway, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate;
 - (c) 50m around a borehole, spring or well;
 - (d) 250m from any borehole used for a public water supply; or
 - (e) 50m of exposed, cavernous or karstified limestone features (such as swallow holes and collapse features).
- (6) Where stored in a field, poultry litter shall be covered with an impermeable membrane within 24 hours of placement in the field.”

Amendment of regulation 20

5. In regulation 20(2)(f) (type of records required) after the words “rented storage” insert “, authorisation for storage of poultry litter in a field heap”.

Amendment of regulation 24

6. In regulation 24(2) (appeals against notices requiring works etc.) for “10(3)(d)” substitute “10(3)(d), 14(2)(d)”.

Amendment of regulation 25

7.—(1) Regulation 25 (offences) is amended in accordance with paragraphs (2) and (3)

(2) In paragraph (2), for “7(8) or 13(3)” substitute “7(8), 13(3) or 14(3)”.

(3) In paragraph (4), for “14” substitute “14(1), 14(2), 14(4), 14(5), 14(6)”.

Amendment of Schedule

8. For the Schedule to the principal Regulations substitute the Schedule set out in Schedule 1 to these Regulations.

Consequential amendment of the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006

9. For Schedule 2 (phosphorus content of organic manures) to the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006(6) substitute Schedule 2 as set out in Schedule 2 to these Regulations.

Sealed with the Official Seal of the Department of Agriculture and Rural Development on 1st June 2012



Mark Browne
A senior officer of the Department of Agriculture
and Rural Development

Sealed with the Official Seal of the Department of the Environment on 1st June 2012



Wesley Shannon
A senior officer of the Department of the
Environment

SCHEDULE 1

Regulation 8

Schedule substituted for the Schedule to the Nitrates
Action Programme Regulations (Northern Ireland) 2010

“SCHEDULE

Regulations 8, 9, 10, 16

PART 1

Criteria as to nutrient management

Table 1

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

<i>Livestock type</i>	<i>Age range (and production period where different)</i>	<i>Bodyweight (kg)</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual nitrogen production (kg N)</i>
Cattle				
Dairy cow		575	100	91
Dairy heifer replacement	>2 years old	500	100	54
Beef suckler cow ⁽²⁾	> 2 years old	500	100	54
Bull beef	6-13.5 months	300	60	23
Grower fattener	> 2 years old	500	100	54
Grower fattener	12-24 months	400	100	47
Grower fattener	6-12 months	180	50	12
Calf	0-6 months	100	50	7
Calf to 12 months	12 months	180	100	19

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

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

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

(4) Sows based on 2.3 lactations, covering 23% of year and dry period 77% of year. Combined output 15.9 kg N/sow/year.

(5) Based on 0.09kg N/pig

(6) Based on 0.29kg N/pig

(7) Based on 2.00kg N/pig as in NAP Guidance Booklet 2011-2014 pg 62

(8) Broilers, output per 6.6 crops/year, 40 day cycle (73 % occupancy)

(9) Broiler breeder replacements (1000), 0-18 weeks data based on 142kg N/year, output per 18 week cycle (46% occupancy)

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

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

Status: This is the original version (as it was originally made).

<i>Livestock type</i>	<i>Age range (and production period where different)</i>	<i>Body weight (kg)</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual nitrogen production (kg N)</i>
Sheep				
Adult ewe/ram	>1 year old	50-70	100	9
Lamb	0-6 months	4-40	50	1.2
Lamb	6-12 months	30-50	50	3.2
Lamb to 1 year	12 months	4-50	100	4.4
Pigs				
Maiden gilt ⁽³⁾		90-130	100	11.1
Boar		130-250	100	17.5
1 sow place, includes litter to 7 kg ⁽⁴⁾		130-225	100	15.9
Weaner (Stage 1)	3-7.5 weeks	7-18	71	1.1 ⁽⁵⁾
Weaner (Stage 2)	7.5-11 weeks	18-35	82	4.2 ⁽⁶⁾
Grower	11-23 weeks	35-105	87	3.6 ⁽⁷⁾
Finisher	11-23 weeks	35-105	86	8.3
Poultry				
1000 Laying hens		2200	98	607
1000 Broiler places ⁽⁸⁾	40 days	2000	73	255
1000 Broiler breeders	0-60 weeks	4000	91/1	878
1000 Broiler breeders (laying)	18-60 weeks	4000	87.5	945

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

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

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

(4) Sows based on 2.3 lactations, covering 23% of year and dry period 77% of year. Combined output 15.9 kg N/sow/year.

(5) Based on 0.09kg N/pig

(6) Based on 0.29kg N/pig

(7) Based on 2.00kg N/pig as in NAP Guidance Booklet 2011-2014 pg 62

(8) Broilers, output per 6.6 crops/year, 40 day cycle (73 % occupancy)

(9) Broiler breeder replacements (1000), 0-18 weeks data based on 142kg N/year, output per 18 week cycle (46% occupancy)

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

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

Status: This is the original version (as it was originally made).

Livestock type	Age range (and production period where different)	Body weight (kg)	Occupancy % of year ⁽¹⁾	Annual nitrogen production (kg N)
1000 Broiler breeder replacements ⁽⁹⁾	0-18 weeks	2000	46	142
1000 Replacement pullets ⁽¹⁰⁾	17 weeks	1600	38	113
1000 Turkeys (male) ⁽¹¹⁾	140 days	12000	80	1284
1000 Turkeys (female) ⁽¹¹⁾	120 days	8000	80	871
1000 Ducks	50 days	3400	85	834
Other				
Goat				9
Deer (red)	6 months–2 years			12
Deer (red)	>2 years			15
Deer (fallow)	6 months–2 years			7
Deer fallow	>2 years			13
Deer (sika)	6 months-2 years			6
Deer (sika)	>2 years			10
Horse	>3 years			50
Horse	2–3 years old			44
Horse	1–2 years old			36
Horse foal	< 1 year old			25

- (1) For individual farms where occupancy values differ from those given, nitrogen excretion values should be altered accordingly.
- (2) Use the suckler cow data for beef and dairy bulls.
- (3) Maiden gilts, assuming all year round accommodation.
- (4) Sows based on 2.3 lactations, covering 23% of year and dry period 77% of year. Combined output 15.9 kg N/sow/year.
- (5) Based on 0.09kg N/pig
- (6) Based on 0.29kg N/pig
- (7) Based on 2.00kg N/pig as in NAP Guidance Booklet 2011-2014 pg 62
- (8) Broilers, output per 6.6 crops/year, 40 day cycle (73 % occupancy)
- (9) Broiler breeder replacements (1000), 0-18 weeks data based on 142kg N/year, output per 18 week cycle (46% occupancy)
- (10) Replacement pullets, output per 20 week cycle. Where there is more than one cycle per year adjust the output figures proportionately
- (11) Turkeys, assuming 2.1 or 2.4 crops per year, for male and female birds respectively.

Status: This is the original version (as it was originally made).

<i>Livestock type</i>	<i>Age range (and production period where different)</i>	<i>Body weight (kg)</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual nitrogen production (kg N)</i>
Donkey/small pony				30

- (1) For individual farms where occupancy values differ from those given, nitrogen excretion values should be altered accordingly.
- (2) Use the suckler cow data for beef and dairy bulls.
- (3) Maiden gilts, assuming all year round accommodation.
- (4) Sows based on 2.3 lactations, covering 23% of year and dry period 77% of year. Combined output 15.9 kg N/sow/year.
- (5) Based on 0.09kg N/pig
- (6) Based on 0.29kg N/pig
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- (8) Broilers, output per 6.6 crops/year, 40 day cycle (73 % occupancy)
- (9) Broiler breeder replacements (1000), 0-18 weeks data based on 142kg N/year, output per 18 week cycle (46% occupancy)
- (10) Replacement pullets, output per 20 week cycle. Where there is more than one cycle per year adjust the output figures proportionately
- (11) Turkeys, assuming 2.1 or 2.4 crops per year, for male and female birds respectively.

Table 2

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

<i>Slurry type</i>	<i>Dry matter content (%)⁽¹⁾</i>	<i>Total nitrogen (kg/ m³)⁽¹⁾</i>
Dairy cattle	2	1.5
	6	3.0
	10	4.0
Beef cattle	2	1.0
	6	2.3
	10	3.5
Pigs	2	2.0
	4	3.0
	6	4.0
Separated cattle slurries (liquid portion)		
Strainer box	1.5	1.5
Weeping wall	3	2
Mechanical separator	4	3
Dirty water	<1	0.3

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

Table 3**Regulations 8(4), 9(5) and 10(4) - Total nitrogen contained in 1 tonne of solid organic manures**

<i>Livestock manure type</i>	<i>Dry matter content (%)</i>	<i>Total nitrogen (kg)</i>
Poultry		
Broilers	66	33.0
Layers	30	16.0
Turkeys	60	30.0
Ducks	25	6.5
Other		
Cattle farmyard manure	25	6.0
Sheep farmyard manure	25	6.0
Pig farmyard manure	25	7.0

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

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

(1) This table does not imply any departure from regulation 8(1) or 9(3) which prohibit the application to the agricultural area on a holding of livestock manure in amounts which exceed 170kg N/ha/year, including that deposited by the animals themselves, or, in the case of grassland holdings granted a derogation in accordance with regulation 10, 250kg of N/ha/year, including that deposited by the animals themselves.

(2) The dairy cattle figures (dairy cows and heifer replacements) apply where it can be demonstrated that more than 50% of the livestock manure applied to the agricultural area, both by land application and by the animals themselves, arises from dairy cattle. In all other cases the figures for other livestock will apply.

Table 5**Regulation 10(4) and 16(3) - Livestock manure production figures**

<i>Livestock type</i>	<i>Body weight (kg)</i>	<i>Volume of excreta produce per animal per week (m³)⁽¹⁾</i>
Cattle		
Dairy cow	575	0.37
Suckler cow	500	0.23
Cattle > 2 years	500	0.23
Cattle 1 – 2 years	400	0.18

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

Status: This is the original version (as it was originally made).

<i>Livestock type</i>	<i>Body weight (kg)</i>	<i>Volume of excreta produce per animal per week (m³)⁽¹⁾</i>
Cattle 0.5 – 1 year	180	0.09
Calf	100	0.05
Sheep		
Adult ewe	65	0.03
Fattening lamb	35	0.01
Pigs		
Gilt	90 – 130	0.05
1 Sow and litter	130 – 225	0.08
1 Weaner (Stage 1)	7 – 18	0.01
1 Grower (Stage 2)	18-35	0.02
1 Finisher meal fed (Stage 3)	35 – 105	0.03
1 Finisher liquid fed (Stage 3)	35 – 105	0.05
Poultry		
1000 laying hens	0.81	

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

Table 6

Regulations 8(6), 8(7), 9(7), 9(8) and 10(4) - Nitrogen availability in livestock manures and chemical fertilisers

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

Table 7

Regulation 10(4) - Phosphorus (P) excretion values

<i>Livestock type</i>	<i>P excretion (kg per annum)</i>
Cattle	
Dairy cow	16.6
Suckler cow	10.1
Breeding bull	10.1
Cattle over 2 years	10.1

<i>Livestock type</i>	<i>P excretion (kg per annum)</i>
Cattle 1-2 years	7.9
Bull beef (0-13 months)	7.5
Calf 6 months to 1 year	3.0
Calf under 6 months	1.7
Sheep	
Adult ewe/ram	1.0
Fattening lamb	0.3
Pigs	
Boar	4.2
Maiden gilt	5.7
Sow and litter up to weaning	8.7
Pigs 18 kg – 35 kg	2.0
Pigs 18 kg – 105 kg	5.3
Pigs 35 kg – 105 kg	3.3
Poultry	
Broilers (1000)	60
Male turkeys (1000)	534.1
Female turkeys (1000)	250.7
Fattening ducks (1000)	392.4
Broiler breeders (1000)	319.3
Pullets (1000)	41.1
Layers (1000)	237.6
Other	
Horse (>3 years old)	9
Horse (2-3 years old)	8
Horse (1-2 years old)	6
Horse foal (< 1 year old)	3
Donkey/small pony	5
Goat	1
Deer (red) 6 months - 2 years	2
Deer (red) > 2 years	4
Deer (fallow) 6 months - 2 years	1
Deer (fallow) > 2 years	2
Deer (sika) 6 months - 2 years	1

Status: This is the original version (as it was originally made).

<i>Livestock type</i>	<i>P excretion (kg per annum)</i>
Deer (sika) > 2 years	2

PART 2

Criteria as to calculation of phosphorus balance

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

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

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

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

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

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

Table 8

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

<i>Agricultural product</i>	<i>Phosphorus content (% fresh weight)</i>
Poultry concentrate	0.5 (or actual declared content)
Pig concentrate	0.48 (or actual declared content)
Ruminant concentrate	0.55 (or actual declared content)
All other concentrates	0.58 (or actual declared content)
Cattle	0.66
Milk	0.10
Sheep	0.54
Wool	0.04
Pigs	0.50
Poultry	0.58
Eggs	0.22
Straw	0.10
Silage	0.06
Hay	0.30

<i>Agricultural product</i>	<i>Phosphorus content (% fresh weight)</i>
Potatoes	0.04
Oats	0.29
Barley	0.30
Wheat	0.26
Maize	0.25
Full fat soya	0.45
Linseed	0.81
Rape	1.10
Soya	0.68
Sunflower	0.93
Gluten	0.96
Citrus	0.1
Wheat distillers	0.77
Corn distillers	0.77
Peas	0.44
Palm kernal	0.63
Pollard	1.00
Soya hulls	0.14
Sugar beet	0.1

Table 9**Regulation 10(7) - Phosphorus (P) content of organic manures**

<i>Livestock manure type</i>	<i>Dry matter content (%)⁽¹⁾</i>	<i>Phosphorus content (kg P/m³)⁽²⁾</i>
Dairy cattle slurry	2	0.26
	6	0.52
	10	0.87
Beef cattle	2	0.26
	6	0.52
	10	0.87
Pig slurry	2	0.44
	4	0.87
	6	1.31

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

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

Status: This is the original version (as it was originally made).

<i>Livestock manure type</i>	<i>Dry matter content (%)⁽¹⁾</i>	<i>Phosphorus content (kg P/m³)⁽²⁾</i>
Separated cattle slurries (liquid portion)		
Strainer box	1.5	0.13
Weeping wall	3	0.22
Mechanical separator	4	0.52
	<i>Dry matter content (%)</i>	<i>Phosphorus content (kg P/t)</i>
Cattle farmyard manure	25	1.53
Pig farmyard manure	25	3.05
Sheep farmyard manure	25	0.87
Duck manure	25	2.40
Layer manure	30	5.67
Turkey litter	60	10.91
Broiler litter	66	7.00

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

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

SCHEDULE 2

Regulation 9

Schedule substituted for Schedule 2 to the Phosphorus
(Use in Agriculture) Regulations (Northern Ireland) 2006

“SCHEDULE 2

Regulation 2(2)

PHOSPHORUS CONTENT OF ORGANIC MANURES

Table 1

	<i>Dry Matter</i>	<i>Available Phosphate (kg P₂O₅/m³)⁽¹⁾</i>
Dairy Slurry	2	0.6
	6	1.2
	10	2.0
Beef Cattle	2	0.6
	6	1.2
	10	2.0
Pig Slurry	2	1.0

(1) Figures in bold are the most common values

	<i>Dry Matter</i>	<i>Available Phosphate (kg P₂O₅/m³)⁽¹⁾</i>
	4	2.0
	6	3.0
Separated cattle slurries (liquid portion)		
Strainer box	1.5	0.3
Weeping wall	3	0.5
Mechanical Separator	4	1.2
	%	(kg P₂O₅/t)
Cattle FYM	25	3.5
Pig FYM	25	7.0
Sheep FYM	25	2.0
Duck manure	25	5.5
Layer manure	30	13
Turkey litter	60	25
Broiler litter	66	16''

(1) Figures in bold are the most common values

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Nitrates Action Programme Regulations (Northern Ireland) 2010 in regard to the manner of storage of poultry litter and location of storage facilities.

Regulation 4 amends regulation 14 to require the doubling of the distances between temporary poultry litter field heaps and surface water features as well as requiring an authorisation for an individual field heap. Regulation 14 is also amended to ensure that poultry litter field heaps are not placed on soil that is water logged or in a location that is flooded or likely to flood.

Regulation 5 amends regulation 20 to include the new authorisation required by amended regulation 14 as a record that a controller must keep.

Regulation 6 amends regulation 24 to provide an appeal procedure where an application for an authorisation for temporary storage of poultry litter in a field heap is refused by the Department.

Regulation 7 amends regulation 25 to make offences for non compliance with amended regulation 14.

Regulation 8 amends the schedule to the principal Regulations to update incorrect values for nitrogen excretion rates and total nitrogen content of slurry.

Status: *This is the original version (as it was originally made).*

Regulation 9 makes a consequential amendment to Schedule 2 to the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 reflecting the updates to the Schedule to the Nitrates Action Programme Regulations (Northern Ireland) 2010.