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WELSH STATUTORY INSTRUMENTS

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**2013 No. 2506 (W. 245)**

**AGRICULTURE, WALES  
WATER, WALES**

**The Nitrate Pollution Prevention (Wales) Regulations 2013**

<i>Made</i>	- - - -	<i>1 October 2013</i>
<i>Laid before the National Assembly for Wales</i>	- -	<i>2 October 2013</i>
<i>Coming into force</i>	- -	<i>25 October 2013</i>

The Welsh Ministers are designated<sup>(1)</sup> for the purposes of section 2(2) of the European Communities Act 1972<sup>(2)</sup> in relation to matters relating to the protection of waters against pollution caused by nitrates from agricultural sources. In exercise of the powers conferred upon them by that section the Welsh Ministers make the following Regulations.

**PART 1**

**Introduction**

**Title**

1. The title of these Regulations is the Nitrate Pollution Prevention (Wales) Regulations 2013.

**Application**

- 2.—(1) These Regulations apply in relation to Wales.  
(2) Parts 3 to 8 only apply to a holding in a nitrate vulnerable zone designated as such by these Regulations.  
(3) In the case of a holding which is partly in a nitrate vulnerable zone designated as such by these Regulations, Parts 3 to 8 apply only in the part of the holding inside the zone, and a reference to a holding is a reference to that part.

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(1) See [S.I. 2001/2555](#) for the designation conferred upon the National Assembly for Wales. By virtue of section 59 of, and paragraph 28(1) of Schedule 11 to, the Government of Wales Act 2006, that designation is now vested in the Welsh Ministers.  
(2) [1972 c. 68](#).

**Coming into force**

3. These Regulations come into force on 25 October 2013.

**Transitional measures for holdings not previously in a nitrate-vulnerable zone**

4. In a holding or part of a holding that was not situated within a nitrate vulnerable zone under the Nitrate Pollution Prevention (Wales) Regulations 2008(3) but which is situated within an area designated as a nitrate vulnerable zone under these Regulations—

- (a) regulations 12 to 22, regulation 23(2), regulations 24 and 25, 30 to 33 and regulations 36 to 46 do not apply until 1 January 2014;
- (b) regulation 23(1) does not apply until 1 January 2016; and
- (c) regulations 26 to 29 and 34 and 35 do not apply until 1 August 2015.

**Meaning of “polluted water”**

5. Water is polluted if—

- (a) it is freshwater and contains a concentration of nitrates greater than 50 mg/l, or could do so if these Regulations were not to apply there, or
- (b) it is eutrophic or may in the near future become eutrophic if these Regulations were not to apply there.

**Interpretation**

6. In these Regulations—

“agricultural area” (“*ardal amaethyddol*”) means any agricultural land used for agricultural purposes;

“agriculture” (“*amaethyddiaeth*”) has the same meaning as in section 109(3) of the Agriculture Act 1947;

“crop with high nitrogen demand” (“*cnwd â galw mawr am nitrogen*”) includes, but not limited to, grass, potatoes, sugar beet, maize, wheat, oilseed rape, barley, brassicas, rye and triticale;

“eutrophic” (“*ewtroffig*”) means water that is enriched by nitrogen compounds, causing an accelerated growth of algae and higher forms of plant life that produces an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned;

“fertilisation plan” (“*cynllun gwrteithio*”) means a plan prepared under regulation 14(1)(c);

“grass” (“*porfa*”) means—

- (a) permanent grassland or temporary grassland (temporary means for less than four years);
- (b) that exists between the sowing and ploughing of the grass; and
- (c) includes crops under-sown with grass,
- (d) but does not include grassland with 50% or more clover;

“grazing livestock” (“*da byw sy’n pori*”) means any animal specified in Table 1 in Schedule 1;

“holding” (“*daliad*”) means all the land located within a nitrate vulnerable zone and its associated buildings that are at the disposal of the occupier and which are used for the growing of crops in soil or rearing of livestock for agricultural purposes;

“land that has a low run-off risk” (“*tir y mae’r risg o oferu drosto yn isel*”) means land that:

- (a) has an average slope of less than 3° (3 degrees);
  - (b) does not have land drains (other than a sealed impermeable pipe); and
  - (c) is at least 50 metres from a watercourse or conduit leading to a watercourse;
- “livestock” (“*da byw*”) means any animal (including poultry) specified in Schedule 1;
- “manufactured nitrogen fertiliser” (“*gwrtaiith nitrogen a weithgynhyrchwyd*”) means any nitrogen fertiliser (other than organic manure) manufactured by an industrial process;
- “manufactured phosphate fertiliser” (“*gwrtaiith ffosffad a weithgynhyrchwyd*”) means any phosphate fertiliser (other than organic manure) manufactured by an industrial process;
- “nitrogen fertiliser” (“*gwrtaiith nitrogen*”) means any substance containing one or more nitrogen compounds used on land to enhance growth of vegetation and includes organic manure;
- “non-grazing livestock” (“*da byw nad ydynt yn pori*”) means any animal specified in Table 2 in Schedule 1;
- “organic manure” (“*tail organig*”) means any nitrogen fertiliser or phosphate fertiliser derived from animal, plant or human sources and includes livestock manure;
- “phosphate fertiliser” (“*gwrtaiith ffosffad*”) means any substance containing one or more phosphorus compounds used on land to enhance growth of vegetation and includes organic manure;
- “poultry” (“*dofednod*”) means poultry specified in Schedule 1;
- “sandy soil” (“*pridd tywodlyd*”) means any soil over sandstone, and any other soil where—
- (a) in the layer up to 40 cm deep, there are—
    - (i) more than 50 % by weight of particles from 0.06 to 2 mm in diameter,
    - (ii) less than 18 % by weight of particles less than 0.02 mm diameter, and
    - (iii) less than 5 % by weight of organic carbon, and
  - (b) in the layer from 40 to 80 cm deep, there are—
    - (i) more than 70 % by weight of particles from 0.06 to 2 mm in diameter;
    - (ii) less than 15 % by weight of particles less than 0.02 mm diameter;
    - (iii) less than 5 % by weight of organic carbon;
- “shallow soil” (“*pridd tenau*”) is soil that is less than 40 cm deep;
- “slurry” (“*slyri*”) means excreta produced by livestock (other than poultry) while in a yard or building (including any bedding, rainwater or washings mixed with it) that has a consistency that allows it to be pumped or discharged by gravity (in the case of excreta separated into its liquid and solid fractions, the slurry is the liquid fraction);
- “spreading” (“*taenu*”) includes application to the surface of the land, injection into the land or mixing with the surface layers of the land but does not include the direct deposit of excreta on to land by animals.

## PART 2

### Designation of nitrate vulnerable zones

#### Designation of nitrate vulnerable zones

- 7.—(1) In this Part—

“the appointed person” (“*y person penodedig*”) means a person appointed by the Welsh Ministers;

“relevant holding” (“*daliad perthnasol*”) means land and its associated buildings that are at the disposal of the occupier and which are used for the growing of crops in soil or rearing of livestock for agricultural purposes, and which are wholly or partly within an area which—

- (a) the Natural Resources Body for Wales recommends; and
- (b) in relation to which the Welsh Ministers are minded to accept that recommendation (with or without amendment), be, or continue to be, designated as a nitrate vulnerable zone for the purposes of these Regulations.

(2) The areas marked as nitrate vulnerable zones on the map marked “Nitrate Vulnerable Zones Index Map 2013” (“*Parthau Perygl Nitradau Map Mynegai 2013*”) and deposited at the offices of the Welsh Government at Cathays Park, Cardiff, CF10 3NQ are designated as nitrate vulnerable zones for the purposes of these Regulations.

(3) Nitrate vulnerable zones are areas of land that drain into polluted waters and that contribute to the pollution of those waters.

(4) To assist the Welsh Ministers in relation to the duty to review under regulation 11(3), the Natural Resources Body for Wales must, on the date on which these Regulations come into force, and at the latest every four years subsequently, make recommendations to the Welsh Ministers by reference to the matters mentioned in regulation 11(3)(a) to (c) as to which areas be designated, or continue to be designated, as nitrate vulnerable zones for the purposes of these Regulations.

(5) Any recommendations as to the matters stated at regulation 7(4) which have been made by the Natural Resources Body for Wales prior to the date on which these Regulations come into force have effect as if made on that date.

(6) The Welsh Ministers must publish the recommendations of the Natural Resources Body for Wales which they are minded to accept (with or without amendment) and send notice of the recommendations to any owner or occupier of a relevant holding.

(7) A notice must contain a reference to a page on a website maintained by the Natural Resources Body for Wales or the Welsh Ministers where the relevant recommendation (with any amendment the Welsh Ministers are minded to make to it) can be found.

## Appeals

**8.—**(1) The owner or occupier of a relevant holding who is sent a notice under regulation 7(6) may make an appeal against that notice to the Welsh Ministers.

(2) The appeal is to be made only on one or more of the grounds stated in paragraph (3).

(3) The grounds are that in relation to the relevant holding or any part of it, the recommendations of the Natural Resources Body for Wales (subject to any amendment the Welsh Ministers are minded to make to them) should not be accepted by the Welsh Ministers because the relevant holding or any part of it—

- (a) does not drain into water which the Welsh Ministers are minded to identify, or continue to identify, as being polluted; or
- (b) drains into water that the Welsh Ministers should not identify, or continue to identify, as being polluted.

(4) The appeal is to be based on either—

- (a) data provided by the appellant; or
- (b) evidence provided by the appellant that the data relied on by the Welsh Ministers is incorrect.

- (5) The appeal must—
  - (a) be made in writing in the manner and form published by the Welsh Ministers;
  - (b) include details of all the evidence that the appellant intends to rely on; and
  - (c) be received by the Welsh Ministers no later than 35 days after the date on which the Welsh Ministers sent the notice to which the appeal relates.
- (6) The Welsh Ministers must remit the appeal to the appointed person for consideration and determination.

### **Proceedings before the appointed person**

9.—(1) If the appointed person is satisfied that a submitted appeal complies with the requirements of regulation 8 in all material particulars, the appointed person must proceed to determine the appeal.

- (2) The procedure for determining the appeal is to be decided by the appointed person.
- (3) But that is subject to the following provisions of this regulation.
- (4) Before determining the appeal the appointed person must, allowing such time as is reasonable—
  - (a) invite the appellant and the Welsh Ministers to submit representations and supporting documents in relation to the appeal;
  - (b) send to the Welsh Ministers a copy of any representations and supporting documents submitted by the appellant;
  - (c) send to the appellant a copy of any representations and supporting documents submitted by the Welsh Ministers;
  - (d) allow the appellant and the Welsh Ministers an opportunity to submit comments on each other's representations and supporting documents to the appointed person.
- (5) The appointed person may at any time request further information from the appellant or the Welsh Ministers.
- (6) The appointed person may invite any person appearing to have a significant interest in an appeal to submit representations, but must allow the appellant and the Welsh Ministers an opportunity to submit comments on any representations made.
- (7) The appointed person may disregard any representations, comments or documents which have been submitted other than in accordance with the provisions of these Regulations.
- (8) The appointed person may, if satisfied that exceptional circumstances exist, convene an oral hearing.
- (9) At an oral hearing the appellant and the Welsh Ministers have the right to appear, and the appointed person may permit any other party to appear.
- (10) On determining an appeal, the appointed person must send a copy of the determination to all parties to the appeal.
- (11) All parties to an appeal are to bear their own costs.
- (12) An appeal may be withdrawn by the appellant at any time before it is determined by the appointed person.
- (13) Withdrawal of an appeal is to be effected by the appellant giving notice in writing to the appointed person.
- (14) If an appeal is withdrawn, the appointed person ceases to be under a duty to consider and determine it.

**Effect of a determination made by the appointed person**

10.—(1) The Welsh Ministers are bound by a determination of an appeal by the appointed person.

(2) The Welsh Ministers must publish on a website maintained by them all determinations of appeals by the appointed person.

**Review of nitrate vulnerable zones**

11.—(1) The Welsh Ministers must keep under review the eutrophic state of fresh surface waters, estuarial and coastal waters.

(2) Before 1 January 2017, and at least every four years subsequently, the Welsh Ministers must monitor the nitrate concentration in freshwaters over a period of one year—

- (a) at sampling stations that are representative of surface water, at least monthly and more frequently during flood periods, and
- (b) at sampling stations that are representative of groundwater, at regular intervals and taking into account the provisions of Council Directive [98/83/EC](#) on the quality of water intended for human consumption<sup>(4)</sup>,

except for those sampling stations where the nitrate concentration in all previous samples taken for this purpose has been below 25 mg/l and no new factor likely to increase the nitrate content has appeared, in which case the monitoring programme need be repeated only every eight years.

(3) At the end of each four year or eight year period at the latest the Welsh Ministers must—

- (a) identify water that is or could be affected by pollution if the controls in these Regulations are not applied in that area, using the criteria in Annex I to Council Directive [91/676/EEC](#) concerning the protection of waters against pollution caused by nitrates from agricultural sources<sup>(5)</sup>;
- (b) identify land that drains into those waters, or water similarly identified in England, and that contributes to the pollution of those waters;
- (c) take into account changes and factors unforeseen at the time of the previous designation; and
- (d) if necessary revise or add to the designation of nitrate vulnerable zones.

## PART 3

### Limiting the application of organic manure

**Application of livestock manure – total nitrogen limit for the whole holding**

12.—(1) The occupier of a holding must ensure that, in any year beginning 1 January, the total amount of nitrogen in livestock manure applied to the holding, whether directly by an animal or by spreading, does not exceed 170 kg multiplied by the area of the holding in hectares.

(2) The amount of nitrogen produced by livestock must be calculated in accordance with Schedule 1.

(3) In calculating the area of the holding for the purposes of ascertaining the amount of nitrogen permitted to be spread on the holding, no account is taken of surface waters, any hardstanding, buildings, roads or any woodland unless that woodland is used for grazing.

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(4) OJ No. L330, 5.12.1998, p.32.

(5) OJ No. L375, 31.12.1991, p.1 as last amended by Regulation [\(EC\) 1137/2008](#) (OJ No. L311, 21.11.2008, p.1).

### **Spreading organic manure – nitrogen limits per hectare**

13.—(1) Subject to paragraph (2), the occupier of a holding must ensure that, in any twelve month period, the total amount of nitrogen in organic manure spread on any given hectare on the holding does not exceed 250 kg.

(2) The occupier of a holding must ensure that the total amount of nitrogen in organic manure exclusively in the form of certified compost applied to any given hectare on the holding does not exceed—

- (i) 1000 kg in any four year period if it is applied as mulch to orchard land; or
- (ii) 500 kg in any two year period if it is applied to any other land.

(3) For the purposes of paragraphs (1) and (2), the total amount of nitrogen in organic manure must be calculated by reference to the methods described in regulation 17 for establishing nitrogen content.

(4) In this regulation—

- (a) “orchard land” (“*tir perllan*”) means land on which any fruit listed in Schedule 2 is grown.
- (b) “certified compost” (“*compost ardystiedig*”) means green compost or green/food compost in relation to which the supplier confirms in writing that it meets the standards set out in the publication *PAS 100:2011* on composted materials dated January 2011<sup>(6)</sup> and contains no livestock manure.
- (c) The occupier must retain written confirmation that the organic manure complies with sub-paragraph (b).

## **PART 4**

### **Crop Requirements**

#### **Planning the spreading of nitrogen fertiliser**

14.—(1) An occupier of a holding who intends to spread nitrogen fertiliser must—

- (a) calculate the amount of nitrogen in the soil that is likely to be available for uptake by the crop during the growing season (“the soil nitrogen supply”);
- (b) calculate the optimum amount of nitrogen that should be spread on the crop, taking into account the amount of nitrogen available from the soil nitrogen supply; and
- (c) produce a plan for the spreading of nitrogen fertiliser for that growing season.

(2) In the case of any crop other than permanent grassland, the occupier must do this before spreading any nitrogen fertiliser for the first time for the purpose of fertilising a crop planted or intended to be planted.

(3) In the case of permanent grassland the occupier must do this each year beginning 1 January before the first spreading of nitrogen fertiliser.

(4) The plan must be in permanent form.

(5) The plan must record—

- (a) the reference or name of the relevant field;
- (b) the area of the field planted or intended to be planted; and
- (c) the type of crop.

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<sup>(6)</sup> Published by the British Standards Institution, 389 Chiswick High Road, London W5 5AL (www.bsigroup.com), ISBN 978-0-580-65307-0.

- (6) For the area planted or intended to be planted the plan must record—
- (a) the soil type;
  - (b) the previous crop (if the previous crop was grass, whether it was managed by cutting or grazing);
  - (c) the soil nitrogen supply calculated in accordance with paragraph (1) and the method used to establish this figure;
  - (d) the anticipated month that the crop will be planted;
  - (e) the anticipated yield (if arable); and
  - (f) the optimum amount of nitrogen that should be spread on the crop, taking into account the amount of nitrogen available from the soil nitrogen supply.

#### **Additional information to be recorded during the year**

**15.**—(1) Before spreading organic manure, the occupier must on each occasion calculate the amount of nitrogen from that manure that is likely to be available for crop uptake in the growing season in which it is spread.

- (2) The occupier must, before spreading, record—
- (a) the area on which the organic manure will be spread;
  - (b) the quantity of organic manure to be spread;
  - (c) the planned date for spreading (month);
  - (d) the type of organic manure;
  - (e) the total nitrogen content; and
  - (f) the amount of nitrogen likely to be available from the organic manure intended to be spread for crop uptake in the growing season in which it is spread.
- (3) Before spreading nitrogen fertiliser, the occupier must record—
- (a) the amount required; and
  - (b) the planned date for spreading (month).

#### **Total nitrogen spread on a holding**

**16.**—(1) Until 31 December 2013, irrespective of the figure in the plan, an occupier must ensure that the total amount of—

- (a) nitrogen from manufactured nitrogen fertiliser, and
- (b) nitrogen available for crop uptake from livestock manure in the growing season in which it is spread calculated in accordance with regulation 17,

does not in any twelve month period exceed the limits set out in regulation 18.

(2) On or after 1 January 2014, irrespective of the figure in the plan, an occupier must ensure that the total amount of—

- (a) nitrogen from manufactured nitrogen fertiliser, and
- (b) nitrogen available for crop uptake from organic manure, in the growing season in which it is spread calculated in accordance with regulation 17,

does not in any twelve month period exceed the limits set out in regulation 18.



**Calculating the amount of nitrogen available for crop uptake from organic manure**

17.—(1) The occupier must establish the total amount of nitrogen in livestock manure, for the purposes of regulation 16, by—

- (a) using the table in Part 1 of Schedule 3; or
- (b) sampling and analysis in accordance with Part 2 of Schedule 3.

(2) Once the total amount of nitrogen in the livestock manure has been determined, the following percentages are assumed in order to establish the amount of nitrogen in the livestock manure that is available for crop uptake in the growing season in which it is spread;

**Available percentage**

<i>Type of livestock manure</i>	<i>Amount of nitrogen available for crop uptake in the growing season in which it is spread</i>	
	<i>Until 31 December 2013</i>	<i>From 1 January 2014</i>
Cattle slurry	35%	40%
Pig slurry	45%	50%
Poultry manure	30%	30%
Other livestock manure	10%	10%

(3) In relation to all other organic manure, the occupier must establish the total amount of nitrogen available for crop uptake in the growing season in which it is spread, for the purposes of regulation 16—

- (a) by reference to technical analyses provided by the supplier;
- (b) to the extent that such information is unavailable, by reference to the values given in the Fertiliser Manual (RB 209) (8<sup>th</sup> Edition)(7) (referred to therein as “nitrogen available to the next crop”); or
- (c) by sampling and analysis in accordance with Part 2 of Schedule 3.

**Maximum nitrogen limits by crop**

18.—(1) The total amount of nitrogen permitted to be spread on any crop listed in the first column below is the figure given in the second column below, adjusted in accordance with the notes to the table and multiplied by the total area in hectares of that crop sown on the holding.

(7) The Fertiliser Manual (RB209), 8th edition, is published by TSO, June 2010, ISBN 978-0-11-243286-9.

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

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### Maximum nitrogen

<i>Crop</i>	<i>Permitted amount of nitrogen (kg)<sup>(a)</sup></i>	<i>Standard yield (tonne/ha)</i>
Asparagus	150	n/a
Autumn or early winter sown wheat	220 <sup>(b)(c)(d)</sup>	8.0
Beetroot	350	n/a
Brussels sprouts	350	n/a
Cabbage	350	n/a
Calabrese	350	n/a
Cauliflower	350	n/a
Carrots	150	n/a
Celery	250	n/a
Courgettes	250	n/a
Dwarf bean	250	n/a
Field beans	0	n/a
Forage maize	150	n/a
Grass	300 <sup>(f)</sup>	n/a
Leeks	350	n/a
Lettuce	250	n/a
Onions	250	n/a
Parsnips	250	n/a
Peas	0	n/a
Potatoes	270	n/a
Radish	150	n/a
Runner beans	250	n/a
Spring-sown wheat	180 <sup>(c)(d)</sup>	7.0
Spring barley	150 <sup>(e)</sup>	5.5
Sugar beet	120	n/a

(a) An additional 80 kg per hectare is permitted to all crops grown in fields if the current or previous crop has had straw or paper sludge applied to it.

(b) An additional 20 kg per hectare is permitted on fields with shallow soil (other than shallow soils over sandstone).

(c) An additional 20 kg per hectare is permitted for every tonne that the expected yield exceeds the standard yield.

(d) An additional 40 kg per hectare is permitted to milling wheat varieties.

(e) This is inclusive of any nitrogen that is applied as an exemption to the closed period for manufactured nitrogen fertiliser. The permitted amount may be increased by up to 30 kg per hectare for every half tonne that expected yield exceeds the standard yield.

(f) An additional 40 kg per hectare is permitted to grass that is cut at least three times a year.

<i>Crop</i>	<i>Permitted amount of nitrogen (kg)<sup>(a)</sup></i>	<i>Standard yield (tonne/ha)</i>
Swedes	150	n/a
Sweetcorn	250	n/a
Turnips	250	n/a
Winter barley	180 <sup>(b)(c)</sup>	6.5
Winter oilseed rape	250 <sup>(e)</sup>	3.5

- (a) An additional 80 kg per hectare is permitted to all crops grown in fields if the current or previous crop has had straw or paper sludge applied to it.
- (b) An additional 20 kg per hectare is permitted on fields with shallow soil (other than shallow soils over sandstone).
- (c) An additional 20 kg per hectare is permitted for every tonne that the expected yield exceeds the standard yield.
- (d) An additional 40 kg per hectare is permitted to milling wheat varieties.
- (e) This is inclusive of any nitrogen that is applied as an exemption to the closed period for manufactured nitrogen fertiliser. The permitted amount may be increased by up to 30 kg per hectare for every half tonne that expected yield exceeds the standard yield.
- (f) An additional 40 kg per hectare is permitted to grass that is cut at least three times a year.

## PART 5

### Controlling the spreading of nitrogen fertiliser

#### Risk maps

19.—(1) An occupier of a holding who spreads organic manure on that holding must maintain a map of the holding (“a risk map”) in accordance with this regulation.

(2) If circumstances change the occupier must update the risk map within three months of the change.

(3) The risk map must show—

- (a) each field, with its area in hectares;
- (b) all surface waters;
- (c) any boreholes, springs or wells on the holding or within 50 metres of the holding boundary;
- (d) areas with sandy or shallow soils;
- (e) land with an incline greater than 12°;
- (f) land within 10 metres of surface waters;
- (g) land within 50 metres of a borehole, spring or well;
- (h) land drains (other than a sealed impermeable pipe);
- (i) sites suitable for temporary field heaps if this method of storing manure is to be used; and
- (j) land that has a low run-off risk (this is optional for an occupier who does not intend to spread manure on low run-off risk land during the storage period in accordance with regulation 35).

(4) If an occupier spreads organic manure by using precision spreading equipment up to 6 metres from surface water as permitted by regulation 22(1) the risk map must identify land within 6 metres of surface waters.

- (5) The occupier must keep a copy of the risk map.

### **When to spread fertiliser**

**20.**—(1) An occupier who intends to spread nitrogen fertiliser must first undertake a field inspection to consider the risk of nitrogen getting into surface water.

(2) No person may spread nitrogen fertiliser on that land if there is a significant risk of nitrogen getting into surface water, taking into account in particular—

- (a) the slope of the land, particularly if the slope is more than 12°;
- (b) any ground cover;
- (c) the proximity to surface water;
- (d) the weather conditions;
- (e) the soil type; and
- (f) the presence of land drains.

(3) No person may spread nitrogen fertiliser if the soil is waterlogged, flooded or snow covered, or has been frozen for more than 12 hours in the previous 24 hours.

### **Spreading manufactured nitrogen fertiliser near surface water**

**21.** No person may spread manufactured nitrogen fertiliser within 2 metres of surface water.

### **Spreading organic manure near surface water, boreholes, springs or wells**

**22.**—(1) No person may spread organic manure within 10 metres of surface water unless using precision spreading equipment in which case no person may spread organic manure within 6 metres of surface water.

(2) But livestock manure (other than slurry and poultry manure) may be spread there if—

- (a) it is spread on land managed for breeding wader birds or as a species-rich semi-natural grassland and the land is—
  - (i) notified as a Site of Special Scientific Interest under the Wildlife and Countryside Act 1981<sup>(8)</sup>; or
  - (ii) subject to an agri-environment commitment entered into under Council Regulation (EC) 1698/2005 (on support for rural development by the European Agricultural Fund for Rural Development (EAFRD))<sup>(9)</sup>;
- (b) it is spread between 1 June and 31 October inclusive;
- (c) it is not spread directly on to surface water; and
- (d) the total annual amount does not exceed 12.5 tonnes per hectare.

(3) No person may spread organic manure within 50 metres of a borehole, spring or well.

(4) For the purposes of this regulation “precision spreading equipment” (“*cyfarpar taenu manwl*”) is defined as a trailing shoe, dribble bar or injector system.

### **Controlling how nitrogen fertiliser is spread**

**23.**—(1) Subject to paragraph (2), any person spreading slurry must use spreading equipment with a low spreading trajectory, that is, below 4 metres from the ground.

<sup>(8)</sup> 1981 c. 69.

<sup>(9)</sup> OJ No. L277, 21.10.2005, p.1.

(2) Spreading equipment with a spreading trajectory of more than 4 metres from the ground can be used on land that has a low run off risk where such equipment can achieve an average slurry application rate of not more than 2 millimetres per hour when it is operating continuously.

(3) Any person spreading nitrogen fertiliser must do so in as accurate a manner as possible.

### **Incorporating organic manure into the ground**

**24.**—(1) Any person who applies organic manure onto the surface of bare soil or stubble (other than soil that has been sown) must ensure that it is incorporated into the soil in accordance with this regulation.

(2) Poultry manure must be incorporated as soon as practicable, and within 24 hours at the latest.

(3) Slurry and liquid digested sewage sludge (that is, liquid from the treatment of sewage sludge by anaerobic digestion) must be incorporated as soon as practicable, and within 24 hours at the latest, unless it was applied using equipment of a type described in regulation 22(4).

(4) Any other organic manure (other than organic manure spread as a mulch on sandy soil) must be incorporated into the soil as soon as practicable, and within 24 hours at the latest, if the land is within 50 metres of surface water and slopes in such a way that there may be run-off to that water.

## **PART 6**

### **Closed periods for spreading nitrogen fertiliser**

#### **Meaning of “organic manure with high readily available nitrogen”**

**25.** In this Part “organic manure with high readily available nitrogen” (“*tail organig sydd â chyfran uchel o nitrogen ar gael yn rhwydd*”) means organic manure in which more than 30 % of the total nitrogen content is available to the crop at the time of spreading.

#### **Closed periods for spreading organic manure with high readily available nitrogen**

**26.** Subject to regulations 27 and 28, no person may spread organic manure with high readily available nitrogen on land between the following dates, all inclusive (“the closed period”)—

#### **The closed period**

<i>Soil type</i>	<i>Until 31 Dec 2013</i>		<i>On or after 1 Jan 2014</i>	
	<i>Grassland</i>	<i>Tillage land</i>	<i>Grassland</i>	<i>Tillage land</i>
Sandy or shallow soil	1 September to 31 December	1 August to 31 December	1 September to 31 December	1 August to 31 December
All other soils	15 October to 15 January	1 October to 15 January	15 October to 31 January	1 October to 31 January

#### **Exemptions: crops sown before 15 September**

**27.** Spreading organic manure with high readily available nitrogen on tillage land with sandy or shallow soil is permitted between 1 August and 15 September inclusive provided that the crop is sown on or before 15 September.

**Exemptions for organic holdings**

**28.** An occupier of a holding registered as an organic producer with a body registered with the Advisory Committee on Organic Standards<sup>(10)</sup> may spread organic manure with high readily available nitrogen at any time on—

- (a) crops listed in the table in Schedule 4 (permitted crops for the closed period), or
- (b) other crops in accordance with written advice from a person who is a member of the Fertiliser Advisers Certification and Training Scheme<sup>(11)</sup>,

provided that each hectare on which organic manure is spread does not receive more than 150 kg total nitrogen between the start of the closed period and the end of February.

**Restrictions following the closed period**

**29.** From the end of the closed period until the end of February—

- (a) the maximum amount of slurry that may be spread at any one time is 30 cubic metres per hectare and the maximum amount of poultry manure that may be spread at any one time is 8 tonnes per hectare; and
- (b) there must be at least three weeks between each spreading.

**Times in which spreading manufactured nitrogen fertiliser is prohibited**

**30.**—(1) No person may spread manufactured nitrogen fertiliser on land during the following periods (all dates inclusive)—

- (a) in the case of grassland, from 15 September to 15 January, or
- (b) in the case of tillage land, from 1 September to 15 January.

(2) Spreading fertiliser during these periods is permitted on the crops specified in the Table in Schedule 4, provided that the maximum rate in column 2 is not exceeded.

(3) Spreading during those periods on crops not in Schedule 4 is permitted on the basis of written advice from a person who is a member of the Fertiliser Advisers Certification and Training Scheme.

**PART 7****Storage of Organic Manure****Storage of organic manure**

**31.** An occupier of a holding who stores any organic manure (other than slurry), or any bedding contaminated with any organic manure, must store it—

- (a) in a vessel;
- (b) in a covered building;
- (c) on an impermeable surface; or
- (d) in the case of solid manure that can be stacked in a free standing heap and that does not drain liquid from the material, on a temporary field site.

<sup>(10)</sup> The Advisory Committee on Organic Standards is a non-executive, non departmental public body that approves organic inspection bodies.

<sup>(11)</sup> The scheme is administered by Basis Registration Ltd, and a list of qualified persons is available from them on request or at their website, [www.basis-reg.com](http://www.basis-reg.com).

### **Temporary field sites**

**32.**—(1) A temporary field site must not be—

- (a) in a field liable to flooding or becoming waterlogged;
- (b) within 50m of a spring, well or borehole or within 10m of surface water or a land drain (other than a sealed impermeable pipe);
- (c) located in any single position for more than 12 consecutive months; or
- (d) located in the same place as an earlier one constructed within the last two years.

(2) Solid poultry manure that does not have bedding mixed into it and is stored on a temporary field site must be covered with an impermeable material.

### **Further requirements applicable to temporary field sites from 1 January 2014**

**33.** Further to regulation 32, from 1 January 2014—

- (a) topsoil must not be removed from the ground upon which a temporary field site is to be constructed;
- (b) a temporary field site must not be located within 30m of a watercourse on land identified on the risk map as having an incline of greater than 12°; and
- (c) the surface area of a temporary field site should be as small as reasonably practicable to minimise the leaching effect of rainfall.

### **Separation of slurry**

**34.** Separation of slurry into its solid and liquid fractions must either be carried out mechanically or on an impermeable surface where the liquid fraction drains into a suitable receptacle.

### **Storage capacity**

**35.**—(1) An occupier of a holding who keeps any of the animals specified in Schedule 1 must provide sufficient storage for all slurry produced on the holding during the storage period, and all poultry manure produced in a yard or building on the holding during the storage period.

(2) The volume of the manure produced by the animals on the holding must be calculated in accordance with Schedule 1.

(3) A slurry store must have the capacity to store, in addition to the manure, any rainfall, washings or other liquid that enters the vessel (either directly or indirectly) during the storage period.

(4) Storage facilities are not necessary for slurry or poultry manure—

- (a) sent off the holding; or
- (b) spread on land that has a low run-off risk (provided that this is done in accordance with the restrictions on spreading in these Regulations); but in this case storage facilities for an additional one week's manure must be provided as a contingency measure in the event of spreading not being possible on some dates.

(5) For the purposes of this regulation the “storage period” (“*cyfnod storio*”) (all dates inclusive) is—

- (a) the period between 1 October and 1 April for pigs and poultry;
- (b) the period between 1 October and 1 March in any other case.

## PART 8

### Calculations and records

#### Recording the size of the holding

**36.**—(1) The occupier of a holding must maintain a record of the total size of the holding calculated in accordance with regulation 12(3).

(2) If the size of the holding changes this record must be updated within one month.

#### Records relating to storage of manure during the storage period

**37.**—(1) The occupier of a holding with livestock must maintain a record—

- (a) of the amount of manure that will be produced by the anticipated number of animals that will be kept in a building or on hardstanding during the storage period referred to regulation 35, using the figures in Schedule 1;
- (b) the amount of storage capacity (slurry vessels and hardstanding) required to enable compliance with regulation 35, taking into account—
  - (i) the amount of manure intended to be exported from the holding;
  - (ii) the amount of manure intended to be spread on land that has a low run-off risk; and
  - (iii) in the case of a slurry vessel the amount of liquid other than slurry likely to enter the vessel;

(c) the current capacity for storage on the holding.

(2) An occupier who introduces animals on to a holding for the first time must comply with paragraph (1) within one month of the introduction of the animals.

(3) If the amount of storage capacity changes the occupier must record the change within one week.

#### Annual records relating to storage

**38.**—(1) Before 30 April each year the occupier of a holding with livestock must record, for the previous storage period referred to in regulation 35 the number and category of animals in a building or on a hardstanding during the storage period.

(2) The occupier must also record the sites used for field heaps and the dates of use.

#### Record of nitrogen produced by animals on the holding

**39.**—(1) Before 30 April every year the occupier must make a record of—

- (a) the number and category (in accordance with the categories in Schedule 1) of animals on the holding during the previous calendar year, and
- (b) the number of days that each animal spent on the holding.

(2) The occupier must then calculate the amount of nitrogen in the manure produced by the animals on the holding during that year using the Table in Schedule 1.

(3) Alternatively, in the case of permanently housed pigs or poultry, the occupier may use—

- (a) software approved by the Welsh Ministers; or
- (b) in the case of a system of keeping livestock that only produces solid manure, sampling and analysis in accordance with Part 2 of Schedule 3.

(4) The occupier must make a record of the calculations and how the final figures were arrived at.



(5) An occupier who used software approved by the Welsh Ministers must keep a printout of the result.

### **Livestock manure brought on to or sent off the holding**

**40.**—(1) Subject to paragraph (3), an occupier who brings livestock manure on to a holding must, within one week record—

- (a) the type and amount of livestock manure;
- (b) the date it is brought on to the holding;
- (c) the nitrogen content; and
- (d) if known the name and address of the supplier.

(2) An occupier who sends livestock manure off a holding must within one week record—

- (a) the type and amount of livestock manure;
- (b) the date it is sent off the holding;
- (c) the nitrogen content;
- (d) the name and address of the recipient; and
- (e) details of a contingency plan to be used in the event that an agreement for a person to accept the livestock manure fails.

(3) If the nitrogen content of the livestock manure brought on to a holding is not known, the occupier must ascertain it, as soon as is reasonably practicable after arrival, and record it within one week of ascertaining it.

(4) All nitrogen content of the livestock manure must be ascertained using either the standard figures in Part 1 of Schedule 3 or by sampling and analysis as set out in Part 2 of that Schedule.

### **Sampling and analysis**

**41.** Any person using sampling and analysis to determine nitrogen content in organic manure must keep the original report from the laboratory.

### **Records of crops sown**

**42.** An occupier who intends to spread nitrogen fertiliser must record within one week of sowing a crop—

- (a) the crop sown; and
- (b) the date of sowing.

### **Records of spreading nitrogen fertiliser**

**43.**—(1) Subject to paragraph (3) below, within one week of spreading organic manure the occupier must record—

- (a) the area on which organic manure is spread;
- (b) the quantity of organic manure spread;
- (c) the date or dates;
- (d) the methods of spreading;
- (e) the type of organic manure;
- (f) the total nitrogen content;

- (g) the amount of nitrogen that was available to the crop.
- (2) Subject to paragraph (3) below, within one week of spreading manufactured nitrogen fertiliser the occupier must record—
  - (a) the date of spreading; and
  - (b) the amount of nitrogen spread.
- (3) Paragraphs (1) and (2) do not apply to the occupier of a holding in any calendar year in which 80% of the agricultural area of a holding is sown with grass, and—
  - (a) the total amount of nitrogen in organic manure applied to the holding, whether directly by animal or a result of spreading, is no more than 100 kg per hectare;
  - (b) the total amount of nitrogen in manufactured nitrogen fertiliser applied to the holding is no more than 90 kg per hectare; and
  - (c) the occupier does not bring any organic manure onto the holding.

#### **Subsequent records**

- 44.—(1) An occupier who has used nitrogen fertiliser must record the yield achieved by an arable crop within one week of ascertaining it.
- (2) Before 30 April each year an occupier must record how any grassland was managed in the previous calendar year.

#### **Keeping of advice**

- 45. An occupier must keep a copy of any advice from a person who is a member of the Fertiliser Advisers Certification and Training Scheme that is relied on for any purpose under these Regulations for five years.

#### **Duration of records**

- 46. Any person required to make a record under these Regulations must keep it for five years.

## **PART 9**

### **Review**

#### **Monitoring and review**

- 47.—(1) At least every four years the Welsh Ministers must review the effectiveness of the restrictions in nitrate vulnerable zones imposed by these Regulations as a means of reducing or preventing water pollution caused by nitrates from agricultural sources and if necessary revise them.
- (2) In order to do this the Welsh Ministers must establish a monitoring programme to assess the effectiveness of the restrictions in these Regulations.
- (3) When carrying out this review the Welsh Ministers must take into account—
  - (a) available scientific and technical data, particularly with reference to respective nitrogen contributions originating from agricultural and other sources; and
  - (b) regional environmental conditions.

### **Public participation**

**48.**—(1) When carrying out this review the Welsh Ministers must ensure that the public is given early and effective opportunities to participate.

(2) The Welsh Ministers must make adequate arrangements for public participation to enable the public to prepare and participate effectively.

(3) The Welsh Ministers must ensure that—

(a) the public is consulted about any proposals and that relevant information about such proposals is made available to the public, including information about the right to participate in decision-making and about the body to which comments or questions may be submitted; and

(b) the public is entitled to express comments and opinions when all options are open before decisions on the plans and programmes are made.

(4) The Welsh Ministers must identify the members of the public entitled to be consulted, including non-governmental organisations promoting environmental protection.

(5) Reasonable time must be allowed for consultation.

(6) Consultation must be taken into account in reaching a decision.

(7) Following consultation the Welsh Ministers must inform the public about the decisions taken and the reasons and considerations upon which those decisions are based, including information about the public participation process.

## **PART 10**

### **Enforcement**

#### **Offences and penalties**

**49.**—(1) Any person who breaches any provision of these Regulations is guilty of an offence and liable—

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

(b) on conviction on indictment, to a fine.

(2) Where a body corporate is guilty of an offence under these Regulations, and that offence is proved to have been committed with the consent or connivance of, or to have been attributable to any neglect on the part of—

(a) any director, manager, secretary or other similar person of the body corporate, or

(b) any person who was purporting to act in any such capacity,

that person, as well as the body corporate, is guilty of the offence and liable to be proceeded against and punished accordingly.

(3) For the purposes of this regulation, “director” (“*cyfarwyddwr*”), in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate.

#### **Enforcement**

**50.** These Regulations are enforced by the Natural Resources Body for Wales.

## Revocations

51. The Nitrate Pollution Prevention (Wales) Regulations 2008(12) are revoked.

1 October 2013

*Alun Davies*  
Minister for Natural Resources and Food, one of  
the Welsh Ministers

## SCHEDULE 1

Regulations 6 and 39

Amount of manure, nitrogen and phosphate produced  
by grazing livestock and non-grazing livestock

Table 1

## Grazing livestock

<i>Category</i>	<i>Daily manure produced by each animal (litres)</i>	<i>Daily nitrogen produced by each animal (grams)</i>	<i>Daily phosphate produced by each animal (grams)</i>
<b>Cattle</b>			
Calves (all categories except veal) up to 3 months:	7	23	12.7
Dairy cows— From 3 months and less than 13 months:	20	95	34
From 13 months up to first calf:	40	167	69
After first calf and—			
annual milk yield more than 9000 litres:	64	315	142
annual milk yield between 6000 and 9000 litres:	53	276	121
annual milk yield less than 6000 litres:	42	211	93
Beef cows or steers <sup>(a)</sup> — From 3 months and less than 13 months:	20	91	33
From 13 months and less than 25 months:	26	137	43
From 25 months—	32	137	60
females for weighing 500kg or less:	32	167	65
breeding— weighing more than 500kg:	45	227	86
Bulls Non-breeding, 3 months and over:	26	148	24
Breeding—			
from 3 months and less than 25 months:	26	137	43
from 25 months:	26	132	60
<b>Sheep</b>			
From 6 months up to 9 months old:	1.8	5.5	0.76
From 9 months old to first lambing, first tuppings or slaughter:	1.8	3.9	2.1
After lambing or tuppings <sup>(b)</sup> —			
weight less than 60kg:	3.3	21	8.8
weight from 60kg:	5	33	10.0
<b>Goats, deer and horses</b>			

(a) Castrated male.

(b) In the case of a ewe, this figure includes one or more suckled lambs until the lambs are aged six months.

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

<i>Category</i>	<i>Daily manure produced by each animal (litres)</i>	<i>Daily nitrogen produced by each animal (grams)</i>	<i>Daily phosphate produced by each animal (grams)</i>
Goats:	3.5	41	18.8
Deer—			
breeding:	542	17.6	
other:	3.5	33	11.7
Horses:	24	58	56

(a) Castrated male.

(b) In the case of a ewe, this figure includes one or more suckled lambs until the lambs are aged six months.

**Table 2**

**Non-grazing livestock**

<i>Category</i>	<i>Daily manure produced by each animal (litres)</i>	<i>Daily nitrogen produced by each animal (grams)</i>	<i>Daily phosphate produced by each animal (grams)</i>
<b>Cattle</b>			
Veal calves:	7	23	12.7
<b>Poultry<sup>(a)</sup></b>			
Chickens used less than 17 weeks for production of eggs for human consumption—	0.04	0.64	0.47
from 17 weeks (caged):	0.12	1.13	1.0
from 17 weeks (not caged):	0.12	1.5	1.1
Chickens raised for meat:	0.06	1.06	0.72
Chickens raised for breeding—	0.04	0.86	0.78
less than 25 weeks:			
from 25 weeks:	0.12	2.02	1.5
Turkeys—			
male:	0.16	3.74	3.1
female:	0.12	2.83	2.3
Ducks:	0.10	2.48	2.4
Ostriches:	1.6	3.83	18.5

(a) Note: all figures for poultry include litter.

<i>Category</i>	<i>Daily manure produced by each animal (litres)</i>	<i>Daily nitrogen produced by each animal (grams)</i>	<i>Daily phosphate produced by each animal (grams)</i>
<b>Pigs</b>			
Weight from 7kg and less than 13kg:	1.3	4.1	1.3
Weight from 13kg and less than 31kg:	2	14.2	6.0
Weight from 31kg and less than 66kg—			
dry fed:	3.7	24	12.1
liquid fed:	7.1	24	12.1
Weight from 66kg and—			
intended dry fed:	5.1	33	17.9
for slaughter—			
liquid fed:	10	33	17.9
sows intended for breeding that have not yet had their first litter:	5.6	38	20
sows (including their litters up to a weight of 7kg per piglet) fed on a diet supplemented with synthetic amino acids:	10.9	44	37
sows (including their litters up to a weight of 7kg per piglet) fed on a diet without synthetic amino acids:	10.9	49	37
breeding boars from 66kg up to 150kg:	5.1	33	17.9
breeding boars, from 150kg:	8.7	48	28

(a) Note: all figures for poultry include litter.

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

## SCHEDULE 2

Regulation 13

## Fruit Species

<b>Botanical Name</b>	<b>Common Name</b>
Cydonia oblonga	Quince
Malus domestica	Apple
Mespilus germanica	Medlar
Morus spp.	Mulberry
Prunus armenaica	Apricot
Prunus avium	Sweet cherry
Prunus cerasus	Sour (cooking) cherry
Prunus ceracifera	Cherry plum
Prunus domestica	Plum
Prunus domestica subsp. insititia	Damson, Bullace
Prunus persica	Peach
Prunus persica var. nectarina	Nectarine
Prunus x gondouinii	Duke cherry
Prunus spinosa	Sloe
Pyrus communis	Pear
Pyrus pyrifolia	Asian pear

## SCHEDULE 3

Regulations 17, 39 and 40

## Calculating nitrogen in organic manure

## PART 1

## Standard table

**Total amount of nitrogen in livestock manure**

<i>Manure other than slurry</i>	<i>Total nitrogen in each tonne (kg)</i>
Manure other than cattle:	6
slurry from—	
pigs:	7
sheep:	7
ducks:	6.5
horses:	7



<i>Manure other than slurry</i>	<i>Total nitrogen in each tonne (kg)</i>
goats:	6
Manure from laying hens:	19
Manure from turkeys or broiler chickens:	30
<i>Slurry</i>	<i>Total nitrogen in each cubic metre (kg)</i>
Cattle:	2.6
Pigs:	3.6
Separated cattle strainer box:	1.5
slurry (liquid fraction)— weeping wall:	2
mechanical separator:	3
Separated cattle slurry (solid fraction):	4
Separated pig slurry (liquid fraction):	3.6
Separated pig slurry (solid fraction):	5
Dirty water:	0.5

## PART 2

### Sampling and analysis of organic manure

#### Slurry and other liquid and semi-liquid organic manure

1.—(1) In relation to slurry and other liquid and semi-liquid organic manure, at least five samples, each of 2 litres, must be taken.

(2) Subject to sub-paragraph (3), the five samples must be taken from a vessel, and—

- (a) if reasonably practicable, the slurry must be thoroughly mixed before the samples are taken, and
- (b) each sample must be taken from a different location.

(3) If a tanker used for spreading is fitted with a suitable valve, the samples may be taken while spreading, and each sample must be taken at intervals during the spreading.

(4) Whether taken as described in sub-paragraph (2) or (3), the five samples must be poured into a larger container, stirred thoroughly and a 2 litre sample must be taken from that container and poured into a smaller clean container.

(5) The 2 litre sample produced in accordance with sub-paragraph (4) must then be sent for analysis.

#### Solid manures

2.—(1) In relation to solid manures, the samples must be taken from a manure heap.

(2) At least ten samples of 1kg each must be taken, each from a different location in a heap.

(3) Each sub-sample must be taken at least 0.5 metres from the surface of the heap.

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

(4) If samples are being collected to calculate compliance with the whole farm limit for pigs and poultry, four samples for analysis must be taken in a calendar year (one taken in each quarter) from manure heaps not more than twelve months old.

(5) The sub-samples must be placed on a clean, dry tray or sheet.

(6) Any lumps must be broken up and the sub-samples must be thoroughly mixed together.

(7) A representative sample of at least 2kg must then be sent for analysis.

#### SCHEDULE 4

Regulations 28 and 30

##### Permitted crops for the closed period

<i>Crop</i>	<i>Maximum nitrogen rate (kg/hectare)</i>
Oilseed rape, winter <sup>(a)</sup>	30
Asparagus	50
Brassica <sup>(b)</sup>	100
Grass <sup>(a)(c)</sup>	80
Over-wintered salad onions	40
Parsley	40
Bulb onions	40

(a) Nitrogen must not be spread on these crops after 31 October.

(b) An additional 50kg of nitrogen per hectare may be spread every four weeks during the closed period up to the date of harvest.

(c) A maximum of 40kg of nitrogen per hectare may be spread at any one time.

#### EXPLANATORY NOTE

*(This note is not part of the Regulations)*

These Regulations revoke and replace the Nitrate Pollution Prevention (Wales) Regulations 2008 which controlled the application of nitrogen fertiliser in nitrate sensitive areas.

In relation to Wales, these Regulations continue to implement Council Directive [91/676/EEC](#) concerning the protection of waters against pollution by nitrates from agricultural sources (OJNo. L375, 31.12.91, p.1).

#### Principal changes

The principal changes are as follows.

Regulation 4 makes transitional provision for those holdings newly designated within a Nitrate Vulnerable Zone by virtue of these Regulations, with most provisions not applying to them until 1

January 2014. Provisions relating to closed period for spreading nitrogen fertiliser and for storage of organic manure do not apply until 1 August 2015.

Regulation 7 designates nitrate vulnerable zones.

Regulation 13 introduces an exception to the 250 kg limit on nitrogen which may be spread on a given hectare within nitrate vulnerable zones.

Regulation 16 requires that when calculating the total amount of nitrogen applied to land the occupier must include the nitrogen contribution from all organic manure applied to the land in that calculation.

Regulation 17 increases the nitrogen value attributed to livestock manure and prescribes how the nitrogen value of other organic manure must be established.

Regulation 22 permits the spreading of organic manure within 6 meters of surface water if it is spread by precision spreading equipment.

Regulation 26 extends the closed periods for spreading organic manure with high readily available nitrogen for all soils other than sandy or shallow to 31 January with effect from 2014.

Regulation 29 reduces the amount of slurry that can be spread following the end of the closed period to 30 cubic metres per hectare.

Regulation 43 exempts holdings upon which 80% or more of the agricultural area is sown with grass and which limit their application of nitrogen from certain record keeping requirements.

## **The Regulations**

Part 2 of these Regulations designate nitrate vulnerable zones, and establish an appeals procedure against the designation.

Part 3 imposes annual limits on the amount of nitrogen from organic manure that may be applied or spread in a holding in a nitrate vulnerable zone.

Part 4 establishes requirements relating to the amount of nitrogen to be spread on a crop, and requires an occupier to plan in advance how much nitrogen fertiliser will be spread.

Part 5 requires an occupier to provide a risk map of the holding, and imposes conditions on how, where and when to spread nitrogen fertiliser.

Part 6 establishes closed periods during which it is prohibited to spread nitrogen fertiliser.

Part 7 makes provision for how nitrogen fertiliser must be stored, and requires storage capacity for manure produced on the holding during the period specified in that Part.

Part 8 specifies what records must be kept.

Part 9 requires the Welsh Ministers to review the Regulations within set time scales.

These Regulations are enforced by the Natural Resources Body of Wales.

Breach of these Regulations is an offence punishable—

- (a) on summary conviction, with a fine not exceeding the statutory maximum, or
- (b) on conviction on indictment, with a fine.

The Welsh Ministers' Code of Practice on the carrying out of Regulatory Impact Assessments was considered in relation to these Regulations. As a result, a regulatory impact assessment has been prepared as to the likely costs and benefits of complying with these Regulations. A copy can be obtained from the Sustainable Land Management Branch, Welsh Government, Rhodfa Padarn, Llanbadarn Fawr, Aberystwyth, SY23 3UR.