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WELSH STATUTORY INSTRUMENTS

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**2021 No. 77**

**The Water Resources (Control of Agricultural  
Pollution) (Wales) Regulations 2021**

**PART 3**

**Crop requirements**

**Planning the spreading of nitrogen fertiliser**

- 6.—(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 comply with paragraph (1) 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 comply with paragraph (1) 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.
- (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.

**Commencement Information**

**11** [Reg. 6](#) in force at 1.4.2021, see [reg. 1\(3\)](#)

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

7.—(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).

**Commencement Information**

**12** [Reg. 7](#) in force at 1.4.2021, see [reg. 1\(3\)](#)

**Total nitrogen spread on a holding**

8. 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 9,

does not in any 12 month period exceed the limits set out in regulation 10.

**Commencement Information**

**13** [Reg. 8](#) in force at 1.4.2021, see [reg. 1\(3\)](#)

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

9.—(1) The occupier must establish the total amount of nitrogen in livestock manure, for the purposes of regulation 8, 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>
Cattle slurry	40 %
Pig slurry	50 %
Poultry manure	30 %
Other livestock manure	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 8—

- (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 Nutrient Management Guide (RB209)(1), or
- (c) by sampling and analysis in accordance with Part 2 of Schedule 3.

#### Commencement Information

**I4** Reg. 9 in force at 1.4.2021, see **reg. 1(3)**

#### Maximum nitrogen limits by crop

**10.** 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.

#### 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

- (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.

(1) <https://ahdb.org.uk/RB209>. A copy can be obtained from AHDB (the Agricultural and Horticultural Development Board).

**Changes to legislation:** There are currently no known outstanding effects for the *The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021, PART 3*. (See end of Document for details)

<i>Crop</i>	<i>Permitted amount of nitrogen (kg)<sup>(a)</sup></i>	<i>Standard yield (tonne/ha)</i>
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>(c)</sup>	5.5
Sugar beet	150	n/a
Sugar beet	120	n/a
Swedes	150	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>
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.

#### **Commencement Information**

**I5** [Reg. 10](#) in force at 1.4.2021, see [reg. 1\(3\)](#)

**Changes to legislation:**

There are currently no known outstanding effects for the The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021, PART 3.