

Guidance for Farmers in Nitrate Vulnerable Zones

Field application of manufactured nitrogen fertilisers

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Department for Environment, Food and Rural Affairs
Nobel House
17 Smith Square
London SW1P 3JR
Telephone 020 7238 6000
Website: www.defra.gov.uk

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Admail 6000
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Order line: 0845 955 6000
Fax: 01709 881673
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The guidance in this series of leaflets is designed to help farmers be compliant with The Nitrate Pollution Prevention Regulations 2008 (SI2349 September 2008). The guidance has been produced in association with the Environment Agency, who is responsible for assessing farmers' compliance with these Regulations.

Field application of manufactured nitrogen fertilisers

Parts 5 and 6 of the Regulations establish rules which restrict when, where and how you can spread manufactured nitrogen fertilisers to land on your farm. These are summarised below.

YOU MUST NOT:

- **spread manufactured nitrogen fertiliser during defined closed spreading periods except to specified crops that have a crop nitrogen requirement during the closed period**
- **spread manufactured nitrogen fertiliser if there is a significant risk of nitrogen pollution of surface water, or within 2 metres of a surface water**

YOU MUST:

- **carry out a field inspection before spreading manufactured nitrogen fertiliser**
- **spread nitrogen fertiliser as accurately as possible**

If you are in an NVZ originally designated in 1996 or 2002, you will need to comply with these rules from 1 January 2009. If, however, you are in an NVZ newly designated in the 2008 Regulations, you have until 1 January 2010.

It is important to note that the rules described in this Leaflet apply, where indicated, to both manufactured nitrogen fertilisers and other nitrogen-containing materials (this does not include organic manure, but includes other materials which contain nitrogen such as dredgings from rivers).

You must also make sure, before you apply any manufactured nitrogen fertiliser to a field, that you comply with the rules concerning Planning Nitrogen Use (see Leaflet 6) and the N max limit (see Leaflet 7).

The boxes below describe the rules in more detail and the following paragraphs provide further explanation.

Field application of manufactured nitrogen fertilisers

1. Closed spreading periods

The Regulations establish a 'closed period' that prohibits the spreading of manufactured nitrogen fertiliser to land at times of the year when there is a high risk of nitrate loss.

YOU MUST NOT spread manufactured nitrogen fertiliser between the following dates:

Grassland	Tillage land
15 September to 15 January	1 September to 15 January

Applications during the closed period will be permitted to the following crops up to a maximum permitted rate (see Table 6 in Leaflet 3):

- winter oilseed rape; asparagus; brassica; grass; overwintered salad onions; parsley; and bulb onions.

Applications to other crops during the closed period are permitted on the basis of written advice from a FACTS qualified adviser.

If you apply manufactured nitrogen fertiliser during the closed period you should make sure that its use was identified as necessary in your Plan (see Leaflet 6). You must comply with the permitted maximum rate of nitrogen and the other conditions that are shown for each crop (see Leaflet 3).

Applications of manufactured nitrogen fertiliser during the closed period is also allowed on a case-by-case basis where there is an agronomic need for nitrogen and where written advice is obtained from a FACTS qualified adviser to justify the application.

The use of solution fertilisers, which all contain some nitrogen, will be permitted during the closed period where there is a requirement for phosphate or potash and there is no practical alternative.

2. Field inspections

Before spreading manufactured nitrogen fertiliser or other nitrogen-containing materials YOU MUST make an inspection of conditions in the field to assess the risk of run-off to surface water, taking into account:

- the slope of the land, particularly if it is greater than 12 degrees (1 in 5);
- the ground cover;
- the proximity to surface water;
- the weather conditions;
- the soil type and conditions;
- the presence of land drains (other than a sealed impermeable pipe).

YOU MUST NOT spread manufactured nitrogen fertiliser or other nitrogen containing materials if you identify there is a significant risk of run-off getting into surface water.

Field application of manufactured nitrogen fertilisers

Before you apply nitrogen fertiliser to a field in an NVZ you must carry out a field inspection to decide if the application is possible without a significant risk of run-off causing pollution of surface water. Run-off can occur across the surface of the soil or through pipe drains, and the risk of run-off increases with slope.

3. Non-spreading conditions and areas

YOU MUST NOT apply manufactured nitrogen fertiliser or other nitrogen containing materials if the soil is:

- waterlogged;
- flooded;
- snow covered;
- or frozen for more than 12 hours in the previous 24 hours.

YOU MUST NOT spread manufactured nitrogen fertiliser within 2 metres of a surface water.

When making your assessment, you should take into account physical and weather conditions. You should not make applications if heavy rain is falling or is forecast to fall within the next 48 hours. Normal common-sense definitions of waterlogged, flooded and snow covered will apply. Application is allowed on days when early morning frost thaws during that day.

To avoid a significant pollution risk you must not apply manufactured nitrogen fertiliser close to surface waters. Surface waters include lakes, ponds, rivers, streams and ditches which contain free water, and also temporary dry ditches and blind ditches.

The 2 metre non-spreading distance is the minimum distance but greater distances may be required depending on slope and the risk of causing pollution. Your field inspection (see Section 2) will help you.

4. Fertiliser spreading

Once you have decided it is safe to spread, you will need to check before actually making the application that you are able to do so in the correct manner.

YOU MUST spread manufactured nitrogen fertiliser and other nitrogen-containing materials in as accurate a way as possible.

You should regularly check, calibrate and adjust each fertiliser spreader you use, following the manufacturer's instructions. You should use only manufactured nitrogen fertiliser that has physical characteristics and quality that will allow you to spread it accurately.

5. Record keeping

The Environment Agency will check your compliance with the rules described in this leaflet by undertaking a physical inspection of the fields on your farm and looking at your records.

YOU MUST keep the following records:

- A record of all manufactured nitrogen fertiliser field applications
- A record of any written advice from a FACTS qualified adviser

For a full description of the field records that you must keep relating to applications of manufactured nitrogen fertiliser, please refer to Annex 1 of Leaflet 6.

As with all records required by the Regulations, you must keep the above for a minimum of five years.

6. Further information and advice

- Code of Good Agricultural Practice – (revised; available late 2008)



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