Guidance for Farmers in Nitrate Vulnerable Zones

Implementing the rules – scope, timing and enforcement

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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.
This Leaflet provides guidance on the following issues concerning the scope of the Nitrate Pollution Prevention Regulations (‘NVZ rules’), the timing of their implementation, and their enforcement:

- Am I responsible for complying with the rules?
- What if my farm is part-in and part-out of a Nitrate Vulnerable Zone?
- What is nitrogen fertiliser?
- When do the rules come into force?
- Compliance assessment and enforcement
- Other information relating to implementation of the rules
- Further advice and information

1. Am I responsible for complying with the rules?

The obligation for complying with the NVZ rules rests with the **occupier** of each **holding** with land in a Nitrate Vulnerable Zone.

The terms highlighted in bold italics are discussed in greater detail below to help you understand if the rules apply to you. If you need further advice on your circumstances, contact the Environment Agency (contact details provided under ‘Further advice and information’).

**Occupier** – Typically, the occupier is usually considered to be the person who owns the land, or the person who rents and farms the land.

**Holding** – This includes an area, or areas, of agricultural land and its buildings which are used for the growing of crops in soil or rearing of livestock for agricultural purposes. The rules apply to all holdings regardless of size.

**Nitrate Vulnerable Zones** – All land in England that drains into a polluted water, and that contributes to the pollution of the water, has been designated as a Nitrate Vulnerable Zone (NVZ). A water has been identified as polluted if:

- It is freshwater (i.e. either a groundwater or surface freshwater) and contains a concentration of nitrate greater than 50 mg/l, or could do if preventative action is not taken, or
- It is eutrophic\(^1\) or may in the near future become eutrophic if preventative action is not taken.

A map of the areas in England included within an NVZ is provided over the page (Figure 1). More detailed maps, which show precisely which fields are located in NVZs, are available via the Defra website (see ‘Further advice and information’ for details). These detailed maps can also be used to identify why your land has been included within an NVZ.

NVZs were originally designated in 1996, but only covered a small area of England. These areas were reviewed and extended in 2002, and then again by the 2008 Regulations. The maps distinguish between ‘existing’ NVZs (i.e. those areas of England designated in either 1996 or 2002) and ‘new’ NVZs (i.e. those areas designated for the first time in 2008).

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\(^1\) “eutrophic” 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.
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The rules apply within the existing NVZs from 1 January 2009, and within the new NVZs from 1 January 2010 (see section 2 below for further details of when the rules come into force).

A great deal of technical expertise and quality control has been applied to accurately identify the new NVZs. However, there is a procedure by which farmers can appeal against the inclusion of their land within an NVZ if they have evidence to demonstrate that it does not drain to a waterbody that is affected by nitrate pollution. Further information on the appeals procedure is available via the Defra website.

2. What if my farm is part-in and part-out of a Nitrate Vulnerable Zone?

Many of the rules apply to individual fields. You will need to comply with these rules in relation to each of the fields on your farm that fall within an NVZ.

The following rules apply to the whole farm:

- The minimum storage capacity for livestock manure (see Leaflet 4)
- The livestock manure N farm limit (see Leaflet 5)

Land outside an NVZ is not subject to the NVZ rules. You will therefore have to make calculations pro rata in relation to the two rules above. For example, if most of your farm (i.e. 90%) is within an NVZ you are likely to need 90% of the storage capacity required by the Regulations.

Figure 1 – Nitrate Vulnerable Zones (NVZs) in England designated by the 2008 Regulations
3. What is nitrogen fertiliser?

The NVZ rules affect the management of nitrogen fertiliser on farms. Nitrogen fertiliser includes all materials applied to land that contain nitrogen compounds. It includes manufactured nitrogen fertiliser, and all types of organic manure, including livestock manure (see Figure 2).

Figure 2 – Nitrogen fertilisers

It is important to read the description of the rules carefully to identify which of the different types of nitrogen fertiliser are affected by the rule in question. For example, rules can apply to:

- all types of nitrogen fertiliser,
- manufactured nitrogen fertiliser only, or
- organic manures only or certain types of organic manure (e.g. the livestock manure N farm limit applies to all ‘livestock manure’ whereas the closed period applies to all ‘organic manure with high readily available N’).
4. When do the rules come into force?

The Nitrate Pollution Prevention Regulations 2008, which provide the legal basis for the NVZ designations and rules, come into force from 1 January 2009.

However, the rules do not apply to land located in those NVZs designated for the first time by the 2008 Regulations until 1 January 2010. Furthermore, some rules have a ‘preparation time’ associated with them, especially where significant action is required to achieve compliance (e.g. the construction of new slurry stores which does not come into force until 1 January 2012).

It should also be noted that in existing NVZs, the old rules continue to apply until they are replaced by the new rules described in this series of Leaflets. Information on the old rules is available in Guidelines for Farmers in NVZs – England (available via the Defra website).

The calendar below (Table 1) highlights some key implementation dates over the coming years. A typical annual calendar is also provided (Table 2). Where compliance with a rule is not required immediately it is recommended that the intervening time is used for preparation.

[Tables 1 and 2 are on pages 5 and 6]
## Table 1: Key implementation dates

*Note: Numbers in brackets refer to relevant Guidance leaflets*

<table>
<thead>
<tr>
<th>Date</th>
<th>Farms within existing NVZs</th>
<th>Farms within new NVZs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 January 2009</td>
<td>From this date most rules come into force within existing NVZs, except those with a specific preparation time You will need to start keeping records relating to, for example, livestock kept on your farm and applications of nitrogen to fields (4,5,6,7) Appeals procedure against NVZ designation is opened</td>
<td>Appeals procedure against NVZ designation is opened</td>
</tr>
<tr>
<td>31 January 2009</td>
<td>Deadline for receipt of NVZ appeals applications</td>
<td></td>
</tr>
<tr>
<td>30 April 2009</td>
<td>By this date you must have:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Recorded the size of your farm (5)</td>
<td>By this date most rules come into force within new NVZs, except those with a specific preparation time You will need to start keeping records relating to, for example, livestock kept on your farm and applications of nitrogen to fields (4,5,6,7) By this date you must have:</td>
</tr>
<tr>
<td></td>
<td>• Calculated and recorded your manure storage capacity requirements (4)</td>
<td>• Completed your risk map (8)</td>
</tr>
<tr>
<td>1 January 2010</td>
<td>By this date you must have:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Completed your risk map (8)</td>
<td>By this date most rules come into force within new NVZs, except those with a specific preparation time You will need to start keeping records relating to, for example, livestock kept on your farm and applications of nitrogen to fields (4,5,6,7) By this date you must have:</td>
</tr>
<tr>
<td>30 April 2010</td>
<td>By this date you must have:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compiled your records relating to livestock kept on your farm (4,5)</td>
<td>• Recorded the size of your farm (5)</td>
</tr>
<tr>
<td></td>
<td>• Calculated the amount of nitrogen produced by the livestock kept on your farm (5)</td>
<td>• Calculated and recorded your manure storage capacity requirements (4)</td>
</tr>
<tr>
<td>30 April 2011</td>
<td>By this date you must have:</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>• Compiled your records relating to livestock kept on your farm (4,5)</td>
<td>• Recorded the size of your farm (5)</td>
</tr>
<tr>
<td></td>
<td>• Calculated the amount of nitrogen produced by the livestock kept on your farm (5)</td>
<td>• Calculated and recorded your manure storage capacity requirements (4)</td>
</tr>
<tr>
<td>1 January 2012</td>
<td>Latest date for compliance with:</td>
<td>By this date you must have:</td>
</tr>
<tr>
<td></td>
<td>• the minimum manure storage capacity requirements; (4)</td>
<td>• Compiled your records relating to livestock kept on your farm (4,5)</td>
</tr>
<tr>
<td></td>
<td>• closed periods for organic manures with high readily available N; (8) and</td>
<td>• Calculated the amount of nitrogen produced by the livestock kept on your farm (5)</td>
</tr>
<tr>
<td></td>
<td>• the prohibition on slurry spreading equipment with a high trajectory. (8)</td>
<td></td>
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<tr>
<td></td>
<td>The N max limit for grass falls to 300 kg N/ha and the N efficiency figures for livestock manure increase (3)</td>
<td></td>
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</tbody>
</table>
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Table 2: Typical annual calendar (once rules are in force)

*Note: Numbers in brackets refer to relevant Guidance leaflets*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1 January       | Start of period for assessing the livestock manure N farm limit (5)  
|                 | Start producing a plan for applications of nitrogen to permanent grassland (6)                                                          |
| 15 January      | End of closed period for spreading:  
|                 | • organic manure to grassland on soils other than shallow or sandy (8)  
|                 | • organic manure to tillage land on soils other than shallow or sandy (8)  
|                 | • manufactured nitrogen fertiliser to both grassland and tillage land (9)                                                              |
| End of February | End of the following restrictions on applications of organic manure: (8)  
|                 | • 150 kgN/ha limit for registered organic producers  
|                 | • 50 m³/ha of slurry and 8 tonnes/ha of poultry manure limit per single application                                                     |
| 30 April        | Deadline for compiling records relating to livestock kept on your farm during the previous calendar year and storage period (4,5)         |
| 1 August        | Start of closed period for spreading organic manure to tillage land with shallow or sandy soils (unless a crop is sown on or before 15th September) (8) |
| 1 September     | Start of closed period for spreading:  
|                 | • organic manure to grassland on shallow or sandy soils (8)  
|                 | • for manufactured nitrogen fertiliser on arable land (9)                                                                             |
| 15 September    | Start of closed period for spreading:  
|                 | • organic manure to tillage land with shallow or sandy soils and a crop is sown on or before 15th September (8)  
|                 | • manufactured nitrogen fertiliser on grassland (9)                                                                                   |
| 1 October       | Start of closed period for spreading organic manure to tillage land with soils which are not shallow or sandy (8)                         |
| 15 October      | Start of closed period for spreading organic manure to grassland with soils which are not shallow or sandy (8)                           |
| 31 December     | End of closed period for spreading organic manure to: (8)  
|                 | • grassland on shallow or sandy soils  
|                 | • tillage land on shallow or sandy soils                                                                                             |
5. Compliance assessment and enforcement

Who is responsible for inspection and enforcement?

The Environment Agency is responsible for assessing farmers’ compliance and enforcing these Regulations.

Will I be given notification of an inspection visit?

Most compliance assessment will be done through a planned programme of farm inspections which will involve an Environment Agency officer visiting the farm, checking records and inspecting storage structures, field activities and field storage of solid manure where necessary. Farmers will normally be given advance notice of these inspections and a convenient date and time agreed.

The Environment Agency may also make unannounced inspection visits, for example, in response to a complaint from the public or when a possible breach of the closed period rules is observed by an officer or through remote sensing.

Which farms will be inspected?

For the planned programme of inspections, a risk based method is used to decide which farms are selected. Inspections are targeted on farms and areas which the Environment Agency believes to pose the greatest environmental risk. As noted above, some inspections are made on the basis of observations of potential breaches.

What will happen during an inspection visit?

The Environment Agency operates an ‘Integrated Regulation of Agriculture’ policy under which checks on compliance with a number of different Regulations are made during the same visit whenever possible.

A major part of the programmed inspection visits will be the checking of records. Farmers will be expected to have their records up to date and in a format which can be checked easily, such as the formats provided in other Leaflets in this series. Computer based records such as PLANET will also be acceptable. Other formats may be acceptable but farmers should ensure that the information indicated in the various Leaflets in this series is covered and easily available.

Environment Agency officers may begin inspections by checking a sample of field records, of their choice, and if these are satisfactory, may decide that checking the remaining field records is not necessary.
What happens if my farm is non-compliant?

Where compliance with some aspects of the Regulations is in doubt, it may be necessary for the Environment Agency officer to check detailed records with other agencies (e.g. British Cattle Movement Service) or with other farmers (e.g. in the case of export of livestock manure).

If a breach of the Regulations is found, actions will be taken according to the Environment Agency Compliance Assessment and Enforcement and Prosecution Policies. Possible actions depend on the seriousness of the breach and environmental impact and include:

- Advice on remediying a minor breach
- Warning letter noting the breach, which may be taken into account in the event of a future breach
- Formal Caution
- Prosecution

Full details of the current Environment Agency Enforcement & Prosecution Policy and related guidelines can be found at the Environment Agency website (see ‘further advice and information’).

A proportion of the programmed inspection visits (a 1% sample of Single Payment claimants) are made specifically for cross-compliance purposes. In addition, where any breach of the cross-compliance requirements is found in any Environment Agency inspection, it will be reported to the Rural Payments Agency (RPA). Depending on the severity, any breach may result in a deduction from your Single Payment.

Verifiable Standards based on The Nitrate Pollution Prevention Regulations 2008 and Payment Reduction Matrices are used to determine the scale of any deduction from the Single Payment. Penalties are graded in accordance with EU guidance and take account of whether the breach is intentional or due to negligence and the severity of impact and permanence of effect.

The Rural Payments Agency website (see ‘further advice and information’) gives full details of how deductions from the Single Payment are calculated.

Offences and penalties

It is an offence to breach any of the Regulations (summarised in Leaflet 1 and set out in more detail in the 'you must' boxes in Leaflets 4 -9).

Under its Enforcement & Prosecution Policy, the Environment Agency seeks to take a proportionate approach to using its powers to prosecute. Prosecution is normally a course of action taken when an offence is deemed to be serious, has been repeated and advice on remedial measures have not been taken, or where the environmental impact is high.

Anyone who is convicted in a Magistrates Court could be liable to a fine of up to £5000 and anyone convicted in a Crown Court to an unlimited fine. It is the policy of the Environment Agency to seek costs in any legal proceedings which if granted by the court would be in addition to any fine.

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2 The NVZ rules are one of the Statutory Management Requirements (SMRs) for cross-compliance under the Single Payment Scheme. Therefore, if you claim under this scheme, or receive payment through Environmental Stewardship, you must comply with the NVZ rules.
**Exceptional circumstances**

If, due to exceptional circumstances, a farmer is unable to comply with any of the requirements of the Regulations he/she should contact the Environment Agency to discuss the situation and agree a course of action. Details of any such discussions should be recorded and brought to the attention of the Environment Agency officer in the case of a subsequent inspection.

In circumstances where many farmers may be experiencing difficulties (for example due to severe flooding), then general advice may be issued by the Environment Agency (normally following discussion with appropriate stakeholder organisations).

**Complaints procedure**

The Environment Agency welcomes feedback, whether as a complaint or as a commendation, and uses this information to improve its work.

Details of the Environment Agency Complaints and Commendations Policy can be found at the Environment Agency website.

Complaints or commendations may also be initiated by phoning the Environment Agency general enquiry number (see ‘further advice and information’)

**6. Other information relating to implementation of the rules**

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

The NVZ rules enshrine many of the good practices, relating to the use and storage of fertiliser and manure, set out in the Code of Good Agricultural Practice (revised; available late 2008).

Farmers with land outside NVZs are encouraged to follow this voluntary code, in particular the section “Minimising nitrate loss”, to help prevent nitrate levels in waters rising to the point where regulation becomes necessary. It will also help to reduce other pollution, including phosphate losses and microbiological contamination of bathing waters.

**Biosecurity**

To comply with some of the rules you may decide to export off your farm a proportion of the manure produced by your livestock. You should take all necessary steps to minimise the risk of spreading animal disease while transporting the manure to other farms including:

- providing secure containment for the manure;
- cleaning the exterior of the vehicle used for transport before leaving your farm; and
- ensuring the manure is spread to tillage land or on grassland used for forage conservation.

**Interactions with other schemes and regulations**

When adapting farming practices to comply with the NVZ rules, you must continue to respect any management agreements you may have entered (e.g. under Environmental Stewardship) and other legal obligations, such as the need to apply to Natural England for an Environmental Impact Assessment (EIA) screening decision before spreading slurry on uncultivated land or semi-natural areas.
**Public Participation**

The Regulations require the Secretary of State to review the effectiveness of the NVZ rules as a means of reducing or preventing water pollution caused by nitrates from agricultural sources every four years. When carrying out this review, the Secretary of State must ensure that there is a mechanism in place to enable the public to participate effectively in the process. This will involve ensuring that the public is consulted about any proposals and are made aware of any relevant information, and that they are given an opportunity to comment before decisions are made. The Secretary of State must also inform the public about any decisions it makes and the reasons for those decisions.

In addition, the Secretary of State is required to decide whether an environmental assessment of the review is necessary under The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/1633). This will require, amongst other things, consideration of whether the review sets the framework for future development consents, or is likely to have a significant environmental effect. In some instances, we consider that for policy reasons to protect the environment, we will always carry out an assessment, for example if the review involves significant amendments to the provisions relating to the storage of organic manure.

**7. Further advice and information**

**Helpline**

A helpline has been established to assist with the interpretation of the NVZ rules. The helpline number is **0845 345 1302** (7am-7pm) but please note that we expect it to be very busy in the initial period. The helpline is run by Momenta on behalf of Defra and will be operational until 31 March 2009.

**Information events**

A number of free national and regional events are being organised to update you on the new NVZ Regulations. To book a place:

- call the Momenta advice line on **0845 345 1302** or
- complete an on-line booking form via www.crosscompliance.org.uk/cms/nvz

**Contacting the Environment Agency**

All enquiries to the Environment Agency should be made using the General Enquiry number - 08708 506 506

Information on the Environment Agency Enforcement & Prosecution Policy and the complaints procedure is available by visiting www.environment-agency.gov.uk
Defra website

The Defra NVZ webpage contains a wide range of up-to-date information on the NVZ rules and how they are being implemented in England. In particular, the following guidance is/will be available by visiting www.defra.gov.uk

- Code of Good Agricultural Practice – (revised; available late 2008)
- The Fertiliser Manual (RB209), due to be released by Defra in 2009, and subsequent editions. The Fertiliser Manual (RB209) is the revised version of Defra’s Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) publication (7th edition, 2000), available electronically at the Defra website or in hard copy from The Stationery Office, PO Box 29, Norwich, NR3 1GN or: www.thestationeryoffice.com
- Guidance Notes for Farmers: The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (as amended)
- Guidance on Construction Repair and Maintenance leaflets:
  - Above-ground circular concrete and weeping-wall slurry stores CGN 001
  - Earth-banked slurry stores CGN 002
  - In-situ concrete slurry stores CGN 003
  - Above-ground circular steel slurry stores CGN 004
  - Separation of clean and dirty water; dirty water storage; and yard area construction CGN 008
  - Sluice valves on steel and concrete above-ground slurry stores CGN 010
  - The use of covers on circular steel and concrete slurry stores CGN 011
- A Farmer's Guide to the Planning System

Other useful guidance publications

- PLANET and ENCASH software – a free copy is available by visiting www.planet4farmers.co.uk or telephoning 08456 023864
- MANNER software – a free copy is available by visiting www.adas.co.uk/manner or by telephoning 01623 844331
- “Tried and Tested” – a simple paper-based Nutrient Management Plan is due to be released in 2009.

Rural Payments Agency

Information on the Single Payment Scheme and the cross-compliance verifiable standards for England is available by visiting www.rpa.gov.uk