



House of Commons
Environment, Food and Rural
Affairs Committee

**Implementation of the
Nitrates Directive in
England: Government
Response to the
Committee's Seventh
Report of Session
2007–08**

**Third Special Report of Session 2007–
08**

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Environment, Food and Rural Affairs Committee

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The current staff of the Committee are Chris Stanton (Clerk), Nerys Welfoot (Second Clerk), Sarah Coe (Committee Specialist—Environment), Marek Kubala and Joanna Dodd (Inquiry Managers), Andy Boyd and Briony Potts (Committee Assistants) and Mandy Sullivan (Secretary).

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Third Special Report

The Environment, Food and Rural Affairs Committee reported to the House on *Implementation of the Nitrates Directive in England* in its Seventh Report of Session 2007–08, published on 10 June 2008 as HC 412. The Government's response to the Report was received on 21 July 2008.

Government response

Introduction

This document provides the Government Response to the twenty recommendations made by the House of Commons Select Committee on Environment, Food and Rural Affairs (EFRA) following its inquiry into the implementation of the Nitrates Directive in England.

Consultation

The Department reviewed current implementation of the EC Nitrates Directive in England, including the extent of current Nitrate Vulnerable Zones (NVZs) and the effectiveness of the current Action Programme. The outcomes of these reviews were discussed in a consultation paper, launched in August 2007, and formed the basis of a series of proposed changes to both the NVZs and Action Programme.

The main purpose of the consultation was to seek views on:

- proposals for revised Action Programme measures to control water pollution caused by nitrogen from agricultural sources.
- whether to apply these measures within discrete Nitrate Vulnerable Zones (extended to cover approximately 70% of the country up from 55%) or throughout the whole of England.

The consultation paper is available via

<http://www.defra.gov.uk/corporate/consult/waterpollution-nitrates/consultation.pdf>

Responses to the consultation

The consultation generated a large amount of interest including:

- A total of 609 written responses, three quarters of which were from farmers
- Over 2700 attendees at Defra-funded information events held in support of the consultation
- Two Parliamentary debates

- A large number of Parliamentary Questions and letters from MPs to the Department
- Considerable media interest

Issues raised within the written responses and at the information events were summarised in a report published on the Defra website on 19 March 2008. The Government Response to the comments raised by stakeholders was published today on the Defra website.

Select Committee inquiry

A report presenting the conclusions and recommendations of the EFRA Committee was published on 10 June 2008.

We are grateful to the Committee for its helpful conclusions and its recognition that the Department has no choice but to implement the requirements of the Directive.

Nitrate Vulnerable Zones

Recommendation 1

We are concerned that the 50 mg/l limit continues to be the basis of the Directive. We are also concerned that the Directive's implementation methodology does not reflect current European Union best practice. We recommend that Defra raise in the Council of Ministers the need to review the scientific evidence that underpins the Directive. If the evidence is found wanting, Defra should try to build an alliance with other member states to persuade the Commission to re-evaluate the Directive's basis. (Paragraph 7)

Government response

We note the recommendation of the Committee and understand its reasons for concern. We have considered such an approach previously, at the time of the negotiation of the Water Framework Directive, but were unable to secure support from other Member States.

The European Commission has sole right of initiation for reviewing or amending EU legislation. Given the Commission's attitude towards implementation of the Directive (i.e. several successful infraction cases), it is unlikely to co-operate at this time, not least because the UK is currently being infringed.

Other Member States have generally accepted the Commission's position and already implemented the Directive, and are therefore unlikely to wish to reverse their policy and support the UK.

Trends in nitrate levels

Recommendation 2

There seems to be general agreement that nitrate levels in some ground waters are on an upward trend, but this may be the result of agricultural practices dating back decades. Trends in ground waters should not be used to justify changes to an Action

Programme that was introduced only in 1998 and extended in 2002. We regret that it is not possible to ascertain a clearer picture of trends in nitrate levels in surface waters and recommend that Defra and the Environment Agency supply more information on this matter in future reviews of the Action Programme. (Paragraph 30)

Government response

We expect to provide more detailed information and analysis on nitrate trends at the time of the next review. Our analysis on trends during the current review was published alongside the consultation:

<http://www.defra.gov.uk/environment/water/quality/nitrate/pdf/consultation-supportdocs/d1-nitrateswater.pdf>

Recommendation 3

We believe that, as Defra admitted, there is insufficient evidence to assess how effective the current Action Programme has been in reducing nitrate pollution, but, in the light of legal action on the part of the European Commission, we agree that changes need to be made in order to bring the UK into compliance with the Directive. (Paragraph 31)

Government response

Whilst we consider that four years may be insufficient time for any impacts of the Action Programme to become apparent in the monitored nitrate concentrations of groundwaters and rivers, we have used a range of other information sources, in addition to water quality monitoring data, and assessment techniques in our review of the current Action Programme. These are described in detail in a number of the evidence papers published alongside the consultation.

In particular, we have been monitoring nitrate losses from agriculture around the country for a number of years. The monitoring data collected was used to develop models which can predict the effectiveness of measures at tackling nitrate losses from agriculture. Using these models, we are able to conclude with reasonable confidence that the measures contained in the current Action Programme are unlikely to significantly reduce nitrate losses at the national scale.

<http://www.defra.gov.uk/environment/water/quality/nitrate/pdf/consultation-supportdocs/g3-nit18-report.pdf>

Implementation timetable

Recommendation 4

We recommend that Defra keep farmers apprised of the proposed implementation date for the changes to NVZ coverage and the Action Programme so that they know where they stand and can plan accordingly. (Paragraph 34)

Government response

The Government Response to the consultation, published today, sets down the timetable for making Regulation to give effect to the proposals. Our planned delivery of advice and guidance, as part of our communications strategy, will ensure that farmers are kept informed of key implementation dates.

The extent of NVZ coverage

Recommendation 5

Defra should avoid unnecessary regulation by continuing to designate specific NVZs, rather than adopting a whole-territory approach. However, in the light of continuing concerns about the decision to apply NVZ coverage to the whole of a river catchment, even if the upland part of the river has low nitrate levels, Defra should consider whether its designation methodology is as well-targeted as is practicable and publish a report as soon as possible on its conclusions about this matter. (Paragraph 41)

Government response

It is our intention to continue applying the Action Programme within discrete Nitrate Vulnerable Zones (revised to cover approximately 70% of England). This will ensure:

- our policy is in-line with the principles of better regulation, targeting action and regulation to areas where it is most needed.
- the cost-effectiveness of our policy is maximised; taking a whole territory approach would impose a financial burden on farmers in areas of the country where action would generate little environmental benefit.

The methodology used in the most recent review of NVZs has been peer reviewed by independent technical experts who judged it to be the best approach currently available. As technology and scientific understanding improves the methodology will be updated.

Recommendation 6

We recommend that NVZs that were designated under the 2002 methodology but would not qualify for designation under the new methodology should be de-designated, and that the appeals mechanism should be open to existing, as well as new, NVZs. (Paragraph 43)

Government response

In relation to de-designation, it is our intention to remove areas of land from previous designations of NVZs where there is good evidence to justify their de-designation.

We consider there is robust evidence to support the de-designation of a number of small areas of the 2002 NVZs on the following grounds:

- Improvements in modelling techniques since 2002 mean that we are now able to more accurately identify the land that actually drains to polluted surface waters.
- Improvements in the network of boreholes for monitoring the quality of our groundwaters, and improved understanding (and data) in relation to hydrogeology, mean we are now able to more accurately identify polluted groundwaters and their catchments.

Using this improved understanding and data will lead to the de-designation of some small areas of NVZs designated in 2002 (approximately 1.5% of England).

The Directive requires us not only to identify waters that are polluted, but also waters which are at risk of becoming polluted in the near future, if action is not taken under the Action Programme. We consider NVZs designated in 2002 draining to waters not identified as being polluted in the recent review should remain designated as NVZs. Specifically, the land draining to:

- Surface waters which were properly identified as polluted in 2002 but now have nitrate concentrations below the 'polluted' threshold of 50mg/l. There is insufficient data to be confident that the improvement in water quality will be sustained, and there is a risk that removal of the Action Programme in these areas could simply lead to an increase in nitrate pollution and their re-identification as polluted during the next review.
- The five waterbodies identified as eutrophic in 2002, but which were not reassessed during the recent review. Our understanding of eutrophication is that its effects take a long time to reverse and become apparent in the ecology. A reassessment of the ecology at these sites would, we believe, still lead to the waters being identified as eutrophic and therefore polluted.

The Department will work with the Environment Agency to develop, in time for the next review of NVZs in four years time, a more detailed methodology which sets more specific criteria to be met for it to be established that an area should be de-designated. For example, the criteria might stipulate the period over which improvements in water quality must be observed, and the evidence needed to demonstrate that changes are not reversible and will not be lost by removing the Action Programme measures (i.e. we need to avoid a 'ping-pong' approach to designations).

As indicated in the consultation, we will provide a procedure by which farmers can appeal against the inclusion of their land within an NVZ if they have evidence to demonstrate that either it does not drain to a water body identified as nitrate-polluted, or that the water body is not polluted. We intend to make this open to farmers in both new and existing NVZs.

Whole-farm limit for livestock manure

Recommendation 7

Defra should implement the 170 kg N/ha limit to bring England into compliance with the Directive, but, given the difficulties such a limit will cause some dairy farmers, it should apply for a derogation to enable a higher limit to be operated where this is justified by the evidence. The derogation application should be made as swiftly as

possible so that, if it is granted, any gap between implementation of the 170 kg N/ha limit and the return to a higher limit is kept to a minimum. (Paragraph 48)

Government response

Shortly after the launch of the consultation, the Secretary of State made a firm commitment to apply for a derogation from the whole farm limit. The Department remains committed to applying for a derogation and will pursue this urgently.

Crop requirement limitation

Recommendation 8

We recommend that Defra proceed with the crop requirement limitation proposals, subject to providing clarification on the difference between Nmax and the nitrogen requirement of the crop, as requested by the Environment Agency. (Paragraph 50)

Government response

As described in the Government Response to the consultation, we intend to make a number of minor refinements to the proposals to improve clarity of this rule. Guidance will have an important role in ensuring that farmers understand the difference between N max and the crop nitrogen requirement.

Controlling where and how nitrogen is applied

Recommendation 9

We recommend that Defra proceed with its proposals on controlling where and how nitrogen should be applied, although it should clarify the meaning of some of the terms it uses in its consultation document, such as “high trajectory” and “high pressure”. (Paragraph 53)

Government response

The recommendation is noted, and we intend to make a number of minor refinements to the proposals to improve clarity of this rule – see Government Response to consultation for detail. Again, guidance will have an important role in this.

Cover crops

Recommendation 10

We urge Defra to leave the universal use of cover crops out of the Action Programme. Cover crops are not required under the Directive, would have a negative impact on biodiversity, and are not suitable for all soil types. However, given that there is evidence to suggest that cover crops have benefits in specific circumstances, we recommend that

Defra evaluate an alternative method of encouraging their uptake in targeted areas. (Paragraph 59)

Government response

We note the recommendation of the Committee. Practical difficulties associated with establishing and maintaining cover crops were highlighted by a large number of stakeholders in response to the consultation and therefore we intend to remove the proposed measure on cover crops from the revised Action associated with establishing and maintaining cover crops Programme.

As identified in the evidence papers published in support of the consultation, cover crops are one of the most effective measures available for tackling nitrate losses from arable land and the proposed rule was expected to deliver the greatest reductions in nitrate loss compared to the other proposed Action Programme measures.

We are looking to the agricultural industry to identify and implement ways of tackling nitrate loss from arable land as a lack of improvement in water quality at the next Action Programme review could lead to the cover crops requirement being reconsidered as a measure.

The Department is currently exploring whether there is scope for introducing a new management option within the Entry Level Stewardship for a temporary vegetative cover (such as a cover crop) to reduce soil erosion and run-off. Depending on uptake, this could contribute to the improvements in water quality that we desire and will help inform policy decisions about a rule on cover crops in any future Action Programme.

Closed periods for manufactured fertiliser

Recommendation 11

Defra should reconsider the practicality of the prohibition on applying nitrogen fertiliser if heavy rain is forecast within 48 hours. However, it should liaise with the Met Office to evaluate the practicality of having incorporated into the weather forecasts that are provided to the farming media information to guide farmers on the optimum periods when it would be safe to apply fertilisers. (Paragraph 62)

Government response

We have reconsidered the practicalities of enforcing this prohibition and intend to remove it from the revised Action Programme. We will continue to encourage farmers to consider weather conditions before making applications of fertiliser and we can look to working with the MET office to identify ways of using technology to disseminate relevant forecast information to farmers.

Closed periods for organic manure

Recommendation 12

We welcome Defra's open-minded approach to the closed periods for the spreading of organic manure and recommend that it publish a short cost-benefit analysis of its proposals to establish whether the new closed periods would be disproportionately costly to the farming industry. If Defra decides to proceed with the changes to the closed periods, it should get the best possible advice on the potential for building flexibility into the requirements. (Paragraph 66)

Government response

We remain convinced that the evidence published alongside the consultation relating to the closed periods is robust and therefore we do not intend to shorten the proposed closed period or amend its scope. For example, the published evidence clearly demonstrates that:

- the closed periods in the current Action Programme were relatively effective at tackling nitrate loss, but only applied in relation to small areas of the country and therefore had little overall impact on water quality;
- the closed period should be extended to all soil types because, although nitrate leaching from sandy soils is greater than from clay soils, nitrate losses from clay soils do occur in the autumn and winter;
- The risk of nitrate leaching persists for more months than previously thought.

At the request of the European Commission we will be undertaking further research regarding leaching losses of nitrogen from applications of organic manure made during January. This will be used to inform the next review of the Action Programme, including whether the closed period should be extended to include the whole of this month.

An updated Impact Assessment will be published alongside the Regulations and will include a cost-benefit analysis.

In response to comments from stakeholders regarding the need for clarity and simplicity we intend to remove the higher rainfall band and align the end dates of the closed periods according to soil type. We also intend to introduce a new exemption which will enable registered organic producers to spread a limited amount of organic manure during the closed periods if there is a demonstrable crop nitrogen requirement.

12. Provisions for the storage of livestock manure

Recommendation 13

We agree with Defra that the storage calculation methodology is important in that it enables farmers to work out 22 or 26 weeks' capacity according to the circumstances on their own farms. Defra must address its own criticism: namely, that the calculation methodology may not have been fully taken on board by farmers. It must outline the information programme it proposes to adopt to deal with this issue. (Paragraph 70)

Government response

We recognise the importance of clear and practical guidance and to this end have been working with stakeholders to develop material to support the Action Programme. One of the guidance booklets will explain in detail (with worked examples, templates etc.) how the storage capacity requirement should be calculated.

Further support will be provided through an extensive advice delivery programme, including workshops and demonstrations.

Recommendation 14

We recommend that Defra recognise farmers' concerns about the relationship between the storage capacity requirements and the length of the closed periods. Defra should re-evaluate and publish the evidence for relating storage requirements to a fixed period of 22 or 26 weeks, rather than the closed periods that apply on individual farms. Consideration should be given to relating storage requirements directly to the closed periods that apply on individual farms. (Paragraph 71)

Government response

Having sufficient storage capacity enables farmers to choose when and how much manure to spread (i.e. when conditions are right; to make best use of the nutrients). Storage capacity must be longer than the closed period to avoid a situation where, come the end of the closed period, the store is close to full and therefore the farmer is forced to spread irrespective of soil and weather conditions.

We consider the storage capacity requirement of 6 months for pig slurry and poultry manure, and 5 months for cattle slurry to be most appropriate for conditions in England.

It is not our intention to require farmers to construct manure storage facilities of a greater capacity than they could possibly need. The exemptions and calculation process proposed in the consultation was designed with this in mind and guidance and advice is being developed to ensure that farmers fully understand the calculation process, are able to assess how much storage they need on their farm, and how to make the most of existing storage facilities.

Comments raised during the consultation highlighted the calculation process did not take account of the fact that some farmers are able to spread manure (outside the closed period) on their farm without increasing the risk of runoff, and therefore potentially do not need such large amounts of storage.

We are therefore adding a refinement to the storage requirement calculation to allow farmers to take account of the amount of manure that can be spread to "low risk run-off land".

Recommendation 15

In the light of criticism from both the NFU and the Environment Agency, we urge Defra to reconsider the necessity for the longer storage times it proposes for pig slurry and poultry manure. (Paragraph 72)

Government response

Please see response to recommendation 14. To note that the requirements we are proposing will bring implementation of the Directive in England in line with other Member States with similar conditions.

Recommendation 16

Given the need to arrange finance, obtain planning permission, and commission and construct slurry stores, two years is an unrealistically short time in which to expect farmers to comply with the new storage measures. We recommend that they be given four years. (Paragraph 74)

Government response

We have taken on board comments made by stakeholders regarding the insufficiency of a two year transitional period and are therefore increasing this to three years.

Anaerobic digestion

Recommendation 17

We welcome Defra's commitment to anaerobic digestion, but we caution against portraying it as something that will help farmers to comply with the Action Programme until such time as it can be demonstrated precisely how it is helpful in this context. We recommend that Defra prioritise its consideration of the role anaerobic digestion could play in helping farmers to manage the storage of manure under the Action Programme and make its conclusions public before the statutory instrument implementing the changes comes into force, so that farmers can make an informed decision. (Paragraph 78)

Government response

The Government is keen to promote uptake of anaerobic digestion as it considers it could help address wider environmental challenges, such as climate change and the need to develop renewable sources of energy, and provide an opportunity for the UK agricultural sector to make a positive environmental contribution and generate additional income.

Whilst we recognise that anaerobic digestion will not be an appropriate solution in all cases, we would encourage farmers to consider how innovative solutions and technologies, such as anaerobic digestion, could help them comply with the storage requirement and other measures.

Financial support and advice

Recommendation 18

The proposed new Action Programme places a considerable financial burden on livestock and dairy farmers at a time when their ability to absorb these costs is questionable, given high feed prices and the phasing out of the Agricultural Buildings Allowance. We regret that Defra is not in a position to provide the kind of financial support offered under the Farm Waste Grants Scheme and recommend that it make representations to the Treasury on the need for financial support in the form of enhanced tax allowances for the construction of slurry storage facilities. (Paragraph 83)

Government response

We recognise there are significant costs attached to constructing manure storage facilities.

There are a number of potential existing sources of financial support available to farmers which could help with implementation of the Action Programme. For example, the England Catchment Sensitive Farming Delivery Initiative is providing grant for farmers with land in a priority catchment for a range of capital items including roofs for slurry stores and for improving yard drainage (clean and foul water separation). There have been two rounds of applications for these grants since April 2007 and subject to funding being available we expect there will be further rounds.

Funds are also available under the Rural Development Programme for England (RDPE), which is being administered by the Regional Development Agencies. These are available via on-farm capital investments for modernising farm holdings, structures and equipment in a manner that will improve the management of nutrients and support the adoption of measures that reduce nitrate leaching. For example, Yorkshire Forward has set up a Farm Resource Efficiency Programme which will provide grant for capital items such as slurry separators and nutrient testing kits.

Treasury has confirmed that slurry storage facilities are eligible for plant and machinery allowances such as the new Annual Investment Allowance, capped at £50,000 per year, included in this year's Finance Bill. Slurry pits also qualify for allowances in their own right under the Capital Allowances Act 2001.

Recommendation 19

We urge Defra to adopt a pro-active approach to explaining the changes to the Action Programme by circulating written guidance that is as simple and concise as possible, providing workshops and seminars, and offering farmers the chance to obtain one-to-one advice. It should also provide an online advice service for farmers affected by the changes. (Paragraph 84)

Government response

We are looking to work with stakeholders and industry to design a package of advice and support that will be of greatest practical value to farmers. The programme will be rolled out in the autumn and is likely to include:

- Guidance booklets for farmers providing information on the rules and the calculation methodologies
- A mass mail out of key information
- A technical helpline
- Workshops / demonstrations

Record keeping

Recommendation 20

Adequate records should be kept to enable the Environment Agency to assess whether the provisions in the final version of the Action Programme are being complied with. However, the record-keeping requirements should be as straightforward as possible to avoid placing an unnecessary burden on farmers. They should comply with best practice, as set out by the Better Regulation Executive in its five principles of good regulation, which state that any regulation should be transparent, accountable, proportionate, consistent and targeted. (Paragraph 87)

Government response

We have tried to keep the record-keeping requirements to a minimum when developing the proposals. It is difficult to simplify the proposed record-keeping requirements any further because the basis for enforcement of the Action Programme is predominantly through the inspection of farm records.

We intend to use guidance to highlight that farmers can continue to use existing record-keeping systems provided they are adapted to cover the necessary information. We will provide templates for record-keeping which can be used, for example, by those farmers who do not have existing records, and we are currently developing software to assist with the various calculations. We also intend to make it clearer under what circumstances the different record-keeping obligations apply.

Department for Environment, Food and Rural Affairs

July 2008