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# Government Response to Stakeholders' Views on the Consultation on Implementing the Nitrates Directive

**August 2012**

defra
Department for Environment
Food and Rural Affairs

This document is also available on our website at:

http://www.defra.gov.uk/consult/2011/12/20/nitrates-directive/

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# Introduction

1. The 1991 EU Nitrates Directive (Council Directive 91/676/EEC) was adopted with the purpose of reducing the amount of nitrate pollution caused by agriculture. It requires us to designate land draining to polluted water as Nitrate Vulnerable Zones (NVZs) (or to designate all of England), and then to set out certain farming practices that farmers within those NVZs must comply with (known as the "action programme"). We must review both our designations and action programme every four years, and revise them as necessary in the light of the evidence thrown up by the review.

2. Over the last 18 months Defra has been carrying out this four-yearly review. New regulations are planned to come into effect from 1 January 2013. As part of this work the Government set out its proposals in a consultation document [1] issued in December 2011, and also published a number of supporting scientific papers. The consultation closed on 16 March 2012. We received 50 responses from farming organisations and companies, water companies, environmental NGOs, local authorities, government agencies and individuals.

3. The Government considers that since water quality in England was improving, and key elements of the existing action programme have only just come into effect (and we therefore hadn't seen the benefit of them yet), any changes to the action programme should only be where the evidence clearly showed they were necessary.

4. The Government has also been pressing ahead to implement many of the recommendations of the Task Force on Farming Regulation. The Task Force made a number of recommendations on implementation of the Nitrates Directive.

5. This document sets out the Government's conclusions in the light of the views respondents expressed on the consultation proposals, the European Commission's close interest in our implementation, the Government's commitment to implement as many of the Task Force's recommendations as possible and the need for policy to be based on sound scientific evidence.

6. The issues are set out in the order in which they appeared in the consultation document.

7. A summary of the consultation responses is available at: http://www.defra.gov.uk/consult/2011/12/20/nitrates-directive/

[1] The Protection of Waters against Pollution from Agriculture – Consultation on Implementation of the Nitrates Directive in England 2013-2016 (December 2011). PB13679

# GOVERNMENT RESPONSE TO STAKEHOLDERS' VIEWS

## Q1 Designation of land

8. In the consultation, we ask whether we should apply the Action Programme measures within discrete Nitrate Vulnerable Zones (NVZs) or throughout the whole of England. Overall, 40 respondents answered this question with 78% in favour of continuing the discrete NVZ approach. This clear majority included both farmers and water companies. The respondents supporting the designation of the whole England were generally organisations with ecological or environmental interests. Water companies' views varied, with the majority preferring a risk-based approach to improving water quality (and so preferring discrete NVZs) and while others opted for greater protection of drinking water sources.

9. The principal reason given for continuing with discrete NVZs was that designation should be based on science and in particular the level of nitrate pollution in each water body. This approach also provided the possibility of removing land from designation at some point in the future, and this was viewed as an important incentive for the farming community. These consultees felt that designating the whole of England would be an indiscriminate approach and would impose nitrate controls on areas that didn't need them.

10. The main view expressed in favour of the whole England approach was that it would enable nitrates to be considered as part of a wider, more integrated approach to improving the sustainability of agriculture and managing nitrate pollution on a catchment basis. In time, this could mean greater flexibility within the action programme to respond to risks and objectives at the catchment level, and allow for closer integration with Water Framework Directive objectives.

11. There is merit on both sides of the argument. Designating the whole of England would remove what is regarded by a significant number of farmers as a competitive inequity. It would also provide an underpinning baseline of good practice to support the catchment-based approach, our headline water quality policy. In particular, the same measures that reduce nitrate pollution also make significant contributions to addressing phosphate, and sediment pollution of water, as well as reducing ammonia and greenhouse gas losses to air. These challenges are not confined to NVZ areas. It is also important for the success of the catchment-based approach that we inspire the necessary confidence in all stakeholders that their resources and efforts will produce positive gains in water quality, not simply compensate for others' pollution.

12. On the other hand, the fact that nitrate pollution has reduced since the last assessment made the argument that we should not be increasing the area of NVZ when the problem area is demonstrably shrinking (albeit marginally) a powerful one. The impact assessment that accompanied our consultation estimated the capital cost of an all England

designation at (worst case) £170 million. This reflected costs to farmers of increases in slurry storage capacity that would be needed by those currently outside NVZs. There would also be benefits from reduced nitrate, ammonia and greenhouse gas emissions. The cost: benefit ratio over 5 years was estimated to be just over 3, i.e. costs were 3 times the value of benefits. (However, note that these estimates did not include non-nitrogen benefits, such as from reduced phosphate and sediment pollution).

13. On balance, whilst it is foreseeable that evidence on pollution from slurry, and a fuller analysis of benefits, will in future show we need to address slurry issues outside of NVZs, it seems reasonable at present not to do this through a nitrates-driven measure (designating all of England) when the evidence on nitrate levels does not sustain this. Therefore, **the Government intends to continue with discrete NVZ designations**. We have used extensive monitoring, and analysis of the data according to a method agreed with experts in the field and with industry stakeholders, to determine where such zones should be established. The zones can be viewed on the Environment Agency website[2].

## Q2 Appeals against designation

14. If owners or occupiers disagree with the Secretary of State's proposal to designate their land as NVZ they will have a right to appeal against that proposal to the First-tier Tribunal. We set out in the consultation document how we expected the appeals process to work and asked for comments. A clear majority of the 27 respondents agreed that the procedure described was suitable. The views expressed have helped us in developing clear guidance and procedures.

## Q3 Contribution of all organic materials to Nmax

15. We received 35 responses to our proposal to require the nitrogen in all organic materials to be included in calculations of compliance with Nmax values. 30 responses were in favour, and 5 against the proposal.

16. Most respondents (including both farming organisations and water companies) simply concluded that it was necessary to take account of all of the nitrogen being applied to land to be able to properly manage the risk to the environment, and that this change would provide a driver to increase the efficiency of nitrogen use. Amongst the arguments made against this proposal, some stated that it was important to consider the crop available nitrogen in a material as opposed its total nitrogen, for example in green compost. However, others included compost as an example of a material whose nitrogen was not being counted and should be.

17. For the reasons set out in the consultation document, principally that including these materials in the calculation of compliance will reduce the risk of pollution without any adverse effect on crop production, the **Government intends to implement its proposal**.

[2] http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=_e

18. The new rule will say that an occupier must ensure that the total amount of nitrogen from manufactured and organic fertiliser must not exceed the amounts set out in the Regulations where farmers are growing the specified crops. To calculate the nitrogen contained in these materials, farmers will be expected to use the results of technical analyses carried out by suppliers on their products (for example, on sewage sludge or compost) or other accredited values of nitrogen content, such as those set out in the Fertiliser Manual RB209.

19. This provision will come into effect on 1 January 2014.

Other changes to Nmax

20. In response to the consultation we received two requests to increase Nmax when grass is grown for the production of chlorophyll or high protein content. We have carefully reviewed the scientific evidence supporting these requests and conclude that with the systems of production used the rates of nitrate application are justified by crop need, and do not pose a significant risk of nitrate pollution. **The Government therefore intends to increase Nmax when grass is grown for these purposes, conditional on the advice of a FACTS [3]-qualified advisor**.

# Q4 Livestock manure N efficiency values

21. In the consultation we proposed increasing the manure N efficiency values for both cattle and pig slurry. We received 31 responses on this suggestion, of which 20 were in favour and 11 against.

22. Our proposal was based on the evidence of research showing that good farming practice is already able to deliver these levels of efficiency. Making this change would serve two purposes. First, it would ensure that those who already meet good practice standards were not over-applying nitrogen when spreading slurry, and it would therefore reduce the risk of nitrate leaching to water. Second, it would provide an incentive to those who do not yet meet good practice standards to do so, so that they can maximise their crop yields and the efficiency of their nutrient applications. Extracting the greatest nutrient value possible out of manures is an important mechanism in sustainably increasing agricultural productivity in England.

23. Those in favour of this proposal (including Agricultural Industries Confederation, (WCL) & Countryside Link and water companies) agreed that it would promote best practice in handling slurries, both in efficient use of the nitrate they contain and in the timing of application. Several respondents stated that the evidence base needed to be robust.

[3] Fertiliser Advisers Certification and Training Scheme

24. Some concerns were also raised (for example by Tenant Farmers Association (TFA), Country Land & Business Association (CLA)). The two most frequently expressed were (a) that another change so soon after the change that came into effect on 1 January 2012 would cause confusion, and (b) that farmers would need a bit more time than proposed to adjust to the new figures: the most frequently suggested date was 1 January 2014.

25. In light of the evidence available (which the Government believes is robust) and the responses it has received, the **Government intends to implement this proposal**. However, the Government recognises the concerns raised by those arguing against the proposal and agrees that it is important both to avoid confusion and to allow a sufficient period for farmers to adjust to the new values. **The new values will therefore come into effect from 1 January 2014**.

## Q5&6 Use of compost

26. At present, the rules prevent the application of more than 250Kg of total organic manure[4] N per ha per year to any given hectare of land. This is built on the generally valid assumption that organic manures have significant levels of readily available N and for the most part farmers can live within the rule with few problems. However, compost, while containing significant quantities of total N, has very low levels of readily available N. It therefore poses a very low risk of releasing its N at a faster rate than established crops, such as apple orchards, can use it.

27. The proposal to allow greater quantities of compost, up to 1000 Kg N/ha every four years used as a mulch, received 19 responses, with 14 in favour and 5 against.

28. The great majority of respondents supported the proposal. Some were concerned that the permissible quantity should be reduced. However, because the nitrogen in compost mineralises over a number of years, the release of nitrate is expected to occur at a rate at which the crops can use it, and therefore represents a small and acceptable risk of leaching.

[4] In the Regulations “organic manure” includes any nitrogen fertiliser derived from animal, plant or human sources, even where they do not, in fact, contain any manure.

29. The Government **therefore intends to implement this proposal**. In addition, although the consultation suggested that only green compost (i.e. excluding compost containing food waste) would benefit from this idea, we have considered the evidence further. We now intend to include both green and green/food waste composts within this rule. The Government will include rules in the revised Nitrates Regulations to implement the following policy:

- It will be allowable to apply up to 1000 Kg N/ha as compost every four years to top fruit orchards (apples, pears, plums, cherries etc).
- All the compost may be applied in one year, or it may be applied over the course of several years, but the total quantity applied must not exceed 1000 Kg N/ha in any four year period.
- Compost must be applied as a mulch.
- Compost may be green only compost, or green/food waste compost, but it will not be allowed to contain any animal manure.
- Compost must meet the PAS 100 standard.
- Because the PAS 100 standard allows the inclusion of animal manure, users will in addition need to get written assurance from the producer that it does not contain any manure.

30. We also consulted on the idea of applying 500Kg N as compost every two years, which could be worked into the soil if desired. This proposal also received support and will also be implemented. The policy will be the same as set out immediately above with two changes:

- It will be allowable to apply up to 500 Kg N/ha as compost every two years.
- Compost may be worked into the soil.

31. It should be noted that these rules count towards the 250Kg N/ha/year organic manure limit. So a person who applied 1,000Kg N as compost on their fruit orchard in year 1 would not be able to apply any further organic fertiliser of any sort until year 5.

These provisions are planned to come into effect from 1 January 2013.

## Q7 Renewal of the grassland derogation

32. We asked whether the Government should seek to renew the grassland derogation, which currently benefits about 400 dairy farmers each year. Opinion was divided, though the majority, 18 responses of the 27 we received, urged the Government to do so.

33. Those in favour (for example, Dairy UK, NFU) argued that the derogation offered farmers essential flexibility to adopt the business model that best suited their circumstances, and was important to some of the most efficient dairy farms in the country.

34. Environmental NGOs and some water companies argued that the risks associated with the higher rate of manure inputs on derogated grassland farms were too great. The National Trust stated that the derogation was conceived as a transitional measure to allow farmers to learn to live within the 170Kg N/ha/year limit.

35. The Government still considers that the evidence shows that the higher level of manure application allowed under the grassland derogation is justified by the demand of the growing grass for nitrogen. It must be remembered that the derogation does not allow farmers to spread any more nitrogen in total on the land – its effect is merely to allow a greater proportion of the nitrogen to come from manures. The Government considers this is consistent with good environmental practice and delivering its policy of sustainable intensification.

36. Ministers have therefore now instructed officials, to **seek a renewal of the derogation** under the same terms as the existing Commission Decision.

## Q8 Closed periods

37. The consultation set out several options on closed periods:

- No change
- An increase of 2 weeks for heavier land (to 3 ½ months)
- An increase of 1 month for heavier land (to 4 months)

38. The options were focused on changes to the closed period for heavier land because the evidence presented with the consultation showed that nitrate leaching from this type of land continued beyond the end of the existing closed period. On sandy and shallow soils, by contrast, nitrate leaching was very small by the end of December (the end of the closed period for this type of soil).

39. The majority of respondents (23 out of 37), including almost all farming interests, favoured no change to the existing closed periods. 11 responses favoured extending the closed period on heavier soils by 2 weeks. A fairly wide range of reasons was given but several were put forward in many responses.

40. First, people argued that the existing closed periods should be given a chance to take effect before we consider extending them further. Second, there was a great deal of concern expressed about an extension of closed periods restricting farmers' operational flexibility. Third (and related to the second point), an extension would reduce the slurry storage buffer built in to carry farms through periods when conditions were not right for spreading. Fourth, there was a trade-off to be made between reducing nitrate leaching

and preventing other pollution (such as ammonia emissions) from increasing as a result of spreading in warmer weather. Fifth, any change could cause confusion and impose further costs on farmers only 4 years after the previous increase in storage capacity.

41. Those whose concern was primarily environmental protection considered the evidence showed that longer closed periods would have a greater beneficial effect on nitrate pollution and opted for an extension of a month.

42. These points were well made and valid. The arguments about introducing a further change before the previous one has had a chance to have effect, and the potentially significant additional costs of building further storage capacity so soon after those resulting from the changes brought in by the 2008 regulations are especially significant. From our own analysis of the evidence we conclude that there is a clear risk of nitrate leaching on heavier soils in the period just after the end of the current closed period. Taking this, as well as the points made by stakeholders and the interest that the European Commission takes in this area, into account there is a case to be made for a modest extension of two weeks to the closed period. Although this will reduce the available slurry storage buffer capacity, it will still leave grassland farms with 6 weeks of spare capacity in an average year. Clearly this increases the risk that prolonged wet conditions immediately after the closed period would lead farmers to spread in conditions that are prohibited by the Regulations, but we conclude this compromise strikes the right balance between the different considerations for the average winter.

43. We also recognise, however, that not all years are average. A warm start to the year can prompt early development of winter crops[5] and increase nitrogen demand. The need to fertilise such crops in some years is already recognised in the rules and reflected in Schedule 3. In addition, the extension of the closed period applies to organic manures only – it will be possible to apply manufactured fertiliser when there is a crop demand for it and conditions are suitable.

44. **The Government therefore intends to extend the closed period by two weeks to 31 January for soils other than sandy or shallow soils. However, farmers will be able to apply manufactured fertilisers during this period, when appropriate**.

45. The new rule will apply from 15 October 2013 for 2009 designations, and 15 October 2015 for 2013 designations.

[5] For example: oilseed rape, asparagus, brassicas

# Q9 Rainfall banding

46. As a result of regular calls for a more tailored approach to setting the start and end of closed periods by taking rainfall into account, we suggested a way of doing this, proposing that the end of the closed period for sandy and shallow soils in drier areas might be brought forward.

47. There was again a wide range of views on this proposal. Some (for example National Farmers Union (NFU), National Pig Association (NPA), Dorset CC) supported the proposal as a step in the right direction, while others were concerned at the likely complexity and difficulty of administering the resulting system (for example WCL, Promar, Agriculture and Horticulture Development Board (AHDB)). The most prevalent view (for example CLA, AHDB, Dairy UK, Natural England, National Trust) was that while rainfall was a key element in any mechanism to tailor closed periods to leaching risk, further work needed to be done to get the right results. For example, soil temperature needed to be taken into account if we weren't to produce anomalies such as assuming a later start to the growing season in the south west of the country than the north east.

48. We note that where rainfall is highest its diluting effect often puts that land outside NVZs (meaning no closed periods apply), so some account of rainfall is naturally built into the system we have. Taking this into account, we conclude that the further tailoring of closed periods needs more investigation and development before we can implement a system that significantly improves our understanding of the relationship between when manure may be spread and the risk of nitrate leaching to the environment. We would want to investigate in more depth the interrelationships between rainfall, soil moisture deficit, and soil temperature and type. With this number of possible factors to be taken into account there is clearly a significant challenge to develop an approach that fulfils both the desire to adopt an approach that takes account of the variation in weather year to year on the one hand, and on the other provides a clear and easily understood outcome for farmers.

49. **The Government does not therefore intend to adopt this proposal to differentiate closed periods on the basis of rainfall at this stage**.

50. However, **the Government wishes to work with industry to test whether a more flexible way of setting closed periods is possible**. Any system would need to be clear and unambiguous to farmers, enforceable, deliverable at reasonable cost and, importantly, be consistent with the scientific evidence. If such a system were possible, we would intend to implement it in the next action programme.

# Q10 Limiting slurry spreading after the closed period

51. The current rules limit slurry spreading to 50m$^3$ per hectare at a time, with no repeat spreading within 3 weeks, between the end of the closed period and the beginning of March. We proposed reducing this quantity to 30m$^3$ as a means of managing the risk of leaching immediately after the closed period when the soil moisture deficit remains small. We suggested that this approach might be implemented as an alternative to extending

closed periods. We also asked whether, if adopted, a reduction to 30m$^3$ per hectare was about right.

52. Respondents' views were again mixed. Most (25 out of 30, including CLA, NFU) agreed that this was a better means of managing leaching than extending the closed period. A significant number of these made their support conditional on avoiding an extension of closed periods. However, a number expressed concerns about the extra pressure this would put on storage capacity. We believe that this concern is unfounded. The AHDB stated in its response that 30m$^3$ per hectare is about the rate at which slurry is spread during the period in question in any case. It is also consistent with Dairy UK's advice that slurry should be spread little and often. Moreover, we calculate that at this rate, slurry will be spread faster than it is produced. It may therefore take longer to completely empty a store, but it should not place extra stress on storage capacity. Apart from the CLA which proposed 40m$^3$, respondents made no suggestions to adopt a different volume.

53. Clearly this option was originally conceived as an alternative to extending closed periods. However, although we have decided to extend closed periods by 2 weeks, we also consider that aligning the post closed period spreading rate with existing on-farm practice is sensible. Having a limit that is significantly greater than current practice may inadvertently encourage some to apply more slurry than is needed. Based on the feedback we have had, we believe that in most cases this reduction will have little impact. Where this causes farmers to reduce their rate of spreading, this will act as an incentive to use precision spreading equipment to make the most of the nutrient content of the slurry being spread. **The government therefore intends to reduce the volume of slurry that can be spread in the weeks immediately after the end of the closed period to 30m$^3$ per hectare**.

54. We have considered whether there is a case to be made for enforcing this limitation for 6 weeks, as now, which (counting from the end of the extended closed period) would mean it would apply until the middle of March, or continue with it ending at the end of February. We conclude that we should maintain the existing end date. This provision will come into effect from 1 January 2014.

## Q11 Application of slurry near watercourses

55. The current rules prohibit slurry spreading within 10 metres of watercourses irrespective of the method of application. We proposed reducing this minimum distance to 6 metres when precision slurry spreaders are used. 36 respondents expressed views. Just over half (19) agreed with the proposals.

56. Most respondents (for and against) recognised the intended policy objective and the potential benefits as a good way to incentivise the take up of precision application. The farming industry (for example, TFA, Reading Agricultural Consultants, AHDB) generally supported the proposal, though AIC thought that there wasn't enough supporting evidence to justify it. A number of consultees pointed out that the proposal neatly complemented

the Entry Level Scheme 6m buffer strip option under Rural Development Programme for England.

57. Other respondents (for example, NE, water companies, NT) considered that reducing the margin next to watercourses posed unacceptable risks of nitrate pollution that would not be adequately managed by precision spreading. The risks varied, for example, with soil type, slope, rainfall and whether the buffer strip was bare earth or grass-covered, and a more sophisticated means of assessing risk might be more appropriate.

58. These risks were correctly identified. However, the existing rules prohibit spreading if there is a significant risk of nitrogen getting into surface water, and specifically cover all of the concerns expressed by respondents. We therefore conclude that even when using precision spreading techniques, farmers would still have to consider whether, taking into account the local conditions, there was a significant chance of nitrogen getting into surface water. If there was, they would not be able to spread. In line with the principles put forward by the Task Force on Farming Regulation, we must trust farmers to make these decisions honestly and competently according to local conditions. We do not therefore think there is a need to bring in additional controls to address these pollution risks.

59. The Government is keen to promote the adoption of precision application techniques. **It therefore intends to allow farmers to spread manures to within 6m of watercourses when using precision equipment.**

60. Some consultees pointed out that the definition of “precision techniques” and/or “precision equipment” would need to be clear. We agree. We will work with industry representatives to determine a suitable definition. In broad terms it will include band spreaders such as trailing hose and trailing shoe, and shallow injectors.

61. This measure is planned to come into force from 1 January 2013.

## Q12 Calculation of minimum slurry storage requirement

62. At present, we have two methods of calculating slurry storage volumes. All farmers building a store must use the calculation method set out in SSAFO. Farmers in NVZs must also calculate the volume according to the nitrates method, and build a store at least as big as the larger answer. (In practice, local conditions, (e.g. high annual rainfall) may indicate more than this statutory minimum volume of storage is needed). In the majority of cases the nitrates method gives the larger number, but this is not always the case.

63. Because we have been frequently told that one of the things people find most challenging about the Nitrates Regulations are the difficult calculations that need to be made, and the slurry storage volume calculation is regularly cited as one of those, we made a proposal to harmonise these calculations. This would have meant that farmers in 60% of the country would have had one less complex calculation to make. Some farmers inside NVZs would have required a slightly reduced storage volume as a result, and a majority of those outside would have required a slightly larger volume.

64. Numerically, there were slightly more responses in favour of the proposal (16) than against (13). Some representative farmers' organisations (for example the NFU, Dairy UK and the TFA) opposed the measure, arguing that in comparison with the cost of increasing storage the calculations were a minor inconvenience (Dairy UK), or that increasing the costs placed on farmers should be avoided (the NFU). Others (for example the CLA, and some farming businesses and consultancies) were supportive, seeing the scope to implement the proposal at modest extra cost with suitable transitional provisions (CLA – see also the related Q17).

65. Water companies, environmental NGOs and local authorities also supported the proposal.

66. Following feedback from the consultation, we intend to carry out a broader review of the SSAFO Regulations than we set out in the consultation document. We intend to revisit this question as part of that work. **The Government therefore intends to make no change to the calculation provisions at the present time**.

## Q13 Storage of solid livestock manures in field heaps

67. We proposed that we should make no changes to the storage of solid manure (or farmyard manure (FYM)) in field heaps, and we based this proposal on scientific evidence and the precautions that we already take to avoid pollution, for example by requiring field heaps to be sited away from drains and to be moved regularly.

68. There was strong support for this position, including from 13 environmental NGOs. **The Government therefore intends to leave the rules unchanged on the siting of field heaps unchanged**.

69. However, on further consideration of the guidance available on the construction of field heaps, we consider it would be helpful to make some additions to the guidance. **The Government therefore intends to expand the existing guidance on the construction of field heaps** to ensure that the risk they pose to the environment is minimised. We will make it clear that

- The surface area of field heaps should be as small as possible, so that the leaching effect of rain will be kept to a minimum;
- Heaps should not be constructed on steeply sloping land. This land is identified in the risk map as having a slope of 12° or more;
- Topsoil should not be removed from the ground on which a field heap is to be constructed;
- Heaps should not be constructed within 30m of a watercourse.

# Q14&15 Nutrient Management Planning & Record-keeping

70. A long-standing complaint about the Nitrates Regulations is that the level of prescription is too great. Farmers wish to be able to choose for themselves how to comply with the rules. With this in mind, the Government consulted on reducing the prescription on record-keeping that is currently included in a number of Regulations in the 2008 Nitrates Regulations.

71. Many respondents emphasised that it was very important for it to be clear what farmers needed to do to comply with the law. It is equally important for us to be able to enforce the rules effectively, both to ensure farmers are competing on the same terms and to show the European Commission that the Directive is properly implemented.

72. We have considered several alternatives to the existing rules, but have concluded that the existing rules require very little more than is required for enforcement agencies to check compliance. If we reduced the record-keeping requirement we would need to have a stronger physical presence on farms to be sure compliance was at high enough levels. This would be a greater burden on both farmers and the enforcement agencies. So while we will keep the paperwork burden to the absolute minimum in the revised regulations, the **Government is not able to significantly reduce the record-keeping requirements**.

73. We recognise, however, that that guidance to the current Regulations is not as clear as it could be. As it is what most farmers refer to, **the Government proposes to review and rewrite the guidance, with industry help**. We will make very clear what are regulatory requirements and what is good practice that goes beyond the requirements. As now, the guidance would walk people through the necessary calculations (for example on slurry storage) for the benefit of those who would find this useful.

74. An important aim of the consultation was to gather ideas about how we might reduce the burden of paperwork involved in complying with the Nitrates Regulations both generally and for specific groups of people. There was a great deal of support for relying on the checks carried out under farm assurance schemes to provide the necessary evidence of compliance with any record keeping rules, and therefore not require separate nitrates records to be kept. Unfortunately we received no specific suggestions about which schemes might provide that assurance.

75. We also invited comments on the idea that those who completed a nutrient management plan using PLANET, Tried & Tested or another appropriate tool should be recognised for that good practice by being given a reduced likelihood of being inspected. The few comments we received on this question were in favour of it.

76. The water companies that responded gave a coordinated view that all farm records should be kept in a single form, from nutrient management to animal movements. We are concerned that such a form would be unmanageable. However, we take it that the spirit of the suggestion was to collect information once and use it many times. This is consistent with several suggestions (for example Thames Water, AHDB) that the various

enforcement agencies should share information and to avoid farmers needing to submit the same information to several agencies. This suggestion is beyond the scope of this review, but is being taken forward in the work to implement the Government's response to the recommendations of the Task Force on Farming Regulation, which will need to address any data protection issues it raises.

77. We also asked for suggestions about, and views on specific groups that might pose a sufficiently small risk to the environment as a result of their farming systems, and so exempt them from record-keeping requirements. We suggested that small farms might be exempted from record keeping on the basis that the burden this imposed was disproportionate to the risk they presented to the environment. There was no sympathy for this suggestion, with organisations as diverse as NFU, Dairy UK, water companies and NE all arguing against it.

78. The second category was to develop a concept of low intensity farming. We suggested that we might exempt from record-keeping farmers who applied nitrate at a rate less than 50% of the maximum allowable for the crop. There was significant support for this idea, which we further developed at a workshop with a number of stakeholders shortly after the end of the consultation period**. The Government now intends to introduce exemptions from record-keeping for farmers who apply nitrate at low intensity**. We are considering how to define "low intensity". Because it will be livestock farmers who will be in a position to benefit, we are currently considering the following:

- Exemption to apply to farms with >80% grassland, and
- Overall livestock manure N loading to be <100Kg/ha, and
- Manufactured N applications <90Kg/ha.

79. Each of these three conditions would need to be met for a holding to be considered "low intensity". We will also need to ensure that while the farm average might meet these conditions we do not inadvertently allow a minority of fields to be intensively fertilised. When a holding met the conditions, detailed field level records of fertiliser applications (as set out in current Regulation 42) would not be required. A farmer wishing to benefit from the exemption would need to be able to show that the exemption applied (by recording the appropriate information). We are considering the detail of the implementation, but it seems logical that those with an exemption would also need to be exempted from Regulation 13, which limits manure application to 250Kg N for any given hectare. Given the low scarcity of manure on these farms it seems unlikely that people would want to spread in excess of this rate of application, but we will keep the practical operation of the rule under review.

80. **We also intend to reduce the priority for inspection for those farmers who complete and implement a full nutrient management plan**. We are considering how to implement this intention efficiently, but we do not consider that we would need legislation.

81. These provisions would apply from 1 January 2013.

# Q16 Use of cover crops in the Action Programme

82. The protection of groundwater, as the main source of drinking water in many parts of the country, is particularly important. That is why the Government consulted on the use of cover crops in 2007, and consulted again in 2011/12. We proposed that a cover crop should be required on sandy soils in areas designated as groundwater NVZs, where the ground would otherwise be left bare over winter. We presented evidence that used in this way cover crops were cheap, compared with other measures, and highly effective.

83. Thirty-two respondents gave their views on this question. Almost two-thirds (20) of respondents disagreed with the proposal. All sectors, including water companies, environmental and farming sectors, expressed concerns.

84. It was accepted by some that all farmers should use cover crops as part of good practice but it was thought that making it mandatory would bring additional problems for farmers, for example in dealing with certain types of weed. There was a strongly held view that the implementation of this proposal would be disproportionate in terms of cost/benefit. It might also be detrimental to an important wildlife habitat (stubbles) and could have an adverse impact on farmland bird populations overwinter.

85. It was pointed out that there was an existing range of Environmental Stewardship options that included the use of cover crops. Respondents thought that their use on a site-by-site voluntary basis through Environmental Stewardship was the better way to protect groundwater, though we note that this is already an option and there has been very little take up.

86. Research currently underway (and due to report this year) is also relevant here. The emerging findings suggest it will be possible to manage stubble to provide greater foraging value to farmland birds by sowing a balanced seed mixture. These plants could also function as a cover crop by capturing nitrate, providing a double benefit.

87. The Government considers that cover crops are fairly cheap to implement and can be very effective when use appropriately. They should therefore be one of the measures used to tackle diffuse pollution. The Government would like to see a significantly increased use of cover crops but considers that a measure targeted at only part of the country could not produce the national uptake that it would like to see – a nationally applicable policy instrument would be a better way to achieve its objective. **The Government does not therefore intend to include a cover crops requirement in the action programme**.

# SILAGE, SLURRY AND AGRICULTURAL FUEL OILS

## Q17 Regulation 6 exemption

88. The SSAFO[6] For example: oilseed rape, asparagus, brassicas Regulations require new stores for silage, slurry, and agricultural fuel oil to be built to a certain minimum standard and, in the case of slurry stores, to be sufficiently large to contain 4 months' worth of slurry. They are intended to protect both the safety of farm workers and the environment. The regulations include (regulation 6) an exemption from these requirements for stores built or planned before 31 March 1991.

89. We proposed removing this exemption, arguing that 20 years after the rules first came into force, the public and farm workers had a right to expect all stores to meet the standards set out in the Regulations. Several of the main farming organisations (for example NFU, NPA) strongly disagreed, but others (CLA, Dairy UK) were more positive. Other stakeholders held a range of views, both for and against.

90. Those arguing against the proposal were very concerned about the cost of removing the exemption, and thought that there was little evidence that inadequate slurry stores, in particular, were the cause of observed pollution. The NFU also pointed out that the SSAFO regulations give the authorities the power to require improvements to be made to storage facilities where necessary by issuing notices. Local authorities and individual farmers also took this view. Some who disagreed did so on the understanding that the proposal would require the replacement of sound storage facilities, though this was not the intention of the proposal.

91. Those in favour offered support for the proposal on the condition that a suitable transitional period was set to allow farmers to adjust (the end of the second cycle of river basin management plans, 2021, (CLA)). It was recognised that the existing rules now created a perverse incentive not to renew stores when needed that ought to be addressed (Dairy UK). Environmental NGOs also considered that 20 years was a sufficient time for all farms to have adopted the SSAFO standard and wanted to see it fully implemented everywhere.

92. The Government has considered these strongly held and divergent views very carefully. Good arguments have been made both for and against this proposal. Given the range of significant challenges we face in further cleaning up our freshwaters and the need to do that as cost-effectively as possible, the Government considers that we need further evidence before taking further action on this proposal. Taking into account the fact that the SSAFO Regulations have now been in place for over 20 years, **the Government therefore intends to carry out a full review of the regulations to determine what changes to the rules may need to be made**. This will also enable us to consider several suggested improvements put forward by the industry that we did not consult on.

[6] The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (SI 2010/639).

93. We will carry out the review as part of a more wide-ranging piece of work to determine what water protection measures should be implemented on all farms (and what measures should be implemented by other means). We will work in collaboration with industry and other key stakeholders, and aim to complete the review by Easter 2013, with a view to bringing in any necessary changes as soon after that as reasonably practicable.

## Q18 Notification of a new store

94. The SSAFO Regulations (regulation 9) require farmers to notify the EA when they have built a new store or refurbished an old one. The rule's purpose is to give the EA a chance to inspect the store before it is used, ensure it is fit for purpose and, if necessary, set out what modifications would be required before use. This risks farmers having to make expensive changes to the fabric of a new store which, if spotted before construction had started, could have been avoided by altering the construction design or specification.

95. The vast majority of respondents supported the proposal to require farmers to notify the EA before irreversible decisions about site and construction method have been made. Some suggested that the EA, as a statutory consultee for the planning permission that all stores require, should address any issues through that route rather than have a separate rule in the SSAFO Regulations. In fact it is not the case that all stores require planning permission. **The Government therefore intends to implement this proposal**. Farmers will be required to send the EA certain details about the intended store, which the EA will then use to determine whether an inspection is required.

## Q19 Commencement Dates

96. Finally, we asked when any new measures should come into force. Respondents were keen to avoid confusion and further changes only shortly after those introduced by the 2008 Nitrates Regulations. We have taken these considerations into account in drawing our conclusions on start dates for the various provisions set out above.

# GLOSSARY OF ABBREVIATIONS

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| AIC | Agricultural Industries Confederation |
| AHDB | Agriculture and Horticulture Development Board |
| CLA | Country Land & Business Association |
| EA | Environment Agency |
| NE | Natural England |
| NFU | National Farmers' Union |
| NPA | National Pig Association |
| NT | National Trust |
| NVZ | Nitrate Vulnerable Zone |
| TFA | Tenant Farmers' Association |
| WCL | Wildlife and Countryside Link, responding on behalf of 13 environmental NGOs |
| SSAFO | The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) |