

Summary of Responses to the Consultation on Implementation of the Nitrates Directive in England 2013- 2016

August 2012

© Crown copyright 2012

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk

This document/publication is also available on our website at:
<http://www.defra.gov.uk/consult/2011/12/20/nitrates-directive/>

Any enquiries regarding this document/publication should be sent to us at:

Nitrates Team

Area 2B Ergon House

Horseferry Road

London

SW1P 2AL

Email: nitratesdirectiveteam@defra.gsi.gov.uk

Contents

Executive Summary	1
List of Tables.....	3
1. Introduction.....	4
2. Analysis of Respondents and Topic Areas	4
3. Analysis of responses.....	4
3.1 Targeted NVZs versus Whole England.....	5
3.2 Suitability of First- Tier Tribunal	6
3.3 Nmax limits	8
3.4 Proposed Changes to Nmax limits.....	9
3.5 Total N in a 2 year period	11
3.6 Total N in a 4 year period	12
3.7 Renewal of the Derogation	13
3.8 Closed periods.....	15
3.9 Closed period based on rainfall banding.....	16
3.10 Reduction in quantity of slurry	18
3.11 Proposals to reduce the Minimum distance for spreading slurry near watercourses.....	19
3.12 Proposed change to SSAFO calculation	20
3.13 Storage of livestock manure	22
3.14 Record-keeping	23
3.15 Low intensity farming.....	25
3.16 Cover Crops	26
3.17 Regulation 6 of SSAFO	27
3.18 Notification of construction of slurry store.....	29
3.19 Implementation of measures	30
Annex 1 Respondent type by occupation or organisation	32

Annex 2 Consultation Results Table33

Annex 3 Table- Organisation by Category35

Executive Summary

- This document summarises stakeholder responses to Defra's consultation on the implementation of the Nitrates Directive in England 2013-2016, which took place between 20 December 2011 and 16 March 2012. The consultation was published on 20 December 2012. A total of 50 different respondents submitted information associated with this consultation exercise. Around a fifth of the respondents were farmers, one fifth were farming representatives and sector representatives and one fifth were water bodies. The remainder were a mixture of other private organisations and private bodies. See annex 2 for a table of organisations by categories.
- The consultation sought comments in relation to 8 broad issues:
 - continuing with discrete designations of Nitrate Vulnerable Zones (NVZs) or the whole country;
 - the tribunal procedure;
 - proposed changes in Nmax limits,
 - renewal of the Derogation,
 - spreading rates and distances,
 - proposed changes to SSAFO calculation, exceptions and notices
 - record keeping,
 - closed periods,
- 40 responses covered the issue of discrete NVZs against the whole England approach, with 77.5% in favour of the discrete NVZ approach.
- 27 responses covered the issue of rules of the Tribunal Procedure, with 77.8% agreeing that the 2009 rules are suitable for appeals against designations of Nitrate Vulnerable Zones.
- 35 responses covered the issue of crop available nitrogen, with 85.7% agreeing that crop available nitrogen from all types of organic manures should count towards the Nmax limits.
- 31 responses covered the issue of the proposed changes to the livestock manure N efficiency standard, of these 64.5% were in favour of the proposed changes.
- 25 responses covered the issue of compost total N, with 60% agreeing that the limit of 500kg/ha of compost total N in any 2 year period is workable.

- There were 19 responses regarding the limit of 1000kg/ha of compost total N in a 4 year period when used as a mulch. 73.7% agreed that this limit is workable.
- There were 27 responses regarding the specific question of the Department renewing the Derogation, with 66.7% supporting the renewal of the Derogation.
- There were 37 responses regarding the preferred option for closed spreading periods, with 62.2% agreeing with option 1: retaining the closed spreading period as existing.
- There were 19 responses regarding the support of the above closed spreading based on rainfall banding, with 68.4% in disagreement.
- There were 30 responses regarding reducing the quantity of slurry that can be spread after a closed period. Of these 83.3% agreed that this was a better mechanism for managing nitrate leaching than extending the closed period.
- 36 responses covered the issue of reducing the minimum distance for spreading slurry near water courses if a precision spreader was used. Of these 52.8% agreed with the proposals.
- 29 responses covered the question on the proposed change to the SSAFO calculation, with 55.2% agreeing with the proposed change.
- There were 30 responses covering the storage of livestock manure, with 83.3% agreeing that it did not require amendments with respect to the storage of livestock manures.
- There were 32 responses covering the issue of cover crops. 62.5% of respondents disagreed that the Department had identified the correct circumstances for their use, and that they should be included in the Action Programme.
- 32 responses concerned the exemption in Regulation 6, with an equal split of those in favour and those against repealing it by 22 December 2015.
- There were 29 responses covering the question of construction of stores with 75.7% agreeing that a person constructing a store should notify the EA of his/her intention to do so before firmly committing to the project.
- There were 31 responses covering the implementation of the measures, with 64.4% disagreeing that they should be implemented from 1 January 2013.

List of Tables

Table 1: NVZs or Whole England

Table 2: Suitability of First-tier Tribunal rules for appeals

Table 3: Nmax limits

Table 4: Proposed Changes to Nmax limits

Table 5: Compost- Total N in a 2 year period

Table 6: Compost - Total N in a 4 year period

Table 7: Renewal of the Derogation

Table 8: Closed periods

Table 9: Closed period based on rainfall banding

Table 10: Reduction in quantity of slurry

Table 11: Proposals to reduce the minimum distance for spreading slurry near watercourses

Table 12: Proposed change to SSAFO calculation

Table 13: Storage of livestock manure

Table 14: Cover crops

Table 15: Regulation 6 of SSAFO

Table 16: Notification of construction of slurry store

Table 17: Implementation of measures

1. Introduction

This document has been prepared by Defra and summarises the responses from stakeholders to the Defra consultation 'The protection of waters against pollution from agriculture: consultation on the implementation of the Nitrates Directive in England 2013-2016'. The consultation period was 20 December 2011- 16 March 2012. This document should be read together with the consultation itself and supporting documents, all of which are available from the Defra website at the following address:

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

The aim of this document is to present, in summarised form, the main comments received from individuals and organisations that responded to this public consultation exercise. This document does not comment on the validity or otherwise of individual opinions expressed in the responses and summarised here, nor does it provide any response from Defra. Defra will issue a separate document giving the Department's response to this consultation.

The Nitrates Directive is the main policy mechanism available to Defra for tackling water pollution caused by nitrogen from agricultural sources. It requires farmers within Nitrate Vulnerable Zones (NVZs) to follow an Action Programme of measures aimed at controlling when, how and in what amount, nitrogen can be applied to land.

The consultation document posed nineteen questions relating to various NVZ issues including the designation of Nitrate Vulnerable Zones, the tribunal procedure, renewal of the Derogation, and proposed changes to spreading periods, the SSAFO calculation, and Action Programme rules.

2. Analysis of Respondents and Topic Areas

Responses were received from 50 different respondents to the written consultation. A breakdown of the respondent's occupation and organisation type is shown in annex 1. One fifth of the respondents were farmers. One fifth were farming representatives and sector representatives. The remainder included a mixture of water bodies, consultants, and public and environmental bodies.

3. Analysis of responses

The responses received by Defra have been collated and summarised. Comments have been categorised in order to tabulate results and provide a description of the percentage of respondents expressing similar comments within each element of the consultation. There were many 'open' questions in the consultation document, some respondents provided more than one comment under each individual question.

3.1 Targeted NVZs versus Whole England

Question 1. Do you prefer Option 1 (continuing with discrete NVZ designations) or Option 2 (applying the Action Programme to a 'Whole England' NVZ)?

Supplementary question The Department would welcome comments on the advantages and disadvantages of the two options and the reasons why you prefer one over the other.

Table1: NVZs or Whole England

	No.	%
Base	40	100%
Discrete designations	31	77.5%
Whole country designation	9	22.5%

Overall, 40 respondents provided a response on the issue of the discrete NVZ versus whole territory England There was a clear majority against the whole territory approach.

Farmers argued that the designation of present and future NVZ's should be based on science and in particular the level of nitrate pollution in the relevant water body.

Water companies argued that the discrete NVZ approach allows for the possibility of de-designation at some point in the future because farmers need something to aim at and de-designation in response to improved nitrate levels in surface / groundwater could be an incentive in terms of easing of legislative burden.

The main arguments for and against a whole England approach are summarised below.

Against whole England approach:

- Whole England (100%) NVZ designation is simply unnecessary and represents gold plating.
- Nitrate levels are falling.
- A whole England approach is indiscriminate and unnecessary and would impose nitrate controls on areas that don't need them.
- Whole England approach adds unnecessary cost that many can't afford and could force some out of business.
- The introduction of option 2 (the 'Whole England' approach) is deemed to be both premature and unnecessary at present.

For whole England approach:

- Discrete NVZs are divisive amongst farmers and are confusing in Methodology.
- There would be benefit in a Whole England approach as part of a wider, more integrated approach to improving the sustainability of agriculture.
- It would support the longer term aspirations of the Task Force on Farming Regulation to deliver coherent interventions on Defra's two main priorities – supporting agriculture and improving the environment.
- Option 2 would remove competitive inequalities and the uncertainties generated by repeated reviews, and create a level playing field for all farmers
- This option would appear to fit well with the catchment management philosophy to implementing the Water Framework Directive, which aligns with the Inspectorate's policy of supporting catchment management schemes to mitigate risks to drinking water quality, where these schemes provide sustainable and robust solutions.
- Option 2 may also limit other pollutants, in addition to nitrate, and may, therefore, enhance existing catchment management measures and improve the cost-benefit of new proposals.
- Whole England approach would avoid any detrimental impact on land prices for farmers within NVZs.

3.2 Suitability of First- Tier Tribunal

Question 2. This section is included mainly to provide information as to our current thinking. Do you consider that the Tribunal Procedure First-tier Tribunal (General Regulatory Chamber) Rules 2009 are currently suitable to cover these appeals against designations of Nitrate Vulnerable Zones?

Table 2: Suitability of First- Tier Tribunal Rules for Appeal

	No.	%
Base	27	100%
Yes	21	77.8%
No	6	22.2%

Overall, 27 respondents provided responses on the issue of the Tribunal procedure. A clear majority agreed that the current tribunal appeals procedure was suitable.

Comments included the need for appropriately qualified personnel to be recruited to sit on the panel, and an increase in the number of days to collect and present the necessary information to support an appeal.

The main arguments for and against the current Tribunal Procedure are summarised below.

Against current Tribunal Procedure:

- The proposed timescale to gather information and submit an appeal re the designation of an NVZ is far too short. We would rather a 3 month appeal window. Therefore the time scales before implementation should be extended.
- There should be a further appeals procedure to allow farmers to contest the finding of the Tribunal. Farmers should be able to seek de-designation at any time during the four year Action Programme if circumstances in their area have changed.

For current Tribunal Procedure

- This process works satisfactorily although can be rather protracted, so whilst the clear timetable (as summarised in 3.20) for appeal resolution is welcomed, the 28-day period to submit appeals seems relatively short in which to adduce evidence.
- The Tribunal Procedure First-tier (General Regulatory Chamber) Rules 2009 are still suitable to cover appeals against NVZ zone designations.
- Agreed. Provided that the monitoring data is readily available to farmers so they can check if their land drains to a particular water body and see the evidence that this water body is polluted.
- Twenty-eight days is long enough for an appeal to be submitted. It is important for appeals to be settled quickly so farmers can incorporate NVZ actions into their farm plans.

3.3 Nmax limits

Question 3. Do you agree that crop available nitrogen from all types of organic manures should count towards the Nmax limits?

Table 3: Nmax limits

	No.	%
Base	35	100%
Yes	30	85.7%
No	5	14.3%

Overall, 35 respondents provided responses. A clear majority were in agreement that crop available nitrogen from all types of organic manures should count towards the Nmax limits.

The main arguments for and against the proposal are summarised below.

Against crop available nitrogen:

- Digestate from a Biogas plant is organic but processed to be a product so should not be counted as a manure (long term) material.
- This would cause over-complication and confusion, particularly given the variability in levels of crop available nitrogen in organic manures.
- The crop available N in many composts is 0%. Ascribing a matrix of statutory values for industrial waters and sludge would become a complete nightmare.

For crop available nitrogen:

- At the moment any crop-available nitrogen derived from sewage sludge, compost or other organic manures that do not originate from farm livestock are not included in the Nmax calculation. Since all these sources of nitrate can contribute to nitrate leaching problems, they should be counted.
- In principle it would appear logical to count all sources of crop available nitrogen.
- Further research is required to consider fully the cost/benefit and opportunity foregone of sensible and appropriate use/disposal of sewage sludge on agricultural land and the cost of an alternative means of disposal.
- All sources of nitrate can contribute to nitrate leaching problems

- The inclusion of these materials would seem to make a more logical and rounded approach.

3.4 Proposed Changes to Nmax limits

Question 4. Do you agree with the proposed changes to the livestock manure N efficiency standard values used in Nmax?

Supplementary Question

What concerns or benefits do you think this change may raise?

Table 4: Proposed Changes to Nmax limits

	No.	%
Base	31	100%
Yes	20	64.5%
No	11	35.5%

A total of 31 respondents provided responses. Two thirds of respondents agreed with the proposed changes to the livestock manure N efficiency standard values used in Nmax.

Respondents suggested that the proposal is only justified if the scientific evidence is robust. A respondent from the farming representative category of respondents recommended that the Department should keep the scientific evidence under close review.

The main arguments for and against the proposals are summarised below.

Against proposed changes:

- The higher efficiency standards have only fully come into effect on 1 January 2012, to change further would add confusion.
- Farmers will be forced to under-apply nutrients to our crops. This will inevitably have a negative impact on yields and profitability, and therefore on their ability to provide sustained employment.

- The consultation document suggests the current Action Programme and applications if the standard values of nitrogen are increased, less manure can be spread on the land ultimately reducing the number of stock that can be held on the holding at any one time and again prejudicing the viability of small and specialist farm businesses.

For proposed changes:

- This will increase the efficiency of N use and reduce the risk of nutrient
- Yes, if it shifts use from mineral N and promotes greater efficiency at the right times of the year, but there must be considerable uncertainty as to whether this will happen.

Additional comments

Concerns:

- It is extremely difficult to put 'standard' values onto the efficiency of manure due to the vast range in the quality and substance of slurry and also to the land to which it is applied.
- The threat posed to groundwater by the application of organic N is often greater than that posed by inorganic N, because inorganic N is usually applied according to crop requirements at a time when the crop can actively use it. Organic N may be applied outside a crop's growing season, at a time of year when the risk of surface run-off or leaching is greatest.
- Sensible for slurries. But any rule change is likely to add to existing confusion.

Benefits:

- This would promote best practice handling and application timing and also provide further encouragement for farmers to get their slurries analysed to allow a more accurate calculation of N inputs.
- Should encourage better use and timing, but should be phased in to give affected farms a further 12 months to adjust.

3.5 Total N in a 2 year period

Question 5. Do you consider the limit of 500 kg/ha of compost total N in any 2 year period is workable?

Supplementary question

Are there any working restrictions we should consider to ensure we are not creating any unintended adverse consequences?

Table 5: Compost - Total N in a 2 year period

	No.	%
Base	25	100%
Yes	15	60%
No	10	40%

In total 25 respondents provided a response. A majority of respondents agreed that the limit of 500 kg/ha of compost total N in any 2 year period was workable. The general view of respondents was that there should be clear definition of the standard of compost because some organic materials take longer than 2 years to mineralise.

The main arguments for and against the proposal are summarised below.

Disagree:

- They break down slowly and will mineralise over a much longer period of time than two years.
- The 500kg/ha limit for composts, which have a low available N content, should not be restricted to composts in isolation. There is no logic in restricting this to composts only, as the issue is the availability of the nitrogen content rather than the product itself.
- Other organic materials, such as some biosolids products, which also have a low available N content, should be included.
- Green manures represent a long term release of nutrient (especially in regards to groundwater). They break down slowly and will mineralise over a much longer period of time than two years. Hence, we would recommend a minimum 5 year period for an application of 500 kg/ha.

Agree:

- We consider that 500 kg/ha of compost total N in any 2 year period is workable. This should be restricted to 'green' composts in order to keep contamination to a minimum. The compost must meet the requirements of the "Quality Compost Protocol" and BSI PAS 100.
- Due to the low available N content of green composts, the 500kg/ha application limit in any 2 year period is acceptable and workable.
- The standard of compost that can be applied at this rate should be defined e.g. C.N. (stable) industrial waste e.g. paper mill sludge.

Additional Comments

- If compost is not to PAS100 standard, [you might have] possible issues with PTEs.

3.6 Total N in a 4 year period

Question 6. Do you agree that a limit of 1000 kg/ha of compost total N in any 4 year period when used as a mulch is workable?

Supplementary question

Do you have concerns or benefits that such a change might raise?

Table 6: Compost - Total N in a 4 year period

	No.	%
Base	19	100%
Yes	14	73.7%
No	5	26.3%

A total of 19 respondents provided responses. Almost three-quarters of respondents agreed that a limit of 1000 kg/ha of compost total N in any 4 year period when used as a mulch was workable.

The main arguments for and against this proposal are summarised below.

Disagree:

- The risk of surface run-off needs to be considered when applying mulch. As with green compost, mulch takes several years to fully mineralise. Hence, we consider the proposed limit is too high and would recommend lowering this considerably.
- The issue is the availability of the nitrogen content rather than the product itself. Other organic materials, such as some biosolids products, which also have a low available N content, should be included.

Agree:

- Farmers need better guidance as to how much crop available N to expect to get in 2nd/3rd/4th years following composts.
- This would be helpful as it would make the use of mulch in NVZs a viable option with clear environmental benefits.
- It must be clear that this measure is referring to green compost only. This does not raise any obvious concerns though the approach should also advocate regular soil testing to ensure that the anticipated slow release does not result in build-up of a nutrient surplus (of either nitrogen or phosphorus).
- Any changes should be based on good science.

3.7 Renewal of the Derogation

Question 7. Do you consider the Department should renew the Derogation?

Table 7: Renewal of the Derogation

	No.	%
Base	27	100%
Yes	18	66.7%
No	9	33.3%

Overall, 27 respondents provided responses. More than two-thirds of respondents agreed that the Department should renew the derogation.

The main arguments for and against the removal of the derogation are summarised below.

Disagree:

- The Department should not seek to renew the derogation as it effectively allows the worst polluting farmers to spread more organic N.
- We do not support the use of the derogation to apply more than 170 kg N/ha/yr. This view is based on evidence which indicates that there is likely to be significantly more nitrate leaching where loading exceeds the 170kg per hectare maximum, regardless of the enterprise.
- Research highlights that some of the greatest nitrate losses occur under grazed grassland systems where these are heavily stocked and/or fertilised.

Agree:

- In principle, and politically, it is right to maintain this option.
- A gradual reduction in the whole farm limit over a number of years would enable tenants time to source additional land or arrange contracts to export nitrogen without having to reduce stock numbers.

3.8 Closed periods

Question 8. Which of the 3 closed spreading period options do you prefer?

Option 1- keep as existing

Option 2- extend by 2 weeks for soils other than sandy and shallow

Option 3- extend by 1month soils other than sandy or shallow

Table 8: Closed periods

	No.	%
Base	37	100%
Option 1: Keep as existing	23	62.2%
Option 2: extend by 2 weeks for soils other than sandy and shallow	11	29.7%
Option 3: extend by 1month soils other than sandy or shallow	3	8.1%

A total of 37 respondents provided responses. Nearly two-thirds of all respondents agreed with option 1 which was to maintain the existing spreading period.

Agree with Option 1: Keep as existing

- The preferred approach of the industry is to spread ‘little and often’. Longer closed periods will concentrate spreading and exacerbate the tendency for ‘national muck spreading day’
- The current closed periods should be retained. Farmers are starting to get familiar with these, and changes will introduce further confusion. The full benefit for longer storage periods (and additional storage) have yet to be seen in full across the country.
- Implementing change would cause confusion and impact on recent decisions regarding cropping, storage of manures and slurries and investment in spreading equipment.
- This is the most cost effective method and avoids penalising growers who have already built new stores to comply with the recent changes in storage capacity.

- The current closed periods allow a limited ‘window’ of opportunity for slurry to be spread before grass contamination becomes an issue.

Agree with Option 2: extend by 2 weeks for soils other than sandy and shallow

- Option 3 – being too tight a window for contractors and farmers to work with.

Agree with Option 3: extend by 1 month soils other than sandy or shallow

- Soil moisture deficit likely to remain low through Feb so there will be continued risk of runoff and drainage losses from med/heavy soils.
- The evidence points to a benefit from extending the closed period to manure application on these soils by up to one month in terms of reduced greenhouse gas emissions and NO₃-N losses. These benefits are reversed if the closed period is extended further.
- Other risks are also reduced from an extension of the closed period including ammonium release, FIO, soluble organic nitrogen and phosphorus.
- There is a risk of increased ammonia release and crop contamination from extending the closed period but this can be mitigated through use of precision application techniques.

3.9 Closed period based on rainfall banding

Question 9. Do you support the above closed spreading period based on rainfall banding?

9a. What additional advantages or disadvantages do you see with this problem?

Table 9: Closed spreading period based on rainfall banding

	No.	%
Base	19	100%
Yes	6	31.6%
No	13	68.4%

Overall, 19 respondents provided responses. More than two-thirds of respondents did not support the above closed spreading period based on rainfall banding.

The main arguments for and against the closed spreading period are summarised below.

Disagree:

- Although it is an important variable to consider, it further complicates the designations/rules and would make it difficult to regulate for instance at a small catchment scale where microclimate variations need to be taken in to full account.
- The implementation of this proposal would be quite complex and could lead to longer closed periods in some areas if soil temperatures are not included in the assessments.
- Although the idea behind this proposal seems to contain a degree of logic, it would only add to the current confusion over dates.
- Too complicated, even having two zones for NVZ (in and out) caused disparity and confusion this would be worse.

Agree:

- We welcome Defra's recognition that closed periods can be reduced in circumstances where risks are lower. The identification of lower risk from rainfall below 750mm is a first step.
- This localised approach would be more acceptable & ensure that farmers do not rush to spread slurry immediately following the closed period, as soon as conditions allow.
- Too variable and difficult to police boundaries.

Additional comments

- The implementation of this proposal would be quite complex and could lead to longer closed periods in some areas if soil temperatures are not included in the assessments. Another layer of cost and bureaucracy would be introduced as new rainfall areas would need to be identified together with an appeal process to determine which rainfall band a farm falls into.
- Nitrate leaching is related not just to the amount of rainfall as soil temperature, soil type, cultivations, etc. are also factors which influence the amount of nitrogen utilised by the crop.
- Flexibility would be better, based on regional temporal rainfall patterns, soil temperature, etc. Careful consideration needs to be given to the practical implementation of such an approach.

3.10 Reduction in quantity of slurry

Question 10. Do you think that reducing the quantity of slurry that can be spread immediately after the closed period is a better mechanism for managing nitrate leaching than extending the closed periods? If the application rate during this period were reduced, do you agree with the suggested reductions in the rate of application?

10 a. What further points should the Government take into account when considering this issue?

Table 10: Reduction in quantity of slurry

	No.	%
Base	30	100%
Yes	25	83.3%
No	5	16.7%

Overall, 30 respondents provided responses. More than three-quarters of respondents agreed that reducing the quantity of slurry that can be spread immediately after the closed period was a better mechanism for managing nitrate leaching than extending the closed periods.

The main arguments for and against reducing slurry quantity are summarised below.

Disagree:

- The evidence suggests that extending the closure period offers better protection to the environment and therefore must be the preferred option.
- The report offers no scientific evidence that the reduction from 50 to 30 m³/ha offers any environmental benefit – and we do not think that it would eliminate the phenomena of ‘spreading day’

Agree:

- Reducing the quantity of slurry that can be spread during and immediately after the closed period is a better mechanism for managing nitrate leaching than extending the closed periods.
- The best way to reduce Nitrate leaching would be to allow a more flexible approach as regard to the closed period.
- Management of run-off is as important as the rate of application with respect to pressure on the environment.
- Yes this should be introduced to reflect modern more accurate practices.

Additional Comments

Some respondents who agreed with this proposal commented that the government it should be applied apply this proposal if closed periods remain unchanged.

3.11 Proposals to reduce the Minimum distance for spreading slurry near watercourses

Question11. Do you agree with the proposals to reduce the minimum distance for spreading slurry near watercourses if a precision slurry spreader is used?

Is the proposed minimum distance from watercourses (6 metres) correct, or does it pose an unacceptable risk of pollution?

Table 11: Minimum distance for slurry spreading

	No.	%
Base	36	100%
Yes	19	52.8%
No	17	47.5%

Overall 36 respondents provided a response. Just over half of respondents agreed with the proposals to reduce the minimum distance for spreading slurry near watercourses if a precision slurry spreader was used.

The main arguments for and against spreading slurry near water courses are summarised below.

Disagree:

- This proposal would increase the risk of pollution to watercourses and is therefore totally unacceptable.
- We do not support the proposal to reduce the minimum distance from watercourses. The risks relating to slope, soil type and rainfall intensity remain high, even if slurry is applied using precision techniques.
- We recommend that grass buffer strips should be maintained along water courses and would be a practical measure to meet cross compliance with the Water Framework Directive to protect drinking water and the environment.

Agree:

- Precision spreading by a bans or hose spreader is accurate to 0.1m. Why does the proposal not consider reducing the minimum distances for slurry spreading to even less than 6 metres?
- 6 metres does not pose an unacceptable risk if correctly applied. Encourage the uptake of precision methods of application by incentivising new machinery purchase.
- A good way to incentivise the take up of precision application.

3.12 Proposed change to SSAFO calculation

Question 12. Do you agree with this proposed change to the SSAFO calculation?

12a. What other factors should ministers consider?

Table 12: Proposed change to SSAFO calculation

	No.	%
Base	29	100%
Yes	16	55.2%
No	13	44.8%

In total 29 respondents provided responses. Around half of respondents agree with the proposed change to the SSAFO calculation.

The main arguments for and against a change to the SSAFO calculation are summarised below.

Disagree:

- We strongly oppose raising the storage capacity required outside NVZs to conform with that required for NVZ farms.
- This overly complicates the regulations where they need to be clear, concise and consistent for farmers.
- [The proposed changes] seem to penalise those growers who are outside the NVZ where nitrate pollution is minimal.

Agree:

- This would provide one clear method of calculation for all farmers to determine all slurry storage capacities.
- Grants should also be considered to support the building of stores and Planners should be made aware or brought in line with the spirit of the Regulations.
- The alignment with NVZ requirements provides simplification and will provide for improved slurry storage capacity and greater on farm flexibility for managing slurry.

Additional Comments

- Grants should also be considered to support the building of stores and Planners should be made aware or brought in line with the spirit of the Regulations.
- Any requirement to invest in additional capacity should only be driven by a demonstrable need to reduce water pollution. It should not be created solely as a result of an effort to iron out regulatory anomalies. The inconvenience farmers may suffer from the existence of two calculation methods does not justify potentially significant additional expenditure on slurry storage.
- As the calculations are required only when a farmer intends to construct a new store or renovate an existing store, carrying out two sets of calculations does not seem onerous. However, if a single approach is desired and one method regularly yields a greater storage requirement than the other, the more conservative calculation method should be specified, provided that the additional storage requirement is not excessive. 6. Proposals on the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010. [Certain branded] tanks have a Design Life of 30 years compliant with ISO 15686,

Parts 1, 2 and 3. The service life of the tank, defined as the period after installation during which the tank meets or exceeds performance requirements, should be longer than the Design Life. There are tanks in the UK and elsewhere that are now in excess of 40 years old and are still giving good service. Based on the above, we do not consider it accurate to make a blanket statement that older slurry tanks are nearing the end of their useful lives on the basis of age alone. The determination that a slurry tank has reached the end of its useful life should be based on an inspection. Anecdotal evidence from our agricultural customers indicates that slurry tanks are inspected for insurance purposes. This evidence also indicates that Glass-Fused-To-Steel tanks are regularly found to be in satisfactory condition more often than tanks of other materials. We agree that it is reasonable for the public to expect that equipment and facilities comply with relevant legislation. However, if a Glass-Fused-To-Steel storage tank is in satisfactory condition and complies with relevant legislation except for volumetric capacity requirements, which may change as a result of revision of regulations, we believe that the exemption should remain in place or other methods of controlling stored volume, such as roof or covers on the slurry tank, should be satisfactory as well.

3.13 Storage of livestock manure

Question13. Do you agree that the Action Programme does not require any amendments with respect to the storage of solid livestock manures?

Table 13: Storage of livestock manure

	No.	%
Base	30	100%
Yes	25	83.3%
No	5	16.7%

A total of 30 respondents provided responses. More than three-quarters agreed that the Action Programme did not require any amendments with respect to the storage of solid livestock manures.

The main arguments for and against amendments to the storage of livestock manure are summarised below.

Disagree:

- There should be a minimum distance by which manure heaps have to be moved.
- Currently it is possible to move a heap incrementally across a field with very little separation between heap sites. This defeats the spirit and purpose of the regulations.
- We would also ask that consideration is given to including livery stables, that which are not already covered by virtue of their location within agricultural businesses, within the Directive.

Agree:

- The evidence does not suggest that a change is needed.
- More could be done to advise farmers as to the risks associated with heaping manures and mitigation measures such as the use of heap covers which could provide greater flexibility around issues of placement and timing.
- We fully support Defra's efforts to leave the rules for field heaps unchanged.
- No amendments are required, the research evidence provided supports this view

3.14 Record-keeping

Question 14. Do you have ideas that will reduce the burden of record-keeping while maintaining environmental protection?

14a. Are there any situations where we should not reduce record-keeping?

The common themes are summarised below.

Cross Compliance

- There should be one form that covers all regulatory requirements (e.g. current Cross Compliance regulations demand that separate records be kept for Soil Protection Review, livestock registration and identification, sewage sludge, and NVZs).
- If other farm audit schemes can demonstrate compliance, duplication of records is unnecessary. The case for certified organic farms should be considered based on compliance criteria and not because they use less fertiliser – this does not necessarily mean that they are low risk in terms of nitrate pollution, due to ploughing clover etc.

- Organic farms should not be excluded from the requirement to keep records but the principle of one form for all should be applied. It should be possible to draw information from other applications / procedures wherever there is overlap.
- There is often a duplication of records and it would make sense for Government agencies to better communicate with each other. Most farms are members of an assurance scheme and have annual inspections for compliance with these schemes. Many of these schemes require records of fertiliser use so it is possible and desirable for the government enforcement agencies to recognize these records and reduce the amount of inspections and paperwork.
- There should be one form that covers all regulatory requirements and this should apply to all farms without exception.
- We are favourable of an approach which recognised duplication and utilised existing compliance measures such as Farm Assurance Schemes, so farmers would not be subject to further inspection if already meeting the requirements of the respective scheme.

Reduced frequency of inspections

- Where full nutrient management plans are being used as management tools on-farm, and this is demonstrated to an inspector, reduced likelihood of inspection should follow. These are more likely to achieve improvements in N use efficiency than N plans for the purpose of compliance as opposed to management.
- Farms recognised as 'low-risk' should have a reduced number of inspections, but growers classified as 'high-risk' should not reduce their record keeping until they have satisfied all requirements and maintained improvements over a specified period of time.
- All farmers need to reduce paperwork where risk is low. Low stock numbers RCT.

14a Are there any situations where we should not reduce record-keeping?

- Record keeping should not be reduced for small farms as they are often the most polluting and can be critical if located close to a groundwater source for example.
- Organic farms should not be excluded from the requirement to keep records but the principle of one form for all should be applied.
- We have concerns about exemption from record keeping purely on the basis of organic certification as organic farms do not always fit the description of a low input system.
- We would hesitate to support any form of exemption for small farms. Size is not a substantive reason why any farm should be exempted from the obligation to manage land responsibly and professionally.

3.15 Low intensity farming

Question 15. What low intensity farming systems do you consider should not have to keep Nitrates Regulations records? We would be interested to discuss suggestions with those responsible for running such schemes.

15a. Should “low intensity” be defined in terms of the Nmax limit, manure nitrogen loadings, or both? Or should other factors be part of the definition (and if so, what are they)? For your preferred way of defining “low intensity”, what level(s) of the relevant measures would be appropriate?

The common themes are summarised below.

Low intensity farmers

- There is a considerable proportion of farms within NVZ’s that produce low value nitrogen manure only. These farmers include sheep or beef units kept on straw beds / grazing only. These farmers are not likely to ever reach the limit of maximum limit of manure allowed and should therefore be very low environmental risk. The burden for NVZ’s for these farmers becomes purely administrative and therefore there is a disproportionate burden.
- Any farm with low intensity should not have to keep records
- Are so few in number within the NVZ area, is it necessary to unlegislated? The EA might take a view that animal units generating <50 kg excreta-N per hectare grass are not worth a visit. Any loopholes made in NVZ rules could be abused (e.g. such farms become a dumping ground for others' excess slurry and wastes!)
- All farms should keep the same records for NVZ purposes.
- No one should be exempt.

15a Should “low intensity” be defined in terms of the Nmax limit, manure nitrogen loadings, or both? Or should other factors be part of the definition (and if so, what are they)? For your preferred way of defining “low intensity”, what level(s) of the relevant measures would be appropriate?

- Use of thresholds for livestock manure loading and for Nmax to determine the low intensity status of a farm, thereafter conferring earned recognition.
- We would welcome the opportunity to discuss the suggestions for definition of low intensity farms that come from this consultation. If Nmax is used as a measure, we believe this could only be in the context of the proposal in Question 3.

3.16 Cover Crops

Question 16. Do you think cover crops should be included in the Action Programme?

If so, have we identified the correct circumstances (sandy soils over groundwater) for their use?

16a. Are the suggested dates appropriate? If not, what dates would you suggest? What 'actions' do you consider should be defined to show compliance?

Table 14: Cover crops

	No.	%
Base	32	100%
Yes	12	37.5%
No	20	62.5%

Overall 32 respondents provided responses. Almost two-thirds of respondents disagreed that cover crops should be included in the Action Programme.

The main arguments for and against the inclusion of cover crops in the Action Programme are summarised below.

Disagree:

- It should be expected that all farmers should use cover crops but making it mandatory brings problems for farmers e.g. in dealing with certain types of weed where winter cultivations are vital for agriculture.
- We appreciate the potential to reduce nitrate leaching via use of a cover crop we are not convinced that this makes up for the potential crop yield loss due to late establishment in spring following an overwintered cover crop.
- This area is already covered adequately as part of soil management plans.
- In some situations cover crops, as a general measure, can be problematic to optimising productivity. E.g. allowing window of opportunity for potato seedbed preparation (destining etc.)
- A requirement for cover crops would not be a welcome addition to the NVZ Action Programme. We are dismayed that the consultation document doesn't recognise that the cost to farmers of meeting this obligation would be one of the disadvantages of the proposal.

- We strongly oppose the proposal to make cover crops compulsory, even in a narrowly defined set of circumstances because the impact on spring-sown crops, in terms of additional weed, pest and disease control and reduced yield and quality has not been fully taken into account in the impact assessment. The proposal will add to the cost, reduce the competitiveness, and increase the administrative burden of British growers.

Agree:

- If volunteers/ weed growth is allowed, compliance would either be zero or very shallow cultivation to encourage germination or demonstration that a crop has been either established or evidence that it was planned to be established
- We support the proposal that cover crops must be used on sandy soils in NVZs designated for groundwater protection. It has scientific backing from ADAS.
- We support this additional option in the Action Programme. However, we would prefer the use of the term 'green cover' rather than 'cover crop' to make it clear that it might not be necessary to sow a crop if stubbles can provide the green cover required.

Additional comments

- The suggested dates are appropriate. Entry in a fertiliser plan should be defined to show compliance.

3.17 Regulation 6 of SSAFO

Question 17. Do you agree that the exemption in Regulation 6 should be repealed? Do you think the deadline for doing so (22 December 2015) is the right one?

Table 15: Regulation 6 of SSAFO

	No.	%
Base		
Yes	17	50%
No	17	50%

A total of 34 respondents provided responses. The results were evenly split between those who agreed and disagreed that Regulation 6 should be repealed.

The main arguments for and against repealing Regulation 6 are summarised below.

Disagree:

- No evidence of significant pollution incidents from old silage & slurry stores
Concede that fuel oil stores should all be bunded.
- We strongly disagree that the exemption to in Regulation 6 be repealed. Should this still be implemented the deadline of 22 December 2015 is far too short as it would not allow farmers the necessary time to plan for such major and unnecessary on farm re-investment programmes.
- Pre 1991 structures may be more than 20 years old but will have been maintained as it is the farmer's interest to look after them to avoid any risk of environmental pollution. Should only be considered if 100% grants are available.
- No evidence to support it was included with the consultation.

Agree:

- We support the repealing of this exemption. In our opinion enough notice period has been provided and stores at their end of their useful lives provide an unacceptable risk to the environment.
- As a general issue of pollution prevention, we would support this repeal and proposed date.
- We support the proposal to remove the current exemption from the SSAFO requirements for stores, silos and tanks built before 1991 from the principle of removing 'immunity' from farms where current infrastructure and/or practices are poor or insufficient, and are putting the environment or human safety at risk.
- We recognise that this will reduce the risk to the environment from ageing storage facilities.

3.18 Notification of construction of slurry store

Question 18. Do you agree that a person constructing a store should notify the EA of his/her intention to do so before firmly committing to the project?

18a. How might we improve this provision?

Table 16: Notification of construction of slurry store

	No.	%
Base	29	100%
Yes	22	75.7%
No	7	24.1%

Overall 29 respondents provided responses. Approximately three-quarters agreed that a person constructing a store should notify the EA of his/her intention to do so before firmly committing to the project.

The main arguments for and against are summarised below.

Disagree:

- They would be notified as part of the planning process. It is in the farmer's best interest to build a compliant storage facility to reduce the risk of any environmental pollution. How many constructed stores have consequently failed the EA inspection?

Agree:

- The EA should be involved through the whole process, well before committing to project.
- The EA are, we believe already informed of a farmer's intent to build a slurry store. The EA are believed to be a statutory consultee of a local planning authority for such a proposed development.
- On balance it is probably most appropriate for the current WQE/3 notification process to continue as the EA will have the opportunity to ensure the completed store is built in accordance with the approved design drawings.
- This has the potential to reduce risk of sub standard construction and the need for subsequent enforcement and remedial action.

- However, there must be clarity on the role and expectation of EA staff at this preconstruction stage and there must be clear guidance available on the standards required for the location and construction of slurry stores.
- The EA should be involved through the whole process, well before committing to project.

3.19 Implementation of measures

Question 19. Do you consider all the measures should be implemented from 1 January 2013?

Table 17: Implementation of measures

	No.	%
Base	31	100%
Yes	11	35.5%
No	20	64.5%

Overall 31 respondents provided a response. More than half felt that the measures should not be implemented after January 2013.

The main arguments for and against implementing the measures after January 2013 are summarised below.

Disagree:

- This is too soon for any farmers & land owners who have not had to undertake any work to date. Farmers & land owners would need more time & notice to make any investment & consider how this will affect their business structure.
- This is not a reasonable proposal. Farmers in new NVZs could not realistically design, obtain planning permission for and construct the necessary slurry storage within a couple of months of the new regulations being made (anticipated by Defra as autumn 2012).
- No changes should be implemented before 1 January 2014.

Agree:

- This represents a tight deadline and all farmers should be made aware in good time. We should not allow the deadline to rush us into half thought out amendments.
- There should be some allowance made for farmers for the CAPEX expenditure required to manage the impact of the extended closed periods.

Annex 1 Respondent type by occupation or organisation

	No.	%
Base	50	100%
A) Environmental Body	3	6%
B) Farming Representatives and Sector Representatives	10	20%
C) Farmers	10	20%
D) Public	3	6%
E) Water Bodies	8	16%
F) Other	16	32%

Annex 2 Consultation Results Table

Question	Number of responses	Agree	Disagree
1) NVZs v whole England	40	31 (Option 1)	9 (Option 2)
2) Suitability of first- tier tribunal for appeals	27	21	6
3) Nmax limits	35	30	5
4) Proposed changes to Nmax limits	31	20	11
5) Compost- total N in a 2 year period	25	15	10
6) Compost total N in a 4 year period	19	14	5
7) Renewal of the Derogation	27	18	9
8) Closed periods	37	23 (Option 1)	11 (Option 2) + 1 (O 3)
9) Closed periods based on rainfall banding	19	6	13
10) Reduction in quantity of slurry	30	25	5
11) Proposals to reduce the minimum distance for spreading slurry near watercourses	36	19	17
12) Proposed change to SSAFO calculation	29	16	13

13) Storage of livestock manure	30	25	5
14) Record- keeping	29	29	0
15) Low intensity farming	31	11	20
16) Cover crops	32	12	20
17) Regulation 6 of SSAFO	34	17	17
18) Notification of construction of slurry store	29	22	7
19) Implementation of measures	31	11	20

Annex 3 Table- Organisation by Category

Type of organisation	Name of organisation	Total
A) Environmental Body	National Trust RSPB Wildlife and Countryside Link	3
B) Farming Representatives and Sector Representatives	Tenant Farmers Association (TFA) British Association BAGCD National Pig Association Dairy UK British Growers Association Country Land and Business Association Agriculture and Horticulture Development Board Devon County Council Tenants Association Milk Link NFU	10
C) Farmers	Cox Brothers, Church Lane Farm Robin Wilson David Mitchell Clayton Hall Farm Bioenergy LLP David Shaw, Grey Leys Farm Exe Vale Farmers Co-operative ltd RJ & AE GODFREY Andrew Critchlow Stuart Yarwood	10

	RG Fisher Ltd.	
D) Public	Natural England Drinking Water Inspectorate Environment Agency	3
E) Water Bodies	Water UK Wessex Water Services Ltd United Utilities Portsmouth Water Anglian Water Yorkshire Water Thames Water Southern Water	8
F) Other	McCain Foods (GB) Ltd. Devon County Council Dorset County Council Reading Agricultural Consultants Chartered Institute of Wastes Management NIAB TAG BAGCD 2 WE & JM Jones Tom Everett (Envar Ltd) Agricultural Industries Confederation AIC Promar International Permastore Sarah Newton MP	16

	Guy Opperman MP Institute of Animal Health Farms Kate Adams	
		Total 50