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Department of
**Agriculture and
Rural Development**
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Planning and Environmental Policy Group

CONSULTATION PAPER
on the proposed
NITRATES ACTION PROGRAMME
REGULATIONS
(NORTHERN IRELAND) 2010

JUNE 2010

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(i) Consultation Arrangements

The Department of the Environment (DOE) and the Department of Agriculture and Rural Development (DARD) (the Departments) would welcome any comment you may wish to make on the proposals made, and the issues raised, in this consultation paper (including the Partial Regulatory Impact Assessment). Where you disagree with any proposal, please provide evidence in support of alternative proposals. For operational reasons, responses are being co-ordinated through DOE. Comments may be made as follows:-

In writing to:

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Comments on the issues and proposals raised in this paper should reach the Departments by **13 August 2010**.

How to obtain further copies of this consultation paper?

Further copies of this paper may be obtained:-

- On written request from the above address
- Via the Departments' websites at www.doeni.gov.uk and www.dardni.gov.uk
- By telephoning 028 9025 4789
- By text phone on 028 9054 0642.

Should you require a copy of this paper in an alternative format it can be made available on request:

- in braille, audiocassette, disc, large print, or text phone for the hearing impaired;
- in minority ethnic languages to those who are not proficient in English; or
- an executive summary translated into Irish or Ulster Scots.

A list of the consultees that we have contacted directly for this exercise is attached at Annex C. This list is not exhaustive and we welcome views from all interested parties.

Throughout the consultation paper reference is made to the following:

- the Scientific Review; and
- the Derogation Report.

These documents can be viewed on the DOE website at:

[http://www.doeni.gov.uk/index/protect_the_environment/water/nitrates .htm](http://www.doeni.gov.uk/index/protect_the_environment/water/nitrates.htm)

and the DARD website at:

<http://www.dardni.gov.uk/index/publications/pubs-dard-environmental.htm>

(ii) Freedom of Information Act 2000 - confidentiality of consultations

The Departments will publish a summary of responses following completion of the consultation process. Your response and all other responses to the consultation may be disclosed on request. The Departments can only refuse to disclose information in exceptional circumstances. **Before** you submit your response, please read the paragraphs below with respect to the confidentiality of consultations, as they will give you guidance on the legal position about any information given by you in response to this consultation.

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- The Departments should not agree to hold information received from third parties 'in confidence' which is not confidential in nature; and
- Acceptance by the Departments of confidentiality provisions must be for good reasons, capable of being justified to the Information Commissioner.

For further information about confidentiality of responses please contact the Information Commissioner's Office or see the website at:

www.informationcommissioner.gov.uk

1. Introduction

Purpose of consultation

1. The Nitrates Action Programme Regulations (Northern Ireland) 2006 (the 2006 NAP Regulations) set out an action programme to reduce nitrates from agricultural sources entering the aquatic environment. The purpose of this consultation is to seek your views on the Departments' proposals to amend the action programme by revoking the 2006 NAP Regulations and making the Nitrates Action Programme Regulations (Northern Ireland) 2010 (2010 NAP Regulations).
2. This will also allow consolidation of the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2008 and the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009, in line with Better Regulation principles.

Background

3. The Nitrates Directive (91/676/EEC) (the Directive) aims to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. In particular, it is about promoting better management of animal manures, chemical nitrogen fertilisers and other nitrogen-containing materials spread onto land. The Directive allows Member States to either designate discrete areas of land as Nitrate Vulnerable Zones (NVZs) or establish an action programme to be applied to the whole territory. The action programme requires farmers to observe rules to reduce nitrate pollution, with measures on storing manure and restrictions on the spreading of manure and chemical nitrogen fertiliser to land.
4. Until 1 January 2007, Northern Ireland had designated seven NVZs on the basis of elevated nitrate levels in groundwaters. These NVZs were very small and covered less than 1% of Northern Ireland's area. However, Northern Ireland also has a widespread problem of eutrophication of surface waters and a large proportion of this nutrient enrichment is attributable to agriculture. Following extensive consultation, the total territory of Northern Ireland was established as the area to which an action programme would be applied.

5. On 1 January 2007 the 2006 NAP Regulations came into operation. These Regulations set out an action programme applying to all farms across Northern Ireland from that date, apart from some transitional arrangements on closed periods for manure spreading and manure storage requirements.
6. The Directive also requires Members States to review and, where necessary, revise their action programmes, including additional measures, at least every four years. The 2006 NAP Regulations must therefore be reviewed by 31 December 2010.

Derogation

7. Following the introduction of the 2006 NAP Regulations (which include a livestock manure application limit of 170 kg nitrogen per hectare per year), Northern Ireland also successfully applied to the European Commission (the Commission) for derogation allowing farmers who meet certain criteria to apply up to 250 kg nitrogen per hectare per year (kg N/ha/year) from grazing livestock manures.
8. It had originally been anticipated that over 730 farmers might need to apply for a derogation. In the event, in 2008, 322 farmers applied successfully to the Northern Ireland Environment Agency (NIEA) to operate under a derogation and in 2009 and 2010 there were 169 and 149 applications respectively. Despite the lower than anticipated numbers applying for a derogation, the continued operation of derogation remains particularly important for the intensive grassland sector.
9. The EC Derogation Decision is directly applicable law in Northern Ireland and stipulates measures to be carried out by farmers operating under a derogation. In addition to these measures, the Departments must carry out further monitoring and controls and report these back to the Commission. The first Derogation Report covering 2007 and 2008 was submitted to the Commission on 2 November 2009 and is available on the DOE and DARD websites at:
[www.doeni.gov.uk/index/protect the environment/water/nitrates .htm](http://www.doeni.gov.uk/index/protect_the_environment/water/nitrates.htm)
and
[http://www.dardni.gov.uk/index/publications/pubs-dard-environmental/nitrates directive derogation summary 2010.htm](http://www.dardni.gov.uk/index/publications/pubs-dard-environmental/nitrates_directive_derogation_summary_2010.htm)

10. The Commission Decision (2007/863/EC) granting the Derogation expires on 31 December 2010 and must be renewed. The Departments have initiated the application process to renew Northern Ireland's Derogation Decision, to be effective from 1 January 2011.

Review process

11. Before a Derogation application can be made to the Commission an acceptable action programme must be in place. This pre-requisite determined the need to commence the review of the 2006 NAP Regulations in autumn 2009.
12. Based on previous experience and to allow for new legislation to be in place by 1 January 2011, the Departments notified the Commission and the EU Nitrates Committee (comprised of Member States) in September 2009 of Northern Ireland's intention to apply for a new Derogation. The formal application process commenced in January 2010, with a presentation made to the Nitrates Committee. This necessitated the collation of scientific evidence necessary to support the application. A second presentation to the Committee was made on 4 May 2010 and Member States are expected to vote on the application in autumn 2010.
13. The review process is dependent on the production of robust scientific evidence on the effectiveness of the current action programme. In addition, to inform the review of the action programme and the Derogation renewal, the Departments agreed to carry out specific research projects.
14. The review of the action programme is running in parallel with the Derogation application. To provide the necessary scientific evidence for a comprehensive review, a Scientific Working Group (SWG) chaired by DARD with representation from DOE (including NIEA), DARD and the Agri-Food and Biosciences Institute (AFBI), was established. Taking account of the requirements of the Nitrates Directive and the scientific evidence and research, the SWG put forward proposals for the action programme and the Derogation for the period 2011-2014.
15. A meeting and workshop was held in November 2009 with key stakeholders from the agricultural industry and environmental non-government organisations (NGO's) to discuss the initial findings of the review. This provided the

opportunity for stakeholders to present evidence to the SWG of their experiences of the action programme and in support of improvements they believe may be possible. A summary of the workshop was included in the final Scientific Review which was submitted to the Commission on 21 December 2009.

16. The review process is also incorporating Better Regulation principles as recommended by the Northern Ireland Agri-Food Better Regulation and Simplification Review Report, published in June 2009.

2. Position in Great Britain and Republic of Ireland

1. In England, Scotland and Wales new action programmes were introduced in 2008. A Derogation has been awarded to England and Scotland by the Commission, with new Regulations taking effect from December 2009 and January 2010 respectively. In England, Scotland and Wales the key water quality problem is elevated nitrate levels and farming systems are more varied with large areas of arable production.
2. The Republic of Ireland is also currently reviewing its action programme and applying for renewal of Derogation. Similar to the situation in Northern Ireland, eutrophication is the key water quality problem in the Republic of Ireland where farming is predominantly grass-based.

3. Scientific Review

1. As described in Section 1, a Scientific Working Group (SWG) was established to produce a scientific, evidence based report reviewing the effectiveness of the current action programme and Derogation. Also, the SWG was to highlight measures, supported by scientific evidence, where change may be necessary. The following provides a summary of the findings and proposals of the SWG.

Water Quality

2. Surface freshwaters and groundwaters in Northern Ireland continue to have nitrate levels well below the 50 mg nitrate per litre (NO₃/l) limit in the Directive. Comparing data between the periods 2001-2004 and 2005-2008 indicates that the majority of sites are showing stabilisation in nitrate concentrations. There are still a very small number of groundwater sites with average concentrations greater than 50 mg NO₃/l situated in areas which were previously designated in 1999 and 2003 as NVZs.
3. Long-term seasonal trend analysis showed that the monthly trends in average nitrate concentrations in rivers in Northern Ireland were predominantly decreasing or stable over the 15-year period, 1994-2009. The most significant decreasing trends occurred in the winter months December to March. Seasonal trend analysis also showed that the direction of monthly trends of average phosphorus concentrations in rivers in Northern Ireland was predominantly decreasing or stable over the nine year period, 1999-2009. The most significant decreasing trends occurred between April and September.
4. Since the adoption of the Water Framework Directive (2000/60/EC) (WFD) in 2000, new methodologies and criteria for assessment of trophic status in rivers, lakes and marine waters have been developed. The quantities of nitrogen, phosphorus and other nutrients are the primary determinants of trophic status which gives an indication of the level of environmental stress of a water body.
5. Overall WFD assessment for all three trophic indicators (soluble reactive phosphorus, macrophytes and diatoms) together shows that eutrophication continues to be a problem in rivers in Northern Ireland. This is in agreement with previous assessments under the Nitrates and Urban Waste Water Treatment (91/271/EEC) (UWWT) Directives and is borne out when considering

each trophic indicator separately. Despite the majority of water bodies being classed as High/Good for phosphorus, both macrophyte and diatom classifications suggest that the plant and algal communities in the majority of river water bodies continue to show signs of response to nutrient pressures with a large proportion being Moderate or Poor status suggesting enrichment to some degree. It is possible that biological components within rivers may not yet have responded to reductions in nutrient loading to river water bodies, and changes in trophic status will need to be monitored over a longer time period.

6. The assessment of 27 surveillance lakes under the WFD in 2006-2008 confirms that the majority (70%) of lakes in Northern Ireland continue to display trophic conditions indicative of nutrient enrichment, including the three largest lakes, Lough Neagh and Lower and Upper Lough Erne. This is in agreement with previous assessments carried out in 2000-2005. The lack of change in lake systems may not be unexpected for a variety of reasons including differences highly related to individual lake typologies e.g. flushing times of these systems and the release of phosphorus reserves already built up in sediments.
7. The assessment of coastal and transitional waters under the WFD in 2007-2009 broadly aligns with previous assessments under the Nitrates and UWWT Directives. The sites classed as Moderate or lower for trophic status are Belfast Harbour, Quoile Pondage and the Tidal Lagan. Sites which have failed the dissolved inorganic nitrogen criterion but passed the biological criteria will invoke a 'checking procedure' to refine classification before further measures are required. As the marine receiving waters are at the very end of the catchment, it is anticipated that improvements will be slowest to manifest in these areas.
8. The results of water quality assessments are not unexpected, given that nearly all assessments are based on water quality up to 2008 i.e. prior to operation of all measures within the 2006 NAP Regulations on 1 January 2009.

Trends in nutrient use in agriculture

9. Northern Ireland farming continues to be a predominantly grass-based system. However, in general the numbers of sheep and pigs on farms in Northern Ireland are declining, whilst cattle numbers remain stable and poultry numbers are increasing.

10. Chemical fertiliser purchases in Northern Ireland have significantly declined in recent years. The level of sales of nitrogen and phosphate-based fertilisers in 2008 were at their lowest since 1975 and 1938 respectively. Nitrogen inputs to farms in Northern Ireland have decreased while outputs increased, therefore increasing the gross efficiency of nitrogen use. Whilst the increase is modest, historically it is large compared to the levels throughout the period 1975 -2000.

Compliance with measures

11. Compliance with many measures in the 2006 NAP Regulations has been very good although there are some key areas of non-compliance including record keeping, farmyard manure storage and phosphorus balances for derogated farms. Other measures such as manure applications near waterways or using inappropriate application techniques show lower levels of non-compliance. It is recommended that awareness of these issues continues to be raised through the media, improved guidance and training.

Research

12. A comprehensive programme of research has been put in place in recent years to address some outstanding issues in relation to a number of the measures and to provide additional information as to how soils and water quality are responding to the measures.
13. The research includes studies of the following:-
 - Impacts of spreading manure in October and February;
 - Minimising phosphorus losses;
 - Options to better manage dirty water; and
 - Improving manure-N efficiency and minimising nitrous oxide losses to the atmosphere.
14. Additional monitoring and research is ongoing on intensive grassland systems operating a grazing livestock manure loading of 250 kg N/ha/year. This was a requirement of the Commission Decision granting the Derogation.

Conclusions and recommendations

15. The key conclusions and recommendations of the SWG were:
 - the 2006 NAP Regulations have been in place from 1 January 2007, and

all measures have been operational from 1 January 2009;

- nitrate levels in surface freshwaters and groundwater appear to be generally stable;
- long-term trend analysis shows that the monthly trends in average nitrate and phosphorus concentrations in rivers in Northern Ireland are predominantly decreasing or stable;
- there is still evidence of eutrophication in rivers, lakes and marine waters;
- it will take longer for a response to be detected in biological indicators of trophic status and in lakes and marine waters;
- trends in fertiliser use and improved use of manures are very encouraging;
- compliance with measures is generally good;
- some key areas require further awareness and training to improve compliance;
- the research programme should continue to be funded over the next action programme period (2011-2014) to inform the next review;
- the action programme measures for 2007-2010 (contained in the 2006 NAP Regulations) should be carried forward into the action programme for 2011-2014 (in the 2010 NAP Regulations) with minimal change to allow time for the existing measures to “bed-in” and for sufficient data to be collected to determine environmental response;
- the values for pig nitrogen excretion rates should be updated in the 2010 NAP Regulations;
- the authorities in Northern Ireland should review proposals for the sustainable use of poultry litter (as discussed in Section 5);
- stakeholder engagement should continue to play a key role in the development and implementation of the action programme for 2011-2014; and
- the development and implementation of the action programme for 2011-2014 should continue to incorporate Better Regulation principles.

4. Stakeholder Engagement to Date

1. As previously discussed, a meeting and workshop was held with stakeholders on 24 November 2009, presenting the findings of the review to date and seeking input of stakeholder experiences of the action programme for 2007-2010. During the workshop sessions participants were asked to give their views on three questions. The presentations from the workshop and the Scientific Review incorporating stakeholder feedback can be found on the DOE website at:
[www.doeni.gov.uk/index/protect_the_environment/water/nitrates .htm](http://www.doeni.gov.uk/index/protect_the_environment/water/nitrates.htm)
and the DARD website at:
<http://www.dardni.gov.uk/index/publications/pubs-dard-environmental.htm>
2. The feedback from the workshop and from a further meeting with stakeholders on 16 April 2010 has contributed to the development of this consultation paper.

5. Engagement with the European Commission

1. As part of the review process the Departments have been engaged in a series of meetings with the Commission. The Commission has raised a number of concerns regarding the action programme in Northern Ireland. These concerns, and the actions proposed by the Departments are detailed below.

Applying manures in February and storage capacity

2. Under the 2006 NAP Regulations farmers cannot apply organic manures (except for farmyard manure and dirty water) from 15 October to 31 January i.e. the closed spreading period. Pig and poultry farms must have at least 26 weeks livestock manure storage capacity and all other farms must have at least 22 weeks storage capacity.
3. The Commission expressed ongoing concerns about the application of organic manures during February and the adequacy of 22 weeks livestock manure storage capacity if conditions for slurry spreading are not suitable at the end of the closed spreading period. The Commission was also concerned at initial research findings indicating that February is a high risk month for manure application.
4. The Departments have agreed to continue the research programme which is due to report in 2012. DARD will also undertake a survey of on-farm practice in relation to application of manures and fertilisers. The Departments have proposed to the Commission that we will be in a better position during the next review of the action programme (due to commence in 2013) to review these measures using research and surveys results in conjunction with further water quality monitoring and farm compliance data.
5. The Departments are, therefore, not consulting on any changes to these measures at this time.

Spreading and storage of farmyard manure

6. The Commission suggested that spreading of farmyard manure during winter months should be phased out during the next four years. There is no crop requirement for nutrients during these months and therefore no reason to apply the manures.

7. The Commission also suggested that the practice of field storage of farmyard manure during the winter should be phased out during the next four years. In addition, the Commission suggested that the length of time manure can be stored in a field, prior to land application, (currently 180 days) should be reduced.
8. The Departments are consulting on proposals to amend these measures.

Temporary measure allowing field storage of poultry litter

9. As part of the development of the 2006 NAP Regulations an Expert Group for Alternative Uses of Manure (EGAUM) was established in March 2005. This was chaired by the then Chief Scientist of DARD and included representatives from the Departments, the Department of Enterprise, Trade and Investment, the agri-food industries, farming and environmental NGOs. EGAUM examined proven technologies being used in other countries and reported their conclusions in March 2006.
10. In respect of the poultry industry, EGAUM reviewed and endorsed the technical approach being adopted by a consortium within the industry to develop a single poultry-litter fired generator. The EGAUM support for this technical solution and recommendation for the industry advancing the proposal helped persuade the Commission to allow a temporary measure in the 2006 NAP Regulations for the storage of poultry litter in field heaps until 31 December 2008 only.
11. Progress was not made with the off-farm solution for poultry litter on the timescale originally envisaged. With no alternative off-farm solution, where necessary, farmers continued with the practice of storing poultry litter in field heaps prior to land spreading, putting them in breach of the 2006 NAP Regulations. Agreement was therefore sought to extend the temporary measure in the 2006 NAP Regulations up to 31 December 2010, in line with the review of the action programme.
12. This agreement has been incorporated into amending Regulations (the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009) extending the use of poultry litter field heaps to 31 December 2010 and allowing farmers to use the quantity of poultry litter stored in temporary field heaps or middens prior to land application to be off-set against the storage capacity requirement.
13. Both Departments continue to agree that the land spreading of poultry litter is

not sustainable at current levels in the long term due to the high phosphorus content of the litter, the enriched phosphorus status of local soils and the resultant impact on water quality.

14. The Commission is adamant that this temporary storage measure should not be extended beyond 2010. They are concerned that storage of poultry litter in fields provides a concentrated source of nutrients which are prone to leaching; thus presenting a significant risk to water quality.
15. This temporary measure will expire on 31 December 2010 and the Departments are consulting on the impact of this.

Application of chemical nitrogen fertiliser during the closed period, on the basis of crop need

16. Under the 2006 NAP Regulations chemical fertiliser containing nitrogen cannot be applied to crops other than grass between 15 September and 31 January, unless there is a demonstrable crop requirement between those dates. The DEFRA Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) allow for a small amount of nitrogen to be applied during this period to certain crops, including brassicas and leeks, particularly where there is a problem with crop establishment.
17. The Commission requested that the Departments provide evidence on how widespread this practice is in Northern Ireland. Data show that these crops are not common in Northern Ireland and this practice is very limited.
18. The Departments have supplied this information to the Commission and are not proposing to change the Regulations in this respect.

Spreading distance from a waterway for chemical nitrogen fertiliser

19. Under the 2006 NAP Regulations chemical nitrogen fertiliser can be applied up to 1.5m from any waterway. The Commission suggested that this should be changed to 2m, to provide increased environmental protection in line with a number of other Members States and other parts of the UK (England and Wales).
20. The Departments are consulting on changing this measure.

Steeply sloping land

21. Under the 2006 NAP Regulations nitrogen fertiliser (chemical and organic) cannot be spread to steeply sloping land if, taking account of factors such as proximity to waterways, soil condition, ground cover and rainfall, there is a significant risk of causing water pollution. Steeply sloping land is defined as having an average incline of 20% or more.
22. The Commission suggested that this definition should be changed to an average incline of 15% or more for arable land, to provide increased environmental protection where the run-off risk is greater. The Commission is also concerned about how farmers assess the pollution risk when considering applying fertiliser to steep slopes. It considers that the removal of this requirement to assess risk would provide clarity for both farmers and regulators.
23. The Departments are consulting on the proposed changes to this measure.

Derogation

24. Commission Officials also noted the lower than expected uptake of the Derogation in Northern Ireland.
25. A continued decline in the number of applications could in future undermine the viability of the Derogation. The Departments are committed to working with stakeholders to ensure that, where appropriate, farmers can successfully apply and operate within the terms of a renewed European Derogation Decision.

Nitrogen excretion rates

26. During discussions with the Commission the Departments tabled proposals to revise pig nitrogen excretion values and nutrient content values in the 2010 NAP Regulations. The Departments have provided the Commission with a scientific paper which has been referred to their consultants for consideration.
27. The Departments also outlined to the Commission that the nutrient content of poultry diets in Northern Ireland has also reduced and that further analysis was due to be undertaken in 2010 to update excretion rates and nutrient content values. The Commission agreed to refer the scientific evidence, when available, to their consultants for consideration.

6. Water Framework Directive

1. The WFD aims to establish an integrated framework for the protection of surface waters and groundwaters, with the overall aim of achieving Good status by 2015. River Basin Management Plans (RBMP) for Northern Ireland were published in December 2009 containing Programmes of Measures to achieve the WFD objectives and can be viewed on the NIEA website at: www.ni-environment.gov.uk/water-home/wfd.htm.
2. Compliance with other Community legislation such as the Nitrates Directive is a basic measure under the Programme of Measures.
3. Eutrophication, arising from too much nitrate and phosphorus entering the water, is the most widespread pollution problem facing Northern Ireland's water environment. Nutrient inputs from agriculture have already been identified as a significant source of this pollution and phosphorus plays a key role in freshwater eutrophication.
4. The Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 (Phosphorus Regulations) were introduced by the DOE on the same date as the 2006 NAP Regulations in support of environmental obligations but not as part of the action programme. These Regulations seek to ensure that chemical phosphorus fertiliser is not applied in excess of crop requirement. They are outside the scope of the review of the 2006 NAP Regulations.
5. Under the Programme of Measures for agriculture in the RBMP there are a number of other existing and proposed measures to reduce phosphorus inputs from agriculture. In particular, DARD has committed to lead on the following actions with support from DOE and AFBI:
 - reduction of the phosphorus content of feedstuffs in Northern Ireland and undertake a study to assess the reductions in phosphorus and the environmental benefits in lowering phosphorus levels by the end of 2010;
 - ensuring sustainable use of manures with a high phosphorus content, particularly poultry and pig manures by the end of 2012; and
 - production of a report on the current phosphorus budget for Northern Ireland to support a review of the need to give statutory effect to phosphorus balances.

6. It is important that any proposals to change the 2006 NAP Regulations take account of the requirements of the WFD and these other measures.
7. In this regard, NIEA has reported an average of 91 pollution incidents per year (from 2007 – 2009) due to discharges of silage effluent as a consequence of inadequate management of silage effluent collection and storage facilities. Silage effluent is a highly polluting material that can cause high severity pollution incidents and fish kills. It has a biochemical oxygen demand four times greater than that of cattle slurry. Under the Nitrates Directive there is a requirement to put in place measures to prevent water pollution by run-off and seepage into groundwater and surface water of liquids containing livestock manures and effluents from stored plant materials such as silage. In the 2006 NAP Regulations there is already a requirement to construct and maintain silage effluent storage facilities to prevent water pollution. The Departments propose to include a requirement for farmers to also manage these facilities to prevent pollution e.g. clear out drains to ensure that effluent can collect in the tank or remove effluent from full tanks to other storage to prevent overflow.

7. Proposed Action Programme for 2011 to 2014

1. This section gives a brief summary of the key changes in the proposed 2010 NAP Regulations. The full draft Regulations are attached at Annex A. There are also other minor changes to the draft Regulations which are legal drafting issues arising, for example, out of the consolidation process or the expiration of deadlines. References below refer to the attached draft of the Regulations.
2. With the exception of the revisions outlined in paragraphs 3 - 15 below, the measures contained in the 2006 NAP Regulations should be carried forward into the Action Programme for the period 2011 to 2014.
3. **Interpretation** The definition of "steeply sloping land" is amended to mean land which has an average incline of 20% or more in the case of grassland or 15% or more in the case of other land.
4. **Regulation 6** is amended to include a closed period for spreading of farmyard manure from 31 October until 31 January.
5. **Regulation 7(2)(f)** is amended to remove the risk clause regarding application of fertiliser to steeply sloping ground.
6. **Regulation 7(4)** is amended to increase the spreading distance for the application of chemical nitrogen fertiliser to 2m from any waterway.
7. **Regulations 11(1) and 11(4)** are amended to include a requirement for farmers to manage silage effluent collection and storage facilities to prevent pollution.
8. **Regulation 13** is amended so that field storage of farmyard manure, during the closed period for spreading, is prohibited from 31 December 2012.
9. **Regulation 13** is also amended so that the length of time farmyard manure may be stored in a field, prior to spreading, is reduced from 180 days to 90 days.
10. **Regulation 14** in the 2006 NAP Regulations will expire on 31 December 2010. A new regulation (regulation 14), only permitting the storage of poultry litter in a midden, will be included in the 2010 NAP Regulations. Therefore, field storage of poultry litter will not be permitted from 1 January 2011.
12. **Regulation 25** is amended to provide clarification on who will be held responsible for different offences under the Regulations. It is proposed that for some regulations, in particular those concerned with record keeping, and

calculations of capacities and limits, the controller will be held responsible for any offence. For other regulations, in particular those concerned with management and application of nitrogen fertiliser, it is proposed that an “appropriate person” should be held responsible for any offence. “The appropriate person” should be defined as the controller; any person permitted by the controller to carry out, on their behalf, any activity described in the Regulations; and, with regard to regulation 11(4), the owner of any storage facility used for the storage of livestock manure and silage effluent or any person using such storage facilities for the storage of livestock manure and silage effluent.

13. **Tables 1 and 2 of the Schedule** are amended to include new values for pig nitrogen excretion rates and the total nitrogen content of pig slurry respectively, obtained from the findings of research. This research has been submitted to the Commission and these amendments are also subject to Commission agreement.
14. **Table 8 of the Schedule** is amended to include the standard phosphorus content of a greater range of agricultural products and feedstuffs for those farms operating under a derogation. Farmers will still have the option to submit different values with supporting documentation. However, this change has been proposed to assist farmers in the completion of fertilisation accounts required under a derogation.
15. It is also the Departments’ intention to give consideration to the amendment of **Table 3 of the Schedule** to include new values for poultry solid manure total nitrogen contents, obtained from the findings of forthcoming research. New values for poultry litter nutrient content obtained from the findings of research, will be submitted to the Commission, when available, later in the year. Whilst at this stage, the values in Table 3 of the Schedule remain unchanged from the 2006 NAP Regulations, the Departments propose to amend them following Commission review of the research findings.

8. Guidance

1. Key factors in the success of the implementation of the action programme to date have been the working partnership between the Departments and stakeholders and the development of guidance and training for farmers on the requirements of the legislation. The Departments are fully committed to continuing to work closely with stakeholders to improve guidance and training and further increase awareness to improve compliance.
2. To this end a Nitrates Guidance Working Group was re-established on 11 May 2010 which will report back to further stakeholder meetings. The Working Group is co-chaired by NIEA and DARD and will work in parallel with this consultation to develop improved and updated guidance material in support of the draft 2010 NAP Regulations.
3. Further information can be obtained by contacting DARD or NIEA using the contact information in Annex D.

9. Mandatory consultation requirements

Human Rights Compatibility Statement

The Human Rights Act 1998 implements the European Convention on Human Rights. The 1998 Act makes it unlawful for any public authority to act in a way that is incompatible with these rights. Since the implementation of the Human Rights Act 1998, all legislation must be checked to ensure compliance with the European Convention Rights.

The Departments consider that the proposed Nitrates Action Programme Regulations (Northern Ireland) 2010 are compatible with the Human Rights Act 1998.

Equality Impact Assessment

A preliminary screening exercise has been undertaken and there is no evidence that the proposed measures will have any impact on equality issues. Therefore, the Departments do not consider a full Equality Impact Assessment to be necessary.

10. Rural Proofing Statement

Rural proofing is a process to ensure that all relevant Government policies are examined carefully and objectively to determine whether or not they have a different impact in rural areas from that elsewhere, because of the particular characteristics of rural areas; and where necessary, what policy adjustments might be made to reflect rural needs and in particular to ensure that, as far as possible, public services are accessible on a fair basis to the rural community.

This paper details the Departments' proposals for revisions to the current action programme in line with the review of the 2006 NAP Regulations and discussions with the Commission. The measures in the revised action programme (contained in the 2010 NAP Regulations) will apply to all farms/livestock units in Northern Ireland for the period 2011-2014.

Compliance with the Nitrates Directive is a legal obligation for all Member States. Given that the Directive's objective is to prevent or reduce water pollution from agricultural sources, the impact of the revised measures, both positive and negative, will be most evident in the rural community.

On the positive side, the revised measures will contribute to improvements in the quality of Northern Ireland's waters, in particular its rivers and lakes. This should lead to enhanced biodiversity and fish habitats and an improvement in the aesthetic standard of water bodies. Good water quality should also lead to increased recreational use and support for tourism. This, in turn, encourages use of the countryside, sustains the viability of rural businesses and encourages diversification, thus benefiting the rural community as a whole.

On the negative side, the revised measures will place restrictions on certain farming practices currently permitted, which may result in additional costs for the farmer.

The Departments recognise that the proposed revision of several measures, while designed to enhance protection of water quality through good farming practice, will require, in some situations, changes to current practices. Key factors in the success of the implementation of the action programme to date have been the working

partnership between the Departments and stakeholders and the development of guidance and training for farmers on the requirements of the legislation.

The Departments have already consulted with key stakeholders, including representatives from the farming unions and the environmental non-government organisations (NGOs), on the impact of the action programme for 2007-2010. The feedback from these key stakeholders formed a valuable part of the review of the current action programme. Issues they have raised will largely be addressed in the implementation of the action programme for 2011-2014 through working together with farmers on improving compliance in some key areas. There is also a need for improved awareness of the measures and the provision of further training and guidance. The Departments will also consider ways of simplifying the requirements for farmers without compromising the aims of the Directive.

The Departments are fully committed to continuing engagement with stakeholders and providing further guidance and training to farm businesses to support the industry in complying with the revised action programme. To this end, a Nitrates Guidance Working Group was re-established on 11 May 2010. The Group includes representatives from the farming industry and environmental NGOs. This Group will work in parallel with this consultation to develop improved and updated guidance material in support of the 2010 NAP Regulations. This should help farm businesses comply with the action programme measures at the minimum cost possible.

In conjunction with this, the Departments are proposing a phased implementation for one of the measures in the 2010 NAP Regulations. This will give farm businesses time to examine whether their current farming practices are in line with the new requirements for storage of farmyard manure during the closed period, consider options and make any necessary adjustments in a timely and proportionate manner.

The Departments will continue to review and monitor implementation of the new action programme through ongoing engagement with stakeholders.

Annex A

STATUTORY RULES OF NORTHERN IRELAND

2010 No.

ENVIRONMENTAL PROTECTION

The Nitrates Action Programme Regulations (Northern Ireland) 2010

Made - - - - *xx November 2010*

Coming into operation *1st January 2011*

The Department of the Environment and the Department of Agriculture and Rural Development, being departments designated[1] for the purposes of section 2(2) of the European Communities Act 1972[2] in relation to the environment, acting jointly in exercise of the powers conferred upon them by that section and the Department of the Environment in exercise of the powers conferred on it by Articles 32, 44 and 72 of the Waste and Contaminated Land (Northern Ireland) Order 1997[3] and, in accordance with Article 32(3) of that Order, the Department of the Environment having published a notice indicating the effect of these regulations and having taken into consideration the representations made to it in accordance with the notice, make the following Regulations:

PART 1

PRELIMINARY

Citation and commencement

1. These Regulations may be cited as the Nitrates Action Programme Regulations (Northern Ireland) 2010 and shall come into operation on 1st January 2011.

Territorial application

2. These Regulations shall establish and apply an action programme throughout the territory of Northern Ireland as required under the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004[4].

Interpretation

3. —(1) The Interpretation Act (Northern Ireland) 1954[5] shall apply to these Regulations as it applies to an Act of the Northern Ireland Assembly.

1 S.I. 2008/301

2 1972 c.68

3 S.I. 1997/2778 (N.I. 19)

4 S.R. 2004 No. 419

5 1954 c.33 (N.I.)

(2) In these Regulations—

“action programme” means measures regarding the protection of water against pollution caused by nitrates from agricultural sources as set out in Article 5 and Annex III of the Directive;

“agricultural area” means any land suitable for agricultural activities, including any common land used for grazing and excludes areas under farm roads, paths, buildings, woods, dense scrub, rivers, streams, ponds, lakes, sandpits, quarries, areas of peat cutting, bare rock, areas of forestry and areas fenced off or inaccessible other than forests where the use of the same is ancillary to the farming of land for other agricultural purposes;

“agricultural land” has the same meaning as in the Agriculture Act (Northern Ireland) 1949[6];

“Appeals Commission” means the Water Appeals Commission for Northern Ireland established under Article 7(1) of the Water and Sewerage Services (Northern Ireland) Order 1973[7];

“authorised person” means a person authorised by the Department under Article 72 of the Order in respect of fulfilling its functions;

“chemical fertiliser” means any fertiliser containing a nitrogen compound which is manufactured or blended by an industrial process;

“controller” means in relation to a holding, the person charged with management of the holding for the calendar year in question and in the absence of written agreement to the contrary, the owner of the agricultural area will be taken to be charged with its management;

“crop requirement” means the amount of nitrogen fertiliser which is reasonable to apply to land in any year for the purpose of promoting the growth of the crop having regard to the foreseeable nitrogen supply to the crop from the soil and from other sources, including any previous applications of livestock and other organic manure and any chemical fertilisers estimated as described in the fertiliser technical standards and regulation 9 of these Regulations;

“Department” means the Department of the Environment;

“Departments” mean the Department of the Environment and the Department of Agriculture and Rural Development acting jointly;

“derogated holding” means a holding over which a derogation has been granted;

“derogation” means a derogation from the limit of livestock manure that can be applied to land each year as provided for in paragraph 2(b) of Annex III of the Directive granted by the Commission Decision 2010/XXX/EC[8] and approved by the Department which is valid for one calendar year;

“derogation application” means an application for derogation submitted by the controller using a form provided by the Department;

“Directive” means Council Directive 91/676/EEC[9] of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources;

6 1949 c.2 (N.I.)

7 S.I. 1973/70 (N.I. 2)

8 OJL XXXX

9 OJL 375, 31.12.91, p. 1-8

“dirty water” means water contaminated by organic manure, urine, effluent, milk and cleaning materials with a Biochemical Oxygen Demand (BOD) no greater than 2000 mg/litre and total nitrogen and dry matter contents as set out in Table 2 of the Schedule;

“environment” means any or all of the following media, namely the air, water and land;

“farmyard manure” means a mixture of bedding material and animal excreta in solid form arising from the housing of cattle, sheep and other livestock, excluding poultry manure, but including spent mushroom compost and the stackable solids fraction from mechanical separation of slurry excluding pig slurry;

“fertilisation account” means an account prepared in accordance with regulation 10(5);

“fertilisation plan” means a plan prepared in accordance with regulation 10(4);

“fertiliser technical standards” means the “DEFRA Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) 2000 7th edition” (as may from time to time be re-issued) and any supplementary guidance, and any other publication by DEFRA or the Departments substituting the standards set out in RB209 and any supplementary guidance;

“grassland” means any land on which the vegetation consists predominantly of grass species;

“grassland holding” means a holding where 80% or more of the agricultural area available for manure application is cultivated with grass;

“grazing livestock” means cattle (with the exclusion of veal calves), sheep, deer, goats and horses;

“holding” in relation to a controller means all the agricultural area managed by that controller;

“lake” means a body of standing inland surface water;

“land application” means the addition of materials to agricultural land whether by spreading on the surface of the land, injection into the land, placing below the surface of the land or mixing with the surface layers of the land but does not include the direct deposition of manure onto land by animals;

“livestock” means any animal kept for use or profit;

“livestock manure” means waste products excreted by livestock, or a mixture of litter and waste products excreted by livestock, even in processed form;

“nitrogen compound” means any nitrogen-containing substance except for gaseous molecular nitrogen;

“nitrogen fertiliser” means any substance, including chemical fertiliser, containing a nitrogen compound utilised on land to enhance growth of vegetation;

“notice” means notice in writing;

“the Order” means the Waste and Contaminated Land (Northern Ireland) Order 1997[10];

“organic manure” means
(a) livestock manure, and

(b) nitrogen fertiliser, not being livestock manure or chemical fertiliser, derived from organic matter, and includes sewage sludge, residues from fish farms and other organic wastes;

“Phosphorus Regulations” means the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006[11];

“pig enterprise” means any enterprise with more than 10 breeding sow places or 150 finishing pig places;

“poultry enterprise” means any enterprise with more than 500 places;

“poultry litter” means a mixture of bedding material and poultry manure arising from the housing of poultry and with a dry matter content not less than 55%;

“public” means such persons as appear to the Departments—

(a) to be representative of those carrying on any business which—

(i) is, or is likely to be, directly affected by the action programme; or

(ii) relies upon the water environment; or

(b) to have an interest in the protection of the water environment;

“scientific case” means a reasoned case, as set out in guidance issued on these Regulations, designed to demonstrate that the proposed deviation from the values set out in Tables 1, 2 or 3 of the Schedule to these Regulations will have no worse effect on the environment than that caused by using the aforementioned values;

“silage effluent” has the same meaning as in regulation 1(1) of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003[12];

“slurry” means (a) excreta produced by livestock whilst in a yard or building or (b) a mixture of such excreta with bedding, rainwater, seepage, washings or any other extraneous material from a building or yard used by livestock or in which livestock manure is stored or (c) any other organic manure or any combination of these, of a consistency that allows it to be pumped or discharged by gravity at any stage in the handling process and includes dirty water that is stored with slurry or mixed with slurry;

“soil fertility status” means the soil reserves available for uptake by the next crop estimated as described in the fertiliser technical standards;

“steeply sloping land” means land which has an average incline of 20% or more in the case of grassland or 15% or more in the case of other land;

“underground strata” has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999[13];

“Waste Regulations” means the Waste Management Licensing Regulations (Northern Ireland) 2003[14];

“water pollution” means the discharge, directly or indirectly, of nitrogen compounds from agricultural sources into the aquatic environment, the results of which are such to cause hazards to human health, harm to living resources and to aquatic ecosystems, damage to amenities or

11 S.R. 2006 No. 488

12 S.R. 2003 No. 319

13 S.I. 1999/662 (N.I. 6)

14 S.R. 2003 No. 493

interference with other legitimate uses of water;

“waterlogged” means soil where water appears on the surface of the land when pressure is added;

“waterway” has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999.

(3) Other expressions used in these Regulations have the same meaning as in the Directive.

PART 2

GENERAL

Duty of the controller to prevent water pollution

4. The controller of a holding shall not cause or permit, directly or indirectly, the entry of nitrogen fertiliser into any waterway or water contained in any underground strata.

Duty of the controller to comply with these Regulations

5. In complying with any duty under these Regulations, the controller of a holding shall have regard to any guidance which may be issued from time to time by the Department or Departments for the purposes of these Regulations and, in accordance with Article 4 of the Directive, the Code of Good Agricultural Practice as may be amended from time to time.

PART 3

PREVENTION OF WATER POLLUTION FROM THE APPLICATION OF FERTILISERS

Periods when the land application of nitrogen fertiliser is prohibited

6. —(1) The land application of chemical fertiliser to grassland shall not be permitted from 15 September in any year to 31 January of the following year.

(2) The land application of chemical fertiliser to any land shall not be permitted from 15 September in any year to 31 January of the following year for crops other than grass unless there is a demonstrable crop requirement between those dates.

(3) The land application of organic manure, excluding farmyard manure and dirty water, to any land shall not be permitted from 15 October in any year to 31 January of the following year.

(4) The land application of farmyard manure to any land shall not be permitted from 31 October in any year to 31 January of the following year.

(5) The land application of any manure, to a derogated holding shall not be permitted from 15 October in any year to 31 January of the following year where the fertiliser plan indicates a proposal to disturb the soil as part of grass cultivation.

Requirements as to the manner of land application of nitrogen fertiliser to any agricultural land

7. —(1) The land application of nitrogen fertiliser shall be done in an accurate and uniform manner in accordance with paragraphs (2) to (10).

(2) The land application of nitrogen fertiliser shall not be permitted when: -

- (a) soil is waterlogged;
- (b) land is flooded or likely to flood;
- (c) the soil has been frozen for 12 hours or longer in the preceding 24 hours;
- (d) land is snow-covered;
- (e) heavy rain is forecast within 48 hours; or
- (f) the land is steeply sloping land.

(3) The land application of nitrogen fertiliser shall not be permitted on any land in a location or manner which would make it likely that the nitrogen fertiliser will directly enter a waterway or water contained in any underground strata.

(4) The land application of chemical fertiliser shall not be permitted within 2 m of any waterway.

(5) The land application of organic manure shall not be permitted within: –

- (a) 20m of lakes;
- (b) 50m of a borehole, spring or well;
- (c) 250m of a borehole used for a public water supply;
- (d) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features); or
- (e) 10m of any waterway, other than lakes, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; except that
- (f) the distance for (e) may be reduced to 3m of any waterway where the land has an average incline less than 10% towards the waterway and where:
 - (i) organic manures are spread by bandspreaders, trailing hose or trailing shoe or soil injection; or
 - (ii) the adjoining area is less than 1 hectare in size or not more than 50m in width.

(6) The maximum land application of solid organic manure shall be 50 tonnes per hectare at any one time provided this does not exceed the limits set out in regulation 8(1) and 9(3) and a period of at least 3 weeks shall be left between such land applications.

(7) The maximum land application of slurry shall be 50 m³ per hectare at any one time provided this does not exceed the limits set out in regulation 8(1) and 9(3) and a period of at least 3 weeks shall be left between such land applications.

(8) The maximum land application of dirty water shall be 50 m³ per hectare at any one time and a period of at least 2 weeks shall be left between such land applications.

(9) The land application of slurry shall only be permitted by spreading close to the ground using inverted splash plate spreading, bandspreading, trailing hose, trailing shoe, soil injection or soil incorporation methods.

(10) The land application of dirty water shall only be permitted by spreading close to the ground using inverted splash plate spreading, bandspreading, trailing hose, trailing shoe, soil injection, soil incorporation or irrigation methods.

Measures governing the limits on land application of nitrogen fertiliser to grassland

8. —(1) Save where regulation 10 applies the amount of total nitrogen in livestock manure applied to the agricultural area of a holding, both by land application and by the animals themselves, shall not exceed 170kg of nitrogen per hectare per year when calculated in accordance with paragraphs (3) and (4).

(2) For each holding, the total available nitrogen in organic manure and chemical fertiliser, excluding livestock manure, applied to grassland, shall be in proportion to the crop requirement of the holding, and shall not exceed the amounts as defined in Table 4 of the Schedule, when calculated in accordance with paragraphs (5), (6) and (7).

(3) The total nitrogen from livestock manure from animals kept on the holding is calculated in accordance with Table 1 of the Schedule.

(4) The total nitrogen from imported livestock manure is calculated in accordance with Table 2 of the Schedule for slurry and Table 3 of the Schedule for solid livestock manure..

(5) The total nitrogen content per tonne of other organic manure, excluding livestock manure, shall be as declared in accordance with the Waste Regulations.

(6) The amount of nitrogen available to a crop from chemical fertiliser, in the year of application of that fertiliser, is the percentage specified in Table 6 of the Schedule.

(7) Except in the case of livestock manure, the amount of nitrogen available to a crop from organic manure in the year of its application is the percentage specified in Table 6 of the Schedule, in relation to cattle and other livestock manure.

(8) Any controller wishing to deviate from the values set out in Tables 1, 2 or 3 of the Schedule must present a scientific case in order to obtain prior approval from the Department, and the Department shall only grant such approval where it is satisfied that a scientific case has been established.

(9) A controller may appeal the decision by the Department in paragraph (8) in accordance with the procedure set out in regulation 24.

Measures governing the limits on land application of nitrogen fertiliser to land other than grassland

9.—(1) Subject to paragraphs (2) and (3), in relation to a holding the quantity of nitrogen fertiliser added to land other than grassland both by land application and by the animals themselves each year shall not exceed the crop requirements for nitrogen calculated in accordance with paragraphs (4) to (8).

(2) The amount of nitrogen fertiliser applied to land other than grassland both by land application and by the animals themselves shall not exceed the recommendations contained in the fertiliser technical standards.

(3) Save where regulation 10 applies the amount of total nitrogen in livestock manure applied to the agricultural area of a holding, both by land application and by the animals themselves, shall not exceed 170kg of nitrogen per hectare per year when calculated in accordance with paragraphs (4) and (5).

(4) The total nitrogen from livestock manure from animals kept on the holding is calculated in accordance with Table 1 of the Schedule.

(5) The total nitrogen from imported livestock manure is calculated in accordance with Table 2 of the Schedule for slurry and Table 3 of the Schedule for solid livestock manure.

(6) The total nitrogen content per tonne of other organic manure, excluding livestock manure, shall be as declared in accordance with the Waste Regulations.

(7) The amount of nitrogen available to a crop from livestock manure or chemical fertiliser in the year of application of that fertiliser is the percentage specified in Table 6 of the Schedule.

(8) Except in the case of livestock manure, the amount of nitrogen available to a crop from organic manure in the year of its application is the percentage specified in Table 6 of the Schedule, in relation to cattle and other livestock manure.

(9) Any controller wishing to deviate from the values set out in Tables 1, 2 or 3 of the Schedule must present a scientific case in order to obtain prior approval from the Department, and the Department shall only grant such approval where it is satisfied that a scientific case has been established.

(10) A controller may appeal the decision by the Department in paragraph (9) in accordance with the procedure set out in regulation 24.

Derogation from the measures governing the limits on land application of livestock manure

10.—(1) Where the Department approves a derogation for a grassland holding in accordance with this regulation, the total nitrogen in livestock manure from grazing livestock applied to that derogated holding shall not exceed 250kg of nitrogen per hectare per year when calculated in accordance with regulation 9(3) and (4).

(2) For the purposes of this provision “applied” means applied both by land application and by the animals themselves.

(3) With regards to derogation applications, the following provisions apply—

- (a) A controller seeking a derogation shall submit a derogation application annually to the Department no later than 1 March for that calendar year.
- (b) The Department shall grant or refuse a derogation application within 28 days from its receipt and where no response is received prior to the expiry of that period the derogation shall be deemed to have been granted.
- (c) The deemed approval of a derogation application shall not preclude service by the Department of a notice under regulation 23.
- (d) The controller may appeal the refusal by the Department of the derogation application under paragraph (b) in accordance with the procedure set out in regulation 24.

(4) With regards to fertilisation plans, the following provisions apply—

- (a) The controller of a derogated holding shall prepare and keep a fertilisation plan describing crop rotation and the planned application of nitrogen and phosphorus fertilisers to its agricultural area.
- (b) Fertilisation plans shall be made available on the derogated holding every year no later than 1 March for that calendar year.
- (c) Fertilisation plans shall include:
 - (i) the number of livestock on the derogated holding;
 - (ii) a description of livestock housing and livestock manure storage systems, including the volume of livestock manure storage available on the derogated holding;
 - (iii) the amount of nitrogen from livestock manure produced on the derogated holding calculated in accordance with Table 1 of the Schedule;
 - (iv) the amount of phosphorus from livestock manure produced on the derogated holding calculated in accordance with Table 7 of the Schedule;
 - (v) the crop rotation and area of each crop, including a sketch map indicating the location of the area of each crop;
 - (vi) the derogated holding's foreseeable nitrogen and phosphorus crop requirement in accordance with fertiliser technical standards;
 - (vii) the quantity of each type of organic manure moved on or off the derogated holding;
 - (viii) the results of soil analysis relating to nitrogen and phosphorus soil status if available;
 - (ix) the amount of nitrogen from nitrogen fertilisers applied in each area of the derogated holding under the same cropping regime and soil type calculated in accordance with Tables 1 to 6 of the Schedule;

- (x) the amount of nitrogen from other organic manure, excluding livestock manures, applied in each area of the derogated holding under the same cropping regime and soil type, as declared under regulation 8(5) and calculated in accordance with regulation 8(7);
 - (xi) the amount of phosphorus from phosphorus fertilisers applied in each area of the derogated holding under the same cropping regime and soil type calculated in accordance with Table 7 of the Schedule of these Regulations and Schedule 2 Table 1 of the Phosphorus Regulations; and
 - (xii) the amount of phosphorus from other organic manure, excluding livestock manures, applied in each area of the derogated holding under the same cropping regime, as declared in accordance with regulation 2(3) of the Phosphorus Regulations.
- (d) Where changes in agricultural practices necessitate changes in the fertilisation plan of a derogated holding the controller shall revise the plan within seven days of such changes taking effect.
- (5) With regards to fertilisation accounts—
- (a) the controller of a derogated holding shall submit fertilisation accounts for the calendar year to the Department by 1 March of the following year; and
 - (b) fertilisation accounts shall include:
 - (i) an account of the nitrogen crop requirement of the derogated holding;
 - (ii) an account of the nitrogen fertiliser applied to the derogated holding;
 - (iii) information relating to the derogated holding's management of dirty water; and
 - (iv) information to allow the calculation of the derogated holding's phosphorus balance.
- (6) At least every four years the controller of a derogated holding shall undertake nitrogen and phosphorus soil analysis of every four hectares of the agricultural area of the derogated holding under the same cropping regime and soil type.
- (7) The phosphorus balance of a derogated holding calculated in accordance with Tables 8 and 9 of the Schedule shall not exceed a surplus of 10kg phosphorus per hectare per year.

PART 4

STORAGE REQUIREMENTS

General obligations as to storage facilities for livestock manure and silage effluent

11. —(1) Subject to paragraphs (2) and (3) and regulations 13, 14, 15 and 16, the capacity of storage facilities for livestock manure and silage effluent of a holding shall be sufficient and adequate to provide for the storage of all the livestock manure and silage effluent which is likely to require storage on the holding for such period as may be necessary to ensure compliance with these Regulations and the avoidance of water pollution.

(2) For the purposes of paragraph (1), the controller shall have due regard to the storage capacity likely to be needed by the holding during periods of adverse weather conditions when, due to

extended periods of wet weather, frozen ground or otherwise, the application to land of organic manure is not permitted.

(3) Subject to regulation 12, the total livestock manure storage capacity on holdings shall be sufficient for at least 22 weeks storage.

(4) All storage facilities for livestock manure and silage effluent shall be maintained free of structural defect, shall be of such standard as is necessary, and be managed to prevent run-off or seepage, directly or indirectly, into a waterway or water contained in any underground strata and where applicable shall comply with The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003.

Obligations as to livestock manure storage capacity on pig and poultry enterprises

12. —(1) Subject to paragraphs (2) and (3), on holdings where there is a pig or poultry enterprise or both the total livestock manure storage capacity on holdings shall be sufficient for at least 26 weeks storage.

(2) On holdings with less than 10 breeding sow places or 150 finishing pig places and holdings with less than 500 poultry places the total livestock manure storage capacity on holdings shall be sufficient for at least 22 weeks storage.

(3) On holdings where there is:

- (a) a pig enterprise;
- (b) a poultry enterprise; or
- (c) both a pig and poultry enterprise,

in addition to another livestock enterprise the livestock manure storage capacity on holdings shall be sufficient for at least 26 weeks storage for the pig or poultry enterprise and at least 22 weeks storage for the other livestock enterprise.

Manner of storage of farmyard manure and location of storage facilities

13. —(1) Farmyard manure shall only be stored on a holding as follows:

(a) prior to land application or field storage, in a midden which shall have adequate effluent collection facilities; or

(b) prior to land application and subject to paragraphs (2), (3) and (4), in the field where land application will take place up to a maximum of 90 days from placement in that field.

(2) Where stored in a field, farmyard manure must not be stored in the same location of the field in consecutive years.

(3) Where stored in a field, farmyard manure must be stored in a compact heap and such heaps must not be placed within:

- (a) 50m of lakes;

- (b) 20m of any waterway, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate;
- (c) 50m around a borehole, spring or well;
- (d) 250m from any borehole used for a public water supply; or
- (e) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features).

(4) Subject to regulation 29, field storage of farmyard manure shall not be permitted from 31 October in any year to 31 January of the following year.

Manner of storage of poultry litter

14. — Prior to land application, poultry litter shall only be stored in a midden which shall have adequate effluent collection facilities.

Manner of storage of dirty water

15. Provision for the safe storage of dirty water should be available for those periods when weather and ground conditions, as set out in regulation 7(2), are unsuitable for land application.

Calculation of livestock manure storage capacity

16. —(1) In calculating the livestock manure storage capacity of a holding, the following farming practices may be taken into account:

- (a) the quantity of farmyard manure stored in a midden or field prior to land application in accordance with regulation 13;
- (b) any solids removed from slurry other than pig slurry by means of a slurry separator;
- (c) any additional storage available off the holding, by means of a rental agreement;
- (d) any valid contract the holding has with a manure processing facility or demonstrable access to an approved treatment or recovery outlet; and
- (e) the quantity of poultry litter stored in a midden prior to land application in accordance with regulation 14.

(2) Subject to paragraph (4), the livestock manure storage capacity of a holding may be less than the capacity specified in regulation 11 in relation to: –

- (a) sheep, deer and goats which are out-wintered at a grassland stocking rate which does not exceed 130 kg nitrogen at any time during the period specified in regulation 6(3) in relation to the application of organic manure as calculated in accordance with paragraph (6);
- (b) livestock (other than dairy cows, sheep, deer and goats) which are out-wintered at a grassland stocking rate which does not exceed 85 kg of nitrogen at any time during the period specified in regulation 6(3) in relation to the application of organic manure, as calculated in accordance with

paragraph (6), provided the amount of livestock manure produced on the holding does not exceed 140kg N/ha/year in accordance with regulation 9; and

(c) in the case of a mixed holding the nitrogen limit in sub-paragraph (b) shall apply except where the controller of the holding demonstrates to the Department that the livestock out-wintered more appropriately reflects the composition of the livestock applicable in sub-paragraph (a).

(3) The livestock manure storage capacity of a holding shall be calculated in accordance with:

(a) the livestock manure production figures specified in Table 5 of the Schedule; and

(b) any further procedures for calculating such storage capacity which will be specified in guidance relating to these Regulations.

(4) A holding falling within paragraph (2) must ensure that:

(a) out-wintered livestock have free access at all times to the required land area;

(b) land is maintained in good agricultural and environmental condition; and

(c) the reduction in storage capacity is proportionate to the extent of out-wintered livestock on the holding.

(5) Any land used for the purpose of out-wintering under paragraphs (2) and (4) must be under the control of the holding to which the exemption applies.

(6) In this regulation, a grassland stocking rate of 130 kg or 85 kg of nitrogen, as the case may be, means the stocking of grassland on a holding at any time by such numbers and types of livestock as would in the course of a year excrete waste products containing 130 kg or 85 kg of nitrogen, as the case may be, per hectare of the grassland when calculated in accordance with the nitrogen excretion rate for livestock specified in Table 1 of the Schedule.

(7) In this regulation, mixed holding means a holding where there are sheep, deer, goats and other livestock (other than dairy cows).

PART 5

MEASURES RELATING TO LAND MANAGEMENT

Cover in winter

17. — After harvesting a crop of cereals (other than maize), oil seeds or grain legumes (such as peas or beans) the controller shall ensure that from harvest to 1 March in the following year, one of the following conditions is met on the land at any time:

(a) the stubble of the harvested crop remains in the land;

(b) the land is sown with a crop which will take up nitrogen from the soil; or

(c) the land is left with a rough surface, ploughed or disced, to encourage the infiltration of rain.

Crop management

18. — In having regard to these Regulations, the following principles of crop management shall apply:

- (a) residues of crops harvested late, such as maize and potatoes, shall be left undisturbed until immediately prior to sowing the following spring; and
- (b) where grass leys are grown in rotation with arable crops the first crop should be sown as soon as possible after the grass has been ploughed.

Crop management for derogated holdings

19. — In addition to the measures mentioned in regulations 17 and 18, where regulation 10 applies the controller of a derogated holding shall carry out the following measures:

- (a) temporary grassland shall be ploughed in spring;
- (b) ploughed grass on all soil types shall be followed immediately by a crop with high nitrogen demand; and
- (c) crop rotation shall not include leguminous or other plants fixing atmospheric nitrogen except for grassland with less than 50% clover and to areas with cereals and pea undersown with grass.

PART 6

RECORD KEEPING AND COMPLIANCE MONITORING

Type of records required

20. — (1) On all holdings the controller shall keep sufficient records available for inspection by the Department as detailed in paragraphs (2) to (4).

(2) The records shall be kept so as to allow the following information to be ascertained on an annual basis: -

- (a) the controller of the land for the calendar year in question;
- (b) the total agricultural area including the size and location of each field;
- (c) the cropping regimes and their individual areas;
- (d) the soil nitrogen supply index for cropping areas other than grassland as estimated in accordance with the fertiliser technical standards;
- (e) the number of livestock kept on the holding, their species and type, and the length of time for which they were kept on the holding;
- (f) the capacity of livestock manure storage, and where applicable the details of rented storage, farmyard manure production, out wintered livestock, manure separation and manure processing facilities utilised;
- (g) the details of any rental or contractual agreement to demonstrate compliance with regulations

16(1)(c) and 16(1)(d);

(h) the quantity of each type of nitrogen fertiliser moved on or off the holding, the amount of each type of nitrogen fertiliser applied, the certified nitrogen content of the chemical fertiliser, the total nitrogen content per tonne of other organic manures as declared in accordance with regulations 8(5) and 9(6), the date of that movement and, in the case of organic manure, the name and address of the consignee, the consignor and any third party transporter of the manure; and

(i) evidence of the right to graze common land.

(3) Records under paragraph (2) of this regulation shall be prepared for each calendar year by 30 June of the following year and shall be retained for a period of 5 years from that date.

(4) The controller of a derogated holding shall retain the fertilisation plan and fertilisation account for each calendar year for that derogated holding for 5 years from the date upon which they were prepared or submitted to the Department, whichever is the later.

Duty of the controller not to provide false or misleading information

21. — The controller shall not compile records which are false or misleading to a material extent or furnish any such false or misleading records or any notice or other document for the purposes of these Regulations.

PART 7

ENFORCEMENT

Enforcement

22. —(1) The enforcement authority for the purpose of compliance with these Regulations shall be the Department or any person authorised by the Department.

(2) In ensuring compliance with these Regulations an authorised person may have regard to the Code of Good Agricultural Practice and any guidance produced on these Regulations.

(3) A person authorised under Article 72 of the Order may exercise any of the functions under that Article to determine or ensure compliance with these Regulations.

Notices

23. —(1) Where the Department is of the opinion that a controller is in breach or is likely to be in breach of these Regulations or has breached these Regulations in such circumstances which make it likely that the breach will continue or be repeated, the Department may serve a notice on the controller in accordance with this regulation.

(2) A notice served in accordance with paragraph (1) shall:

(a) require the controller upon whom it is served to carry out such works or to take reasonable precautions and other steps as the Department considers appropriate to remedy, or to prevent the continuation or repetition of, any contravention to which the notice relates;

- (b) state the period within which any such requirement is to be complied with; and
- (c) inform the controller on whom the notice is served of their right to appeal under regulation 24(1).

(3) Subject to paragraph (4), the period for compliance stated in the notice as per paragraph (2)(b) shall be such as is reasonable in the circumstances and shall not in any case be less than 28 days.

(4) A notice under paragraph (2) may be appealed in accordance with regulation 24 and such an appeal shall suspend the period of compliance under paragraph (2)(b).

(5) The Department may at any time: —

- (a) withdraw the notice;
- (b) extend the period for compliance; or
- (c) with the consent of the person on whom the notice is served, modify the requirement of the notice.

Appeals against notices requiring works etc

24. — Appeals under regulations 8(9), 9(10), 10(3)(d) and 23(4) shall be determined by the Appeals Commission in accordance with the procedure set down in Article 293 of the Water and Sewerage Services (Northern Ireland) Order 2006[15] and for the purposes of appeals under these Regulations references to the Department in Article 293 shall have the same meaning as under these Regulations.

Offences

25. —(1) It shall be an offence for the controller to fail to comply without reasonable excuse with regulation 4, 8(1), 9(3), 10(1), 10(6) or 10(7).

(2) It shall be an offence for the appropriate person to fail to comply without reasonable excuse with regulation 6(3), 6(4), 6(5), 7(2), 7(3), 7(6), 7(7) or 7(8).

(3) It shall be an offence for the controller to fail to comply with regulation 8(2), 8(8), 9(1), 9(2), 9(9), 10(4), 10(5), 11(1), 11(3), 12, 15, 17, 19, 20 or 21.

(4) It shall be an offence for the appropriate person to fail to comply with regulation 6(1), 6(2), 7(1), 7(4), 7(5), 7(9), 7(10), 11(4), 13, 14 or 18.

(5) It shall be an offence for a controller to fail without reasonable excuse to comply with the conditions of a notice issued under regulation 22.

(6) In paragraphs (2) and (4) “the appropriate person” means-

- (a) the controller;

(b) any person permitted by the controller to carry out, on their behalf, any activity described in these Regulations; and

(c) with regard to regulation 11(4)-

(i) the owner of any storage facility used for the storage of livestock manure and silage effluent; and

(ii) any person using such storage facilities for the storage of livestock manure and silage effluent.

Penalties

26. — Any person guilty of an offence under regulation 25 shall be liable:

(a) on summary conviction, to a fine not exceeding the statutory maximum together with a fine of an amount equal to one-tenth of that level for each day upon which the offence continues after the conviction; or

(b) on conviction on indictment to a fine or to imprisonment for a term not exceeding 2 years or both.

PART 8

POWERS, DUTIES AND FUNCTIONS OF THE DEPARTMENTS

Reporting

27. —(1) The Departments shall prepare at four-yearly intervals a report in accordance with Article 10 of the Directive.

(2) The Departments shall submit a report to the European Commission within 6 months of the reporting cycle which ends on 31 December 2011 and every four years thereafter.

(3) The Departments shall prepare and submit a report to the European Commission in accordance with Article X of the Commission Decision 2010/XXX/EC[16].

Reviewing

28. —(1) The Departments shall, every four years, in consultation with the public, review this action programme and, if appropriate, publish a revised action programme for the protection of water against nitrates from agricultural sources.

(2) An action programme shall include such measures necessary as required by Article 5 of the Directive and shall contain a review of the action programme most recently made and of such additional measures as may be required.

(3) The Departments shall:—

(a) ensure that in accordance with Article 2 of Directive 2003/35/EC[17] the public is given early and effective opportunity to participate in the preparation, review or revision of an action

¹⁶ OJL XXXX

¹⁷ OJL 156, 25.6.2003, p. 17–25

programme; and

(b) in doing so shall—

(i) ensure that the public is informed by public notices or other appropriate means such as electronic media, about any proposals for the preparation, review or revision of an action programme;

(ii) ensure that the information about the proposals referred to in paragraph (3)(a), is made available to the public, including information about the right to participate in decision making in relation to those proposals;

(iii) ensure that the public is entitled to make comments before any decision is made on the establishment, review or revision of an action programme;

(iv) in making any such decision, take due account of the results of the public participation; and

(v) having examined the comments made by the public, make reasonable efforts to inform the public of the decisions taken and the reasons and considerations on which these decisions are based, including information on the public participation process.

(4) In carrying out their functions under paragraph (3), the Departments shall ensure that reasonable time is allowed such as is sufficient to enable the public to participate effectively.

(5) In carrying out their functions under paragraph (3), where the Departments publish any information, the Departments shall:

(a) do so in a way as they consider appropriate for the purpose of bringing the information to the attention of the public; and

(b) make copies of that information accessible to the public free of charge through their websites or otherwise.

(6) The Departments shall specify in a notice on their websites or otherwise the detailed arrangements made to enable public participation in the preparation, review or revision of an action programme, including: -

(a) the address to which comments in relation to those proposals may be submitted; and

(b) the date by which such comments should be received.

PART 9

MISCELLANEOUS

Timescale for implementation of measures and transitional provision

29. —(1) Regulation 13(4) shall apply from 31 December 2012.

(2) A notice served under regulation 22 (Notices) of the Nitrates Action Programme Regulations

(Northern Ireland) 2006[18] shall, notwithstanding the revocation of those Regulations, be deemed to be a notice served under regulation 23 (Notices) with the coming into operation of these Regulations.

Consequential amendments

30. —(1) The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003[19] are amended as follows—

(a) in regulation 2(1A), substitute ‘2010’ for ‘2006’; and

(b) in Schedule 2, paragraph 6(1), substitute ‘2010’ for ‘2006’.

(2) Schedule 2 to the Waste Management Licensing Regulations (Northern Ireland) 2003[20] shall be amended as follows—

(a) in Part I, paragraphs 9, 10 and 11, sub-paragraphs (3)(c), (1)(c) and (3)(e) respectively, substitute ‘2010’ for ‘2006’;

(b) in Part I, paragraph 47A, sub-paragraph (1)(d) substitute ‘2010’ for ‘2006’;

(c) in Part I, paragraph 47B, sub-paragraph (c) substitute ‘2010’ for ‘2006’; and

(d) in Part III, paragraph 2(b) substitute ‘2010’ for ‘2006’.

Revocation

31. — (1) The following regulations are revoked—

(a) the Nitrates Action Programme Regulations (Northern Ireland) 2006[21];

(b) the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2008[22]; and

(c) the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009.[23].

Sealed with the Official Seal of the Department of Agriculture and Rural Development on

XX November 2010.

L.S.

John Speers

A senior officer of the Department of Agriculture and Rural Development

18 S.R. 2006 No. 489

19 S.R. 2003 No. 319

20 S.R. 2003 No. 493

21 S.R. 2006 No. 489

22 S.R. 2008 No. 196

23 S.R. 2009 No. 360

Sealed with the Official Seal of the Department of the Environment on

XX November 2010.

L.S.

Maggie Smith

A senior officer of the Department of the Environment

SCHEDULE

CRITERIA AS TO NUTRIENT MANAGEMENT

Table 1 – Regulations 8(3), 9(4), 10(4) and 16(6)

The nitrogen excretion rate for livestock

<i>Unit of livestock category</i>	<i>Production period or Age range</i>	<i>Body Weight kg</i>	<i>Occupancy % of year⁽¹⁾</i>	<i>Annual Nitrogen Production kg N</i>
Cattle				
Dairy Cow		575	100	91
Dairy heifer replacement	>2 years old	500	100	54
Beef suckler cow ⁽²⁾	> 2 years old	500	100	54
Bull beef	6-13.5 months	300	60	23
Grower fattener	> 2 years old	500	100	54
Grower fattener	12-24 months	400	100	47
Grower fattener	6-12 months	180	50	12
Calf	0-6 months	100	50	7
Calf to 12 months	12 months	180	100	19
Sheep				
Adult ewe/ram	>1 year old	50-70	100	9
Lamb	0-6 months	4-40	50	1.2
Lamb	6-12 months	30-50	50	3.2
Lamb to 1 year	12 months	4-50	100	4.4
Pigs				
Maiden gilt ⁽³⁾		90-130	100	11.1
Boar		130-250	100	17.5

1 sow place, includes litter to 7 kg ⁽⁴⁾	12 months	130-225	100	15.9
Weaner (Stage 1)	3-7.5 weeks	7-18	71	1.1
Weaner (Stage 2)	7.5-11 weeks	18-35	82	4.2
Grower	11-20 weeks	35-65	89	6.1
Finisher	11-23 weeks	35-105	86	8.3
Poultry				
1000 Laying hens		2200	98	607
1000 Broiler places ⁽⁵⁾	40 days	2000	73	255
1000 Broiler breeders	0-60 weeks	4000	91	878
1000 Broiler breeders (Laying)	18-60 weeks	4000	87.5	945
1000 Broiler breeder replacements ⁽⁶⁾	0-18 weeks	2000	46	142
1000 Replacement pullets ⁽⁷⁾	17 weeks	1600	38	113
1000 Turkeys (male) ⁽⁸⁾	140 days	12000	80	1284
1000 Turkeys (female) ⁽⁸⁾	120 days	8000	80	871
1000 Ducks	50 days	3400	85	834
Goat				9
Deer (red)	6 months–2 years			13
Deer (red)	>2 years			25
Deer (fallow)	6 months–2 years			7
Deer fallow	>2 years			13
Deer (sika)	6 months-2 years			6
Deer (sika)	>2 years			10
Horse	>3 years			50
Horse	2–3 years old			44
Horse	1–2 years old			36
Horse foal	< 1 year old			25
Donkey/small pony				30

(1) For individual farms where occupancy values differ from those given, nitrogen excretion values should be altered accordingly.

(2) Use the suckler cow data for beef and dairy bulls.

(3) Maiden gilts, assuming all year round accommodation.

(4) Sows based on 2.3 lactations, covering 23 per cent of year and dry period 77 per cent of year. Combined output 15.9 kg N/sow/year.

(5) Broilers, output per 6.6 crops/year, 40 day cycle (73 per cent occupancy).

(6) Broiler breeder replacements, output/24week cycle. Where there is more than one cycle per year adjust the output figures proportionately.

(7) Replacement pullets, output per 20 week cycle. Where there is more than one cycle per year adjust the output figures proportionately.

(8) Turkeys, assuming 2.1 or 2.4 crops per year, for male and female birds respectively.

Table 2 – Regulations 8(4) and 9(5)

Total nitrogen content of slurry and dirty water on a fresh weight basis

<i>Livestock type</i>	<i>DM content (%)⁽¹⁾</i>	<i>Total nitrogen (kg/ m³)⁽¹⁾</i>
Dairy Cattle	2	1.5
	6	3.0
	10	4.0
Beef Cattle	2	1.0
	6	2.3
	10	3.5
Pigs	2	1.3
	4	1.7
	6	2.1
Separated cattle slurries (liquid portion)		
Strainer box	1.5	1.5
Weeping wall	3	2
Mechanical separator	4	3
Dirty Water	<1	0.3

(1) Figures in bold – most common values

Table 3 – Regulations 8(4) and 9(5)

Total nitrogen contained in 1 tonne of solid organic manures

<i>Livestock type</i>	<i>DM content (%)</i>	<i>Total nitrogen (kg)</i>
Poultry manure		
Broilers	60	30.0
Layers	30	16.0
Turkeys	60	30.0
Ducks	25	6.5
Cattle FYM	25	6.0
Sheep FYM	25	6.0
Pig FYM	25	7.0

Table 4 – Regulation 8(2)

Nitrogen application standards for grassland crops

	<i>*Dairy Cattle</i>	<i>*Other Livestock</i>
Balance of crop nitrogen requirement (kg N/ha/year) (e.g. from chemical fertiliser or organic nitrogen supply other than livestock manure)	272	222
This table does not imply any departure from regulation 8(2) or 9(3) which prohibit the application to the agricultural area on a holding of livestock manure in amounts which exceed 170kg N/ha/year, including that deposited by the animals themselves.		
The Dairy Cattle figures (dairy cows and heifer replacements) apply where it can be demonstrated that more than 50% of the livestock manure applied to the agricultural area, both by land application and by the animals themselves, arises from dairy cattle. In all other cases the figures for Other Livestock will apply.		

Table 5 – Regulation 16(3)

Livestock manure production figures

<i>Type of livestock</i>	<i>Volume of excreta produce per animal per week (m³)⁽¹⁾</i>	
Cattle		
Dairy cow	575kg	0.37
Suckler Cow	500kg	0.23
Cattle > 2 years	500kg	0.23
Cattle 1 – 2 years	400kg	0.18

Cattle 0.5 – 1 year	180kg	0.09
Calf	100kg	0.05
Sheep		
Adult ewe	65kg	0.03
Fattening Lamb	35kg	0.01
Pigs		
Gilt	90 – 130kg	0.05
1 Sow & litter	130 – 225kg	0.08
1 Weaner (Stage 1)	7 – 18kg	0.01
1 Grower (Stage 2)	18 – 35kg	0.02
1 Finisher meal fed (Stage 3)	35 – 105kg	0.03
1 Finisher liquid fed (Stage 3)	35 – 105kg	0.05
Poultry		
1000 laying hens		0.81

⁽ⁱ⁾ The standard figures for slurry produced by animals do not include water for cleaning buildings.

Table 6 – Regulations 8(6), 8(7), 9(7) and 9(8)

Nitrogen availability in livestock manures and chemical fertilisers

<i>Fertiliser</i>	<i>Nitrogen availability (%) in year of application</i>
Chemical	100
Pig Manure	50
Poultry litter	30
Farmyard manure	30
Cattle and other livestock manure	40

Table 7 – Regulations 10(4)(d)(iv) and (xi)

Phosphorus (P) excretion values

<i>Stock Type</i>	<i>P kg excretion per annum</i>
Dairy cows	16.6
Suckler Cows	10.1
Breeding Bull	10.1

Cattle over 2 years	10.1
Cattle 1-2 years	7.9
Bull beef (0-13 months)	7.5
Calves 6 months to 1 year	3.0
Calves under 6 months	1.7
Adult ewe/ram	1.0
Fattening lamb	0.3
Boars	4.2
Maiden Gilt	5.7
Sow and litter up to weaning	8.7
Pigs 18 kg -35 kg	2.0
Pigs 18 kg – 105 kg	5.3
Pigs 35 kg -105 kg	3.3
Broilers (1000)	189.7
Male turkeys (1000)	534.1
Female turkeys (1000)	250.7
Fattening ducks (1000)	392.4
Broiler breeders (1000)	319.3
Pullets (1000)	41.1
Layers (1000)	237.6
Horse (>3 years old)	9
Horse (2-3 years old)	8
Horse (1-2 years old)	6
Horse foal (< 1 year old)	3
Donkey/small pony	5
Goat	1
Deer (red) 6 months - 2 years	2
Deer (red) > 2 years	4
Deer (fallow) 6 months - 2 years	1
Deer (fallow) > 2 years	2
Deer (sika) 6 months - 2 years	1
Deer (sika) > 2 years	2

Table 8 – Regulation 10(7)

Phosphorus (P) content of agricultural products and feedstuffs

<i>Agricultural Product</i>	<i>Phosphorus content % fresh weight</i>
Poultry concentrate	0.5 (or actual declared content)
Pig concentrate	0.48 (or actual declared content)
Ruminant concentrate	0.55 (or actual declared content)
All other concentrates	0.58 (or actual declared content)
Cattle	0.66
Milk	0.10

Sheep	0.54
Wool	0.04
Pigs	0.50
Poultry	0.58
Eggs	0.22
Straw	0.10
Silage	0.06
Hay	0.30
Potatoes	0.04
Oats	0.29
Barley	0.30
Wheat	0.26
Maize	0.25
Full Fat Soya	0.45
Linseed	0.81
Rape	1.10
Soya	0.68
Sunflower	0.93
Gluten	0.96
Citrus	0.1
Wheat Distillers	0.77
Corn Distillers	0.77
Peas	0.44
Palm Kernal	0.63
Pollard	1.00
Soya Hulls	0.14
Sugar Beet	0.1

Table 9 – Regulation 10(7)

Phosphorus (P) content of Organic Manures

<i>Agricultural Product</i>	<i>Dry Matter %⁽¹⁾</i>	<i>Phosphorus content (kg P/m³)^{(1) (2)}</i>
Dairy Slurry	2	0.26
	6	0.52
	10	0.87
Beef Cattle	2	0.26
	6	0.52
	10	0.87
Pig Slurry	2	0.44
	4	0.87
	6	1.31
Separated cattle slurries (liquid portion)		

Strainer box	1.5	0.13
Weeping wall	3	0.22
Mechanical separator	4	0.52
	<i>Dry Matter %</i>	<i>Phosphorus content (kg P/t)</i>
Cattle FYM	25	1.53
Pig FYM	25	3.05
Sheep FYM	25	0.87
Duck manure	25	2.40
Layer manure	30	5.67
Broiler / turkey	60	10.91

⁽¹⁾ Figures in bold are most common values.

⁽²⁾ For calculation purposes assume 1m³ of slurry weighs 1 tonne.

The phosphorus balance will be the difference between phosphorus inputs to the farm less the total of phosphorus outputs leaving the farm. It is calculated per unit area of agricultural land on the holding and is based upon the following:

Inputs include: P in chemical fertiliser (quantity and P content)
P in feedstuffs (quantity and P content)
P in any organic manure imported onto farm (quantity and P content – use standard values for P content)

less

Outputs include: P in produce – for example meat, milk and crops (use standard values for P content of each product)
P exported in organic manures (quantity and P content)

The balance is inputs less outputs divided by the agricultural area for each calendar year.

Note: inputs of phosphorus to agricultural land in precipitation and losses of phosphorus from the farm to surface or groundwaters are excluded from the balance calculation.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations give further effect to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources and Council Directive 2003/35/EC on public participation in respect of the drawing up of certain plans and programmes relating to the environment. They revoke and replace the Nitrates Action Programme Regulations (Northern Ireland) 2006, the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2008 and the Nitrates Action Programme (Amendment) Regulations (Northern Ireland) 2009.

Regulation 2 establishes and introduces an action programme that is applicable to all farmers across Northern Ireland.

Regulation 4 imposes an obligation on the controller of a holding to prevent water pollution.

Regulation 5 imposes obligations on the controller of a holding in complying with these Regulations to have regard to any guidance issued by the Department of the Environment and/or the Department of Agriculture and Rural Development and the Code of Good Agricultural Practice issued by the Department of Agriculture and Rural Development.

Regulation 6 establishes closed periods for the land application of chemical fertiliser to grassland and non grassland crops and closed periods for the land application of organic manure, excluding dirty water.

Regulation 7 establishes the manner of application and spreading of nitrogen fertiliser (including dirty water) including the minimum distances from waterways, the weight and volume of solid organic manure and slurry that may be applied and the period of time to be left between applications.

Regulations 8 and 9 limit the land application of nitrogen fertiliser to 170kg N/ha/year and set limits for the amount of chemical fertiliser and organic manures that may be applied in relation to crop requirement for grass and other crops. These limits are currently calculated by using the values set out in DEFRA's Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) 2000 7th Edition, the Schedule of these Regulations and the Waste Management Licensing Regulations (Northern Ireland) 2003. Regulations 8 and 9 also allow for a scientific case to be presented to deviate from the values set in Tables 1, 2 or 3 of the Schedule to the Regulations in respect of nitrogen excretion values, total nitrogen content of slurry, dirty water and solid organic manures.

Regulation 10 prescribes the requirements to be complied with for grassland holdings with an approved derogation from the measures governing the limits on land application of livestock manure, in accordance with Commission Decision 2010/XXX/EC

Regulations 11 to 14 detail the requirements for the provision of livestock manure storage and establish the type of storage, how the different manures are to be stored, the location of the storage and the duration of storage, including the minimum duration required.

Regulation 15 sets out how to store dirty water.

Regulation 16 advises how to calculate storage capacity and on farm practices, including out-wintering of livestock (other than dairy cows), that may be taken into account when calculating such capacity.

Regulations 17 and 18 prescribe soil cover and detail crop management in order to minimise soil erosion and nutrient run-off.

Regulation 19 details further crop management practices for grassland holdings with an approved derogation

Regulation 20 imposes an obligation on the controller of a holding to keep detailed records sufficient to ascertain the identity of the controller of the holding for the calendar year, the total agricultural area of the holding, the crop regime for individual areas within the holding, the number of livestock on the holding, the livestock manure storage capacity and storage arrangements of the holding and the quantity of nitrogen fertiliser moved on and off the holding. These records must be ready for inspection and held for 5 years.

Regulation 21 prescribes that these records must be accurate and not misleading.

Regulation 22 establishes the Department of the Environment as the enforcement authority and its authority to carry out these functions in accordance with the Waste and Contaminated Land (Northern Ireland) Order 1997.

Regulation 23 prescribes how the Department of the Environment may serve a notice if a controller of a holding is in breach of the Regulations and the requirements to be met when the notice is served.

Regulation 24 creates a right of appeal to the Water Appeals Commission against any notice issued under regulation 22. It also provides the procedures for an appeal against a refusal for a deviation under regulations 9 and 10.

Regulations 25 and 26 set out offences and defences for failing to comply with the Regulations and their corresponding penalties.

Regulation 27 establishes the duty on the Departments to submit a report to the European Commission in accordance with Article 10 of the Nitrates Directive within 6 months of the end of the reporting cycle which ends on 31 December 2007 and every four years thereafter.

Regulation 28 imposes a duty on the Departments to review the action programme, through a consultative process, every four years.

Regulation 29 creates an exemption from the requirement to comply with the closed period for storage of farmyard manure in a field until the 1. In the case of poultry litter this regulation limits the storage in a field until 31 December 2012. It also deems notices served under regulation 22 of the Nitrates Action Programme Regulations (Northern Ireland) 2006 to be notices under these Regulations from 1 January 2011.

Regulation 30 makes consequential amendments to The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 and The Waste Management Licensing Regulations (Northern Ireland) 2003 to maintain consistency with these Regulations.

Regulation 31 provides for the revocation of a number of statutory provisions consequent upon the coming into operation of these Regulations.

Copies of the Code of Good Agricultural Practice for the Prevention of Pollution of Water, Air and Soil, referred to in regulation 5, may be obtained from the Department of Agriculture and Rural Development's website: <http://www.dardni.gov.uk>

Copies of the Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) may be obtained from the Department for Environment, Food and Rural Affairs website: <http://www.defra.gov.uk>

Copies of Council Directive 91/676/EEC may be obtained from the Stationery Office, 16 Arthur Street, Belfast, BT1 4GD.

Annex B

Partial Regulatory Impact Assessment

The Nitrates Action Programme Regulations (Northern Ireland) 2010

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1. Title of Proposal

The Nitrates Action Programme Regulations (Northern Ireland) 2010

2. Purpose and Intended Effect of Measure

(i) The Objective

The Nitrates Directive (91/676/EEC) (the Directive) aims to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. In particular, it is about promoting better management of animal manures, chemical nitrogen fertilisers and other nitrogen-containing materials spread onto land.

(ii) The Background

The Directive allows Member States to either designate and apply action programmes to discrete areas of land known as Nitrate Vulnerable Zones (NVZs), or establish an action programme to be applied to the whole territory. Action programmes require farmers to observe rules to reduce nitrate pollution, with measures on storing manure and controls on the application of manure and chemical nitrogen fertiliser to land.

Northern Ireland has a widespread problem of eutrophication of surface waters and a large proportion of this nutrient enrichment is attributable to agriculture. Following extensive consultation, the total territory of Northern Ireland was established as the area to which an action programme would be applied.

On 1 January 2007 the Nitrates Action Programme Regulations (Northern Ireland) 2006 (the 2006 NAP Regulations) came into operation. The Regulations apply to all agricultural land (as defined in the Agriculture Act (Northern Ireland) 1949) and, therefore, affect all farm businesses in Northern Ireland which produce livestock manure, or store or apply organic manure or chemical nitrogen fertiliser to land.

The key measures in the 2006 NAP Regulations include: a closed period for the spreading of organic and chemical nitrogen fertilisers; a minimum livestock manure storage requirement; a limit on the amount of nitrogen that can be applied to land from livestock manures of 170 kg nitrogen per hectare per year (kg N/ha/year); and the inclusion of nitrogen efficiency measures.

Following the introduction of the 2006 NAP Regulations, Northern Ireland successfully applied to the European Commission (the Commission) for Derogation allowing farmers who meet certain criteria to apply up to 250 kg N/ha/year from grazing livestock manures. The Derogation is particularly important for intensive grassland farms and amending Regulations came into operation on 9 June 2008. The Commission Decision (2007/863/EC) granting this Derogation expires on 31 December 2010 and needs to be renewed. The process to obtain Derogation is allowed for in the Directive

The Directive requires Members States to review and where necessary revise their action programmes, including additional measures, at least every four years. The 2006 NAP Regulations must therefore also be reviewed by 31 December 2010.

A Scientific Working Group (SWG) comprising officials from DARD, DOE (including NIEA), and AFBI was convened to carry out this review in 2009. The SWG assessed the effectiveness of the action programme through the results of water quality

monitoring, evaluation of changes in farming practice and assessment of compliance with the action programme measures. The SWG made proposals for revision of the measures and presented these to stakeholders. Stakeholder comments were incorporated into a final Review Report which was submitted to the Commission on 21 December 2009.

Officials have also been engaged in a number of meetings with the Commission and have made presentations to the EU Nitrates Committee comprised of representatives of all the Member States. The Commission will wish to see an acceptable action programme in place before presenting a draft Derogation Decision to a Member State vote at this Committee.

The Departments propose to revise the current action programme (2007-2010) by revoking the 2006 NAP Regulations and making the Nitrates Action Programme Regulations (Northern Ireland) 2010 (2010 NAP Regulations). This will also allow consolidation of the 2006 NAP Regulations and the 2008 and 2009 amending Regulations in line with Better Regulation principles.

With the exception of the measures described in detail in Section 5 (Costs), the measures contained in the 2006 NAP Regulations will be carried forward into the action programme for the period 2011 to 2014 (in the 2010 NAP Regulations). This will allow time for the existing measures to “bed-in” and for sufficient data to be collected to determine environmental response.

(iii) Risk Assessment

The Directive requires Member States to monitor surface freshwaters and groundwaters for nitrate pollution against a maximum limit of 50mg of nitrate per litre (NO₃/l). Secondly, the Member State must assess the trophic status of surface waters. Where the 50mg NO₃/l limit is exceeded, or where surface waters are founded to be eutrophic, or where trends indicate that either criteria could be reached if action programmes under the Directive are not established, Member States must determine the agricultural nitrate contribution to these. If a significant amount of the nitrate present in these waters comes from agricultural sources, then the Member State is required to designate their catchments as NVZs and to apply action programmes to control agricultural pollution to those zones. Alternatively, Member States may apply action programme(s) across their whole territory, in which case there is no requirement to designate specific NVZs.

With respect to the 50mg NO₃/l limit, nitrate concentrations in both surface waters and groundwaters in Northern Ireland are generally low and only limited areas are impacted by high concentrations.

Eutrophication, however, is considered to be the most widespread threat to good water quality in Northern Ireland with a large proportion of surface waters, both freshwater and marine, impacted. Eutrophication is the enrichment of waters by nutrients causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned.

For surface freshwaters, phosphorus is the main nutrient of concern. Normally, it is in short supply, therefore limiting the growth of plants (sometimes referred to as the ‘limiting nutrient’). In coastal and marine waters, nitrogen is generally the limiting nutrient. However, scientific studies show that in freshwaters and marine waters, nitrogen and phosphorus can each be limiting factors, either together or in turn,

depending on a range of factors such as the plant species present and the time of year. There is a requirement to control losses to waters of both nutrients.

Evidence suggests that about 75% of diffuse nitrate loadings into water in Northern Ireland is caused by agriculture. This is perhaps unsurprising given that agriculture covers just under 80% of the land area and that substances that give rise to the nitrate inputs (i.e. chemical nitrogen fertilisers and manures including slurry) are essential, integral elements of the farmer's business.

In August 2002 DOE and DARD published a scientific report, entitled "*Report on the Environmental Aspects of the Nitrates Directive*", which focused essentially on analysing the agricultural contribution to nutrients in eutrophic waters. The findings of this and subsequent analyses concluded that:

- agriculture is the most significant source of nitrate in both Lough Neagh and Lough Erne contributing 75% and 92% of the total nitrate loading respectively;
- nitrate from agriculture formed the dominant proportion of the annual nitrate loading in the remaining eutrophic areas: Tidal River Lagan (78%), Inner Belfast Lough (73%) and Quoile Pondage (94%); and
- there are also significant nitrate loadings in the other larger catchments in Northern Ireland as follows: River Foyle (92%), Lough Foyle (90%), Lower Bann (92%), Strangford Lough (90%), and Tidal Newry River (96%).

The Review Report 2009 confirmed that nitrate levels in surface freshwaters and groundwater appear to be generally stable and that long-term trend analysis shows that the monthly trends in average nitrate and phosphorus concentrations in rivers in Northern Ireland are predominantly decreasing or stable. However, there is still evidence of the impacts of eutrophication in rivers, lakes and marine waters. The report concluded that it will take longer for a response to be detected in biological indicators of trophic status and in lakes and marine waters.

The agricultural activities which give rise to water pollution are mainly:

- inadequate farmyard management e.g. in relation to provision of livestock manure storage facilities of adequate capacity, interception of soiled water, diversion of unsoiled surface water;
- application of fertilisers (organic and chemical nitrogen) to land in an inappropriate manner e.g. on wet or frozen land, too close to watercourses, in wet weather conditions, application of excessive quantities of liquid, on land sloping steeply towards water courses; and
- the over-application of fertilisers to land, typically over an extended period that increases levels of nutrients in the soils which increases the incidence/risk of nutrients leaching from soil to water.

The Review Report 2009 also highlighted that trends in fertiliser use and improved use of manures are very encouraging and that compliance with existing measures is generally good. However there were still some key areas which require further awareness and training to improve compliance.

3. Options

Two options have been identified to help protect water resources from the impact of agricultural nitrate and are compared to the 'business as usual' or 'do nothing' option, as follows:

Option 1: Do nothing, or 'business as usual' scenario; i.e. do not amend the 2006 NAP Regulations;

Option 2: Make all proposed amendments to the 2006 NAP Regulations operational from 1 January 2011; or,

Option 3: Allow a phase-in period for a closed period for farmyard manure field storage and make all other proposed amendments to the 2006 NAP Regulations operational from 1 January 2011.

4. Explanation of Options

Option 1: *Do nothing or business as usual scenario*

The Directive requires Member States to review and, where necessary, revise their action programmes, including additional measures, at least every four years. The 2006 NAP Regulations are due to be reviewed by 31 December 2010. A scientific review has been completed and discussions have taken place with the Commission on proposed amendments to the action programme. If the 2006 NAP Regulations are not amended the Commission may use its Treaty powers to seek judgement at the European Court of Justice to secure compliance by the UK Government with the Directive. This could result in significant fines to the Northern Ireland Executive which would ultimately be paid from the public purse.

The Commission Decision granting the Derogation must be renewed before 31 December 2010. An acceptable action programme is a pre-requisite for renewal of the Derogation. The Derogation is particularly important for intensive grassland farms, with approximately 150 farms currently operating under a derogation in Northern Ireland. If the Derogation is not renewed (because the Commission is not content with the proposed action programme), this would have a serious impact on farms currently operating under it, and other farm businesses which might have considered applying for a derogation in the future.

It is therefore not feasible for the Departments to do nothing and Option 1 is ruled out.

Option 2: *Make all proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

This option is likely to satisfy the requirements of the Commission. However, during discussions the need to phase-in some measures over the next period of the action programme was recognised. Making all amending measures operational from 1 January 2011 could present practical difficulties for farm businesses which may need to alter their farming practices in line with new requirements. This is particularly the case where alternative storage would be required to comply with a closed period for field storage of farmyard manure.

Option 3: *Allow a phase-in period for a closed period for farmyard manure field storage (to be operational from 1 January 2013) and make all other proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

This option reflects discussion with the Commission and is likely to satisfy the requirements to proceed with the Derogation application. This option would give farm businesses time to examine whether their current farming practices are in line with the new requirements for storage of farmyard manure during the closed period in the 2010 NAP Regulations, consider options and make any necessary adjustments in a timely and proportionate manner. It is worth noting that the same argument cannot be made for storage of poultry litter as the inclusion of field heaps was a temporary measure until 31 December 2008 and has already been extended to 31 December 2010. For these reasons, this is the recommended option.

5. Costs

Option 1: *Do nothing or business as usual scenario*

Under this option there would be no additional cost to most of the agricultural industry, however, as already described, the option could result in significant fines being imposed by the Commission on the Northern Ireland Executive which would ultimately be paid from the public purse.

In addition, as discussed in Section 4, it is likely that the Commission would not proceed with the application to renew the Derogation Decision for Northern Ireland. Loss of the Derogation would impact on intensive grassland farms in particular. There are currently 150 farms operating under a derogation in Northern Ireland and if it were not renewed they would have to take alternative action such as destocking or renting additional land to comply with the 170 kg N/ha/year limit. To analyse the cost impact of this outcome, three scenarios are considered below.

a. *Destocking*

An analysis of farms currently operating under a derogation indicates that, on average, in order to comply with the 170 kg N/ha/year limit, each farm would have to de-stock by 18 dairy cows. At a gross margin of £580 per dairy cow this equates to a loss of £10,440 gross margin per farm. The gross margin of £580 per dairy cow is calculated from 2009 data, when returns for the dairy sector were low. In other years, where returns are better, the gross margin per cow, and therefore the cost of destocking, could be significantly higher. For example in 2008, the gross margin per dairy cow was £670 and at that level of return the cost of destocking would be £12,060 gross margin per farm. In 2007, the gross margin per dairy cow was £843 and at that level of return the cost of destocking would be £15,174 gross margin per farm. Therefore, based on these gross margins the total cost could range from £1.57m to £2.28m per year.

b. *Renting additional land*

If farms opted to rent additional land, the maximum cost would be approximately £6.5m per year. This assumes that the additional land required could be sourced and is taken in conacre at £250/ha.

c. *Exporting Manure*

Farms theoretically could also comply with the 170 kg N/ha/year limit by exporting manure to other farms. However, it is assumed that this is not a viable option for the farms operating under a derogation. If it had been viable, the farms in question would have been unlikely to apply for a derogation in the first instance.

It should be noted that these costs are based on the 150 farms currently operating under a derogation and do not allow for potential costs to other farms which may have availed of a derogation in the future. A derogation enables dairy farms to maximise grass-based production and substantially more farms could potentially avail of it. For example, in the Republic of Ireland a much higher proportion of farms operate under a derogation, with some 5,000 farms in total. The approximate total number of farm businesses in Northern Ireland which it was estimated could benefit from a derogation (i.e. intensive grassland dairy and beef farms) was 730. Therefore the maximum potential loss of income to the agricultural industry if the Derogation Decision is not renewed is $730 \times \text{£}(6.5/150)\text{m}$, i.e. £31.6m per year. Therefore, the loss of the Derogation in the future could have a significantly higher cost to the local agricultural industry in the long term.

If the Derogation Decision is not renewed, costs to Government associated with its implementation would be reduced as NIEA would no longer have to process applications and assess compliance with Derogation conditions. The cost of the research, monitoring and reporting specifically required for the Derogation would also be saved.

Option 2: *Make all proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

and

Option 3: *Allow a phase-in period for a closed period for farmyard manure field storage (to be operational from 1 January 2013) and make all other proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

The costs for Options 2 and 3 are similar and will be considered together.

Some additional costs to farm businesses in Northern Ireland are likely to arise from proposed amendments to measures in the 2006 NAP Regulations. The proposed amendments and any associated estimated costs are discussed below. Further detail on the reasoning for the proposed amendments can be found in the attached Consultation Paper. References below refer to the attached draft of the 2010 NAP Regulations in Annex A.

1. *The amendment of the definition of steeply sloping land to mean land which has an average incline of 20% or more in the case of grassland or 15% or more in the case of other land, and the amendment of regulation 7(2)(f) to remove the risk clause regarding application of fertiliser to steeply sloping ground*

Firstly, these amendments would impact on all arable land with an average incline of 15% to 20% and all arable land with an incline greater than 20% where it was previously judged (under the 2006 NAP Regulations) that fertiliser application did not pose a risk of water pollution. While it is difficult to accurately quantify how much arable land would be affected, the best estimate is a total of 270 ha. The amendment would prevent any fertiliser applications to this land (including manure

spreading) and the resulting reduction in yield would be likely to make it unviable to grow arable crops.

To analyse the cost impact, three scenarios are considered:

- a. no alternative use of the land is found. Taking the typical gross margin for spring barley of £404/ha, the total cost in this scenario would be approximately £110,000 per year:
- b. land is returned to grassland and used for a livestock enterprise. Livestock enterprises produce a wide range of gross margins. Hill suckler cows, for example, produce a gross margin of £150/ha. This represents a reduction of £254/ha in gross margin compared with spring barley. The total cost in this scenario would be approximately £69,000 per year; or
- c. land is let in conacre. The lease of land would yield approximately £250/ha. This represents a net reduction of £154/ha compared to spring barley. The total cost of this scenario would be approximately £42,000 per year.

In summary, depending on the alternative use, if any, of the land affected, the total cost could range from £42,000 to £110,000 per year.

Removing the risk clause would also prevent the application of fertiliser (including manure) to all grassland over 20% slope. It is difficult to accurately determine this impact of the amendment as under the 2006 NAP Regulations applications were already prohibited where it was judged they posed a risk of water pollution. No data is available on the amount of steeply sloping land that currently receives fertiliser and manure (where the practice is assessed to pose no risk of water pollution). However, it is likely that chemical fertiliser and manures will not be spread on many steep grassland slopes because it is not practical for the spreading machinery to operate on such terrain. Costs for industry are, therefore, assumed to be negligible.

2. *The amendment of regulation 6 to include a closed period for spreading of farmyard manure from 31st October until 31st January*

No direct costs are associated with this amendment.

3. *The amendment of regulation 7(4) to increase the spreading distance for the application of chemical nitrogen fertiliser to 2 m from any waterway*

It is difficult to accurately determine the impact of this amendment as there is no data available to indicate how much of the land in question currently receives chemical fertiliser. However, if it is assumed that all agricultural land in lowland areas and one third in Less Favoured Areas currently receives chemical fertiliser, approximately 1632 ha would be affected.

Prohibiting chemical fertiliser application to this land would result in a reduction in grass or crop yield of around 25%. Based on the Northern Ireland average gross margin of £440/ha/year, for grazing livestock enterprises, this equates to a loss of £110 /ha/year. Therefore, the overall cost could be in the region of £180k per year.

4. *The amendment of Regulations 11(1) and 11(4) to include a requirement for farmers to manage silage effluent storage facilities to prevent pollution*

Silage effluent is a highly polluting material that can cause high severity pollution incidents and fish kills. It has a biochemical oxygen demand four times greater than that of cattle slurry. NIEA have reported an average of approximately 90 pollution incidents per year (from 2007 to 2009) as a consequence of inadequate management of silage effluent collection and storage facilities. Under the Directive there is a requirement to put in place measures to prevent water pollution by run-off and seepage into groundwater and surface water of liquids containing livestock manures and effluents from stored plant materials such as silage. In the 2006 NAP Regulations there is already a requirement to construct and maintain silage effluent storage facilities to prevent water pollution. The Departments propose to include a requirement in the 2010 NAP Regulations for farmers to also manage these facilities to prevent pollution, e.g. clear out drains to ensure that effluent can collect in the tank or remove effluent from full tanks to other storage to prevent overflow. As these management procedures are already part of good farming practice, it is not anticipated that this requirement should lead to any additional cost to the agricultural industry.

5. The amendment of regulation 13 to introduce a closed period for the field storage of farmyard manure. (Under Option 2 this would be operational from 1 January 2011 and under Option 3 this would be operational from 1 January 2013)

It is estimated that 500 mainly beef and sheep farms in the Less Favoured Areas may be affected by this amendment. This assumes that 500 farms opt to build middens as they have no alternative means of complying with the Regulations. Three types of storage facility could be built to assist with compliance with the amended regulation 13. Costs for these are summarised in the table below and are based on a midden size of 10m x 10m (estimated to be the appropriate size for the farms in question). The costs include provision for effluent collection and storage.

Storage Facility	Cost Per Farm £	No of Farms	Total Cost £
Type 1: basic midden with no side walls	7,000	500	3.5m
Type 2: unroofed midden with side walls	11,000	500	5.5m
Type 3: midden with side walls and roof	15,000	500	7.5m

Therefore, the total estimated one-off capital costs range from £3.5m to £7.5m. These storage facilities should have a lifespan of at least 20 years. Using a discount rate of 3.5% to annualise these costs gives an equivalent range of approx £247k to £528k per annum (over 20 years).

6. The amendment of regulation 13 so that the length of time farmyard manure may be stored in a field, prior to spreading, is reduced from 180 days to 90 days

No additional costs are anticipated under this amendment.

7. Field storage of poultry litter not permitted after 31 December 2010 (i.e. no extension to the temporary measure in the 2006 NAP Regulations)

The number of farms affected is estimated at 45. This is based on an assessment of poultry farms which currently rely on storing poultry litter in field heaps. It indicates that 45 farms may opt to build middens as they have no alternative means of complying with the Regulations. Three types of storage facility could be built to assist with compliance with the Regulations. Costs for these are summarised in the table below and are based on a midden size of 24m x 10m which is sufficient for a farm with three poultry houses. The costs include provision for effluent collection and storage.

Storage Facility	Cost Per Farm £	No of Farms	Total Cost £
Type 1: basic midden with no side walls	16,000	45	720k
Type 2: unroofed midden with side walls	25,000	45	1.125m
Type 3: midden with side walls and roof	35,000	45	1.575m

Therefore, the total estimated one-off capital costs range from £720k to £1.58m. These storage facilities should have a lifespan of at least 20 years. Using a discount rate of 3.5% to annualise these costs gives an equivalent range of approximately £51k to £111k per annum (over 20 years).

8. The amendment of Tables 1 and 2 of the Schedule to include new values for pig nitrogen excretion rates and total nitrogen content of pig slurry respectively

No additional costs are anticipated under this amendment. The new values will allow for a more accurate calculation of the nitrogen content of pig slurry, thus resulting in more efficient use when land spread. This should also result in reduced usage of chemical nitrogen fertiliser as farmers will be able to match manure and chemical fertiliser applications to crop requirements more accurately.

9. The proposed amendment of Table 3 of the Schedule to include new values for total nitrogen contents of solid poultry manure from forthcoming research

No additional costs are anticipated under this amendment. The new values will allow for a more accurate calculation of the nitrogen content of poultry litter and manure, thus resulting in more efficient use when land spread. This should also result in reduced usage of chemical nitrogen fertiliser as farmers will be able to match manure and chemical fertiliser applications to crop requirements, more accurately.

10. The amendment of Table 8 of the Schedule to include the standard phosphorus content of a greater range of agricultural products and feedstuffs for those farms operating under a derogation

This amendment should not increase costs to the industry. It should make the completion of fertilisation accounts for derogated farms simpler, in line with Better Regulation principles.

6. Other costs

As well as costs to the agricultural industry, Options 2 and 3 will result in costs to Government. Changes to the required measures included in the 2010 NAP Regulations will necessitate the provision of further guidance and training to farm businesses. These could range from £50,000 for re-issue to all active farm businesses in Northern Ireland of a revised and updated Guidance Booklet (first issued for the 2006 NAP Regulations) to minimal costs of providing updated guidance on Departmental websites. Training programmes are still ongoing for the 2006 NAP Regulations and the new requirements can be built into these.

Inspection and enforcement costs for NIEA are not likely to be significantly different. NIEA costs for assessing fertilisation accounts may be slightly reduced due to a wider range of phosphorus values for feedstuffs. Pollution incidents due to poor management of silage effluent stores may be reduced with an associated reduction in investigation, enforcement and clean-up costs. NIEA investigation and prosecution costs, for pollution incidents caused by silage effluent, averaged £200 per case in 2008-2009, with an approximate average of 90 cases per year (an approximate total cost of £18,000 per year). Clean-up costs are more difficult to estimate. In addition, the risk of prosecution, imprisonment and fines up to £20,000 per offence would be greatly reduced. There may be some initial additional work for NIEA in staff training, raising awareness and responding to enquiries about new requirements.

7. Benefits

Option 1: *Do nothing or business as usual scenario*

No additional benefits were identified.

Option 2: *Make all proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

and

Option 3: *Allow a phase-in period for a closed period for farmyard manure field storage (to be operational from 1 January 2013) and make all other proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

As Option 3 proposes the phasing-in of one measure for the 2010 NAP Regulations, there may be a slight time lag in terms of benefits compared to Option 2. However, apart from timing, the benefits related to Options 2 and 3 are identical and will be considered together.

The NAP Regulations will play a key role in meeting the aims of the Water Framework Directive (2000/60/EC). At the highest level, the benefits to be attained under the 2010 NAP Regulations are those associated with the achievement of good

status in water bodies. Whilst the action programme is primarily aimed at reducing levels of nitrates in water, many of the measures will also reduce phosphorus levels.

It is difficult to place an exact monetary value on the benefits associated with improving water quality. However it is clear that taking action to prevent and control eutrophication will generate a wide range of benefits for Northern Ireland's natural environment, its economy and the quality of its environmental amenities.

More specifically, action to tackle eutrophication will enhance biodiversity, restore fish habitats and improve the aesthetic standards of water bodies. Many of the important and characteristic aquatic plant and fish species found in Northern Ireland need low levels of nutrients to flourish. At low and moderate levels of nutrient enrichment, aquatic food webs are complex and diverse. If nutrient levels are too high, this diversity is reduced as the original flora and fauna become displaced by a smaller number of species, both plant and fish that are favoured by high nutrient content.

Plants and animals also contribute towards clean, healthy and robust aquatic ecosystems which provide many benefits. Good water quality is important because it provides clean drinking water, safe bathing water, healthy fisheries and contributes to an improved living environment. Good water quality is also essential for recreation and for supporting tourism which in turn encourages the use of the countryside and the viability of rural businesses.

As recognised in the Review Report 2009, due to the nature of biological and chemical processes, there may be a delay between the period in which measures are taken and the period in which the benefits are realised. Although the benefits under Option 3 may be slightly delayed compared to Option 2, there is likely to be a lag in any event between the timing of measures and the realisation of benefits.

Identified potential qualitative and economic benefits of Options 2 and 3 are summarised in the table below.

Benefit Category	Nature of Benefits
Human health	Reduction in risk of exposure to potentially toxic algae, elevated nitrate concentrations and faecal pathogens
Biodiversity / ecosystem health	Protection and enhancement of aquatic and marine ecosystems (as the impacts of eutrophication are reduced) Maintenance and improvement of biodiversity Reduced impact on sensitive ecosystems
Agricultural industry	Necessary for revised action programme to be in place to progress application to renew Derogation Potential for more farm businesses to avail of renewed Derogation Improved water quality for stock watering and on-farm water use of abstracted water Improved nitrogen efficiency from more effective use of manures Reduction in use of chemical nitrogen fertilisers and

	<p>associated reduced cost</p> <p>Greater awareness of crop nutrient requirements (through training and guidance) may improve yield, productivity and farm incomes</p> <p>Development of alternative farming practices could provide the potential for new business opportunities (particularly for agricultural consultants, builders and suppliers)</p>
Water abstraction and treatment	Reduced levels of nutrients, algae, faecal pathogens etc within water supplies should provide potential for reduction in treatment costs prior to use for potable supplies or other purposes
Commercial fisheries, shellfisheries and recreational fisheries	<p>Improved productivity and potential for increased stocks and variety</p> <p>Increased revenues from fisheries</p>
Pollution incidents	Reduced numbers of pollution incidents and fish kills and associated reduced costs for investigations and clean-up
Recreation and tourism	Improved water quality leading to greater use of recreational and tourist facilities with associated increased revenue in mainly in rural areas

8. Business Sectors Affected

The proposed Regulations will have a direct impact on the agricultural industry, but additional costs are only likely to be incurred by farm businesses where;

- the agricultural area includes a high proportion of steeply sloping land not previously affected by the 2006 NAP Regulations;
- chemical nitrogen fertiliser is applied between 1.5m and 2.0m of a waterway;
- farming practices involve the storage of farmyard manure in a field heap during winter months; and
- farming practices involve the storage of poultry litter in a field heap.

There may also, potentially, be some impact on agricultural contractors who spread farmyard manure during the winter period. However, as this is not a very common practice, any impact is likely to be negligible. As discussed in Section 7, there may also be business development opportunities for builders, suppliers and contractors providing storage facilities for farmyard manure and poultry litter and agricultural consultants providing advice and guidance on alteration of farm practices to meet the requirements of the amended Regulations.

9. Small Firms Impact Test

A small business is defined as having fewer than 50 employees, and no more than 25% of the business owned by another enterprise (which is not a small business); and either less than £4.4 million annual turnover; or less than £3.18 million annual balance sheet total. Nearly all active farm businesses in Northern Ireland would be considered as small businesses and may be impacted by additional costs if they are affected by the parameters described in Section 8.

Representatives of the agricultural industry have been involved throughout the review process through engagement with the Nitrates Stakeholder Group. Discussions on the progress of the scientific review took place at a workshop with stakeholders in November 2009 and feedback was included in the final Review Report 2009. A further meeting took place in April 2010 at which stakeholders were briefed on the proposed revisions to the 2006 NAP Regulations for the 2011-2014 action programme.

It is the Departments' intention to continue this engagement and provide further guidance and training to farm businesses to support the industry in complying with the Regulations. To this end, a Nitrates Guidance Working Group was re-established on 11 May 2010 which will work in parallel with this consultation to develop improved and updated guidance material in support of the 2010 NAP Regulations. This should help farm businesses comply with the measures at the minimum cost possible.

10. Enforcement and Sanctions

NIEA aims to protect the environment by consistent and fair application of the legislation it enforces. It will continue to work co-operatively with those it regulates in order to secure improved performance and will offer advice where appropriate. NIEA will continue to work in partnership with DARD to issue appropriate guidance to farmers. NIEA will also continue to train and update staff to ensure that the proposed Regulations are implemented, monitored and enforced fairly and equitably across Northern Ireland.

In taking enforcement action NIEA will continue to apply the existing published Enforcement and Prosecution Policy for Environmental Protection and any subsequent amendments.

A range of enforcement tools is available, and includes warning letters and notices as well as prosecution. The choice of enforcement action taken will depend on the individual case, but NIEA will continue to be consistent, proportionate and transparent in the action taken.

Compliance with the NAP Regulations is also a statutory management requirement for Cross Compliance under direct aid payment schemes. If a non-compliance is identified on a controller's agricultural holding, the breach will be reported to DARD's Single Farm Payment Administration branch. This may lead to a reduction being applied to the farm business's direct aid payments.

It is intended that the 2010 NAP Regulations will be amended from the 2006 NAP Regulations to expand and clarify who can be held responsible for different offences under the Regulations (regulation 25). It is proposed that for some regulations, in particular those concerned with record keeping, and calculations of capacities and limits, the controller will be held responsible for any offence. For other regulations, in

particular those concerned with management and application of nitrogen fertiliser, it is proposed that an “appropriate person” should be held responsible for any offence.

It is proposed that the “appropriate person” will be defined as the controller; any person permitted by the controller to carry out, on their behalf, any activity described in the Regulations; and, with regard to regulation 11(4), the owner of any storage facility used for the storage of livestock manure and silage effluent or any person using such storage facilities for the storage of livestock manure and silage effluent.

This clarification will only affect a farm business if an offence has been committed. The situation may arise where both a controller of an agricultural holding and an ‘appropriate person’ (e.g. a contractor) are both found guilty of the same offence (e.g. spreading slurry on waterlogged ground) and would both be subject to criminal sanctions. On the other hand, a situation may arise where only one ‘appropriate person’ is found to be fully responsible for an offence committed on the controller’s land.

There are no anticipated additional or reduced regulatory costs associated with this amendment which provides clarification in line with Better Regulation principles.

11. Monitoring and Review

As described under Section 2(ii) Action Programmes must be reviewed and, if necessary, revised at least every four years. In addition, the Commission Derogation Decision needs to be renewed every four years. The process to complete this work is described under Section 2(ii) and a similar process will be put in place at the end of the next Action Programme (2011-2014).

12. Consultation

This partial RIA forms part of the Departments’ formal consultation process with key stakeholders and the general public on the implications of the proposed Regulations.

The review of the 2006 NAP Regulations was discussed with key stakeholders at a workshop in November 2009. The proposals for the revised 2010 NAP Regulations have also been discussed with key stakeholders at a further meeting on 16 April 2010 and, where possible, this consultation takes account of comments made.

13. Summary and Recommendation

In order to meet the requirements of the Nitrates Directive this partial Regulatory Impact Assessment presents three options. The total minimum and maximum estimated costs, for the agricultural industry and government, associated with these options are summarised in the table below. Please note that, for Option 1, the cost to the public purse if infraction proceedings are initiated by the Commission have not been estimated.

Description of costs	Minimum estimated cost	Maximum estimated cost
Option 1 - no revision of 2006 NAP Regulations		
Cost to agricultural industry	£1.57m per year	£31.6m per year
Cost to government	Cost of infraction penalties not estimated	Cost of infraction penalties not estimated
Options 2 and 3 – proposed revisions		
Costs to agricultural industry:		
<i>Amend definition of steeply sloping land and removal of the risk clause in the case of arable land with a slope of greater than 15%</i>	£0.04m per year	£0.11m per year
<i>Increase spreading distance for the application of chemical nitrogen fertiliser to 2 m from any waterway</i>	£0.18m per year	£0.18m per year
<i>Closed period for the field storage of farmyard manure</i>	0.25m per year	0.53m per year
<i>No field storage of poultry litter after 31 December 2010</i>	£0.05m per year	£0.11m per year
Total estimated costs to agricultural industry of Options 2 and 3	£0.52m per year	£0.93m per year
Costs to government		
<i>Provision of additional training and guidance</i>	negligible	£0.05m
<i>Savings to government from reduction in pollution incidents</i>	(-)£0.018m per year	(-)£0.018m per year
Total estimated costs to government of Options 2 and 3	£0.018m savings per year	£0.032m

Calculating Total Net Present Costs (NPCs) over 10 years, using a 3.5% discount rate gives the following results.

Option	Minimum Estimated NPC	Maximum Estimated NPC
1	£13.1m	£262.8m
2	£4.2m	£8.0m
3	£3.7m	£7.0m

Options 2 and 3 have different NPCs due to the delay in introducing the measure for a closed period for the field storage of farmyard manure. It has been assumed that this expenditure is incurred at the end of the second year. On this basis, Option 3 has the lowest net present cost.

Option 1: *Do nothing or business as usual scenario*

The Directive requires Member States to review and, where necessary, revise their action programmes, including additional measures, at least every four years. An acceptable Action Programme is also pre-requisite for applying to renew the Derogation (due by 31 December 2010). The review of the 2006 NAP Regulations (also due by 31 December 2010) has been completed and discussions have taken place with the Commission. These processes have identified possible revisions required to the Action Programme. Therefore, if the 2006 NAP Regulations are not amended it could result in significant fines to the Northern Ireland Executive (and, ultimately, the public purse) and also impact farm businesses currently operating under a derogation, with an estimated cost to those businesses ranging from £1.57m to £6.5m per year. Taking into consideration farm businesses which might have potentially applied for a derogation in the future, the potential maximum cost (£31.6m per year) to the agricultural industry is substantially greater than the maximum (£0.93m per year) estimated to be incurred if the revisions are implemented.

For these reasons, Option 1 is not recommended.

Option 2: *Make all proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

This option is likely to satisfy the requirements of the Commission. However, making all amending measures operational from 1 January 2011, could present practical difficulties for farm businesses which may need to alter their farming practices in line with new requirements. For this reason, Option 2 is not recommended.

Option 3: *Allow a phase-in period for a closed period for farmyard manure field storage (to be operational from 1 January 2013) and make all other proposed amendments to the 2006 NAP Regulations operational from 1 January 2011*

This option is likely to satisfy the requirements of the Commission, and would give farm businesses time to examine whether their current farming practices are in line with the new requirements for storage of farmyard manure during the closed period in the 2010 NAP Regulations, consider options and make any necessary adjustments in a timely and proportionate manner. It would also allow those farm businesses who found it necessary to build storage facilities to spread the costs over two years, resulting in lower Net Present Costs than Option 2. For these reasons, this is the recommended option.

The Departments welcome any views on this partial Regulatory Impact Assessment during this consultation phase. In particular:

1. Do you agree with the Departments' assessment of possible options and recommendation?

2. Can you provide evidence to support any alternative view or provide further data in order to gain an estimate of potential costs and/or benefits for implementation of the proposed amendments to the Action Programme?

3. The Departments welcome any views on the Small Firms Impact Test during this consultation process.

Annex C

List of consultees

A Taste of Ulster
Agricultural Consultants Association
Agriculture Industries Confederation
Agriculture Initiative
Agri-food and Biosciences Institute
Agrisearch
Antrim & District Angling Association
Barenbrug UK LTD
British Association for Shooting & Conservation
Causeway Coast and Glens Heritage Trust
Clare Glen Seeds
Clarendon Agricare
Council for Nature Conservation and the Countryside
Countryside Access and Activities Network
Countryside Alliance
Crop Specialists Ltd
Devenish Nutrition Ltd
East Down Positive Farmers' Group
Environment Committee of the Northern Ireland Assembly
Ernest Kennedy & Son
Farmfed Chickens Ltd
Farming and Wildlife Advisory Group
Feedtest Services
Fermanagh Rural Community Initiative Ltd
Fermanagh East Rural Development
Fertilizer Association of Ireland
Finnebrogue Venison
First Division Association
Forestry & Timber Association
Foyle, Carlingford and Irish Lights Commission
Friends of the Earth
General Consumer Council for Northern Ireland
Growing Media Association
Howard Allen Seeds
Institute of Ecology and Environmental Management
Irish Agricultural Wholesale Society
Irish Organic Farmers and Growers Association
Irish Peatland Conservation Council
James & Michael Watson Seed Merchant Packers Processors
Joseph Morton Ltd
Lisnaskilly Farm
Livestock and Meat Commission
Lough Neagh and Lower Bann Advisory Committees
Lough Neagh Partnership
Loughs Agency
Magherafelt Area Partnership Ltd
Mayobridge & Burren Farmers' Development Group Ltd
Moypark Ltd
Mushroom Industry Association of Northern Ireland
NI Agricultural Producers' Association
NI Bankers Association
NI Committee of the Irish Congress of Trade Unions
NI Council of National Beef Association
NI Dairy Association
NI Dairy Council
NI Environment Link
NI Food & Drinks Association

NI Freshwater Task Force
 NI Grain Trade Association
 NI Institute of Agricultural Science
 NI Livestock Auctioneers' Association
 NI Local Government Association
 NI Master Butchers' Association
 NI Meat Exporters Association
 NI National Trust
 NI Nursery Stock Growers' Association
 NI Poultry Federation
 NI Region National Sheep Association
 NI Tourist Board
 NI Water Council
 North of Ireland Potato Marketing
 Association Ltd
 North West Seeds
 O'Kane Poultry Ltd
 Pennielea Farm
 Pig Production Development
 Committee
 Portcullis Developments Ltd
 Rare Breeds Survival Trust
 Royal Ulster Agricultural Society
 RSPB NI
 Rural College
 Rural Community Network
 Rural Development Council for
 Northern Ireland
 Rural Generation Ltd
 Samuel McCausland Ltd
 Sludge Clearance Ltd
 Strangford Lough Management
 Committee
 Sustainable NI
 Thomas J Scott
 Thomas James McCollum
 Toller Beattie Solicitors
 Ulster Agricultural Organisations
 Society
 Ulster Angling Federation
 Ulster Arable Society
 Ulster Coarse Fishing Federation
 Ulster Curers' Association
 Ulster Farmers Union
 Ulster Grassland Society
 Ulster Pork and Bacon Forum
 Ulster Society for the Preservation of
 the Countryside
 Ulster Wildlife Trust
 United Dairy Farmers
 Waste Management Advisory Board
 for Northern Ireland
 Waterways Ireland
 Wildfowl and Wetland Trust
 WWF (NI)
 Yara UK Ltd
 Young Farmers' Clubs of Ulster

Annex D

Useful Contacts

Department of the Environment (DOE)

Northern Ireland Environment Agency

Water Management Unit	Telephone	028 9262 3100
17 Antrim Road	Fax Number	028 9267 6054
Lisburn	Email	WaterInfo@doeni.gov.uk
BT28 3AL	Website	www.ni-environment.gov.uk
	Water Pollution	0800 80 70 60
	Hotline	

Planning and Environmental Policy Group

Calvert House	Telephone	028 9025 4916
23 Castle Place	Email	epdwebteam@doeni.gov.uk
Belfast		
BT1 1FY		

Department of Agriculture and Rural Development (DARD)

Headquarters

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Upper Newtownards Road	Fax Number	028 9052 3127
Belfast	Email	dardhelpline@dardni.gov.uk
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Countryside Management Branch

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Cookstown		
BT80 9AA		

CAFRE

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