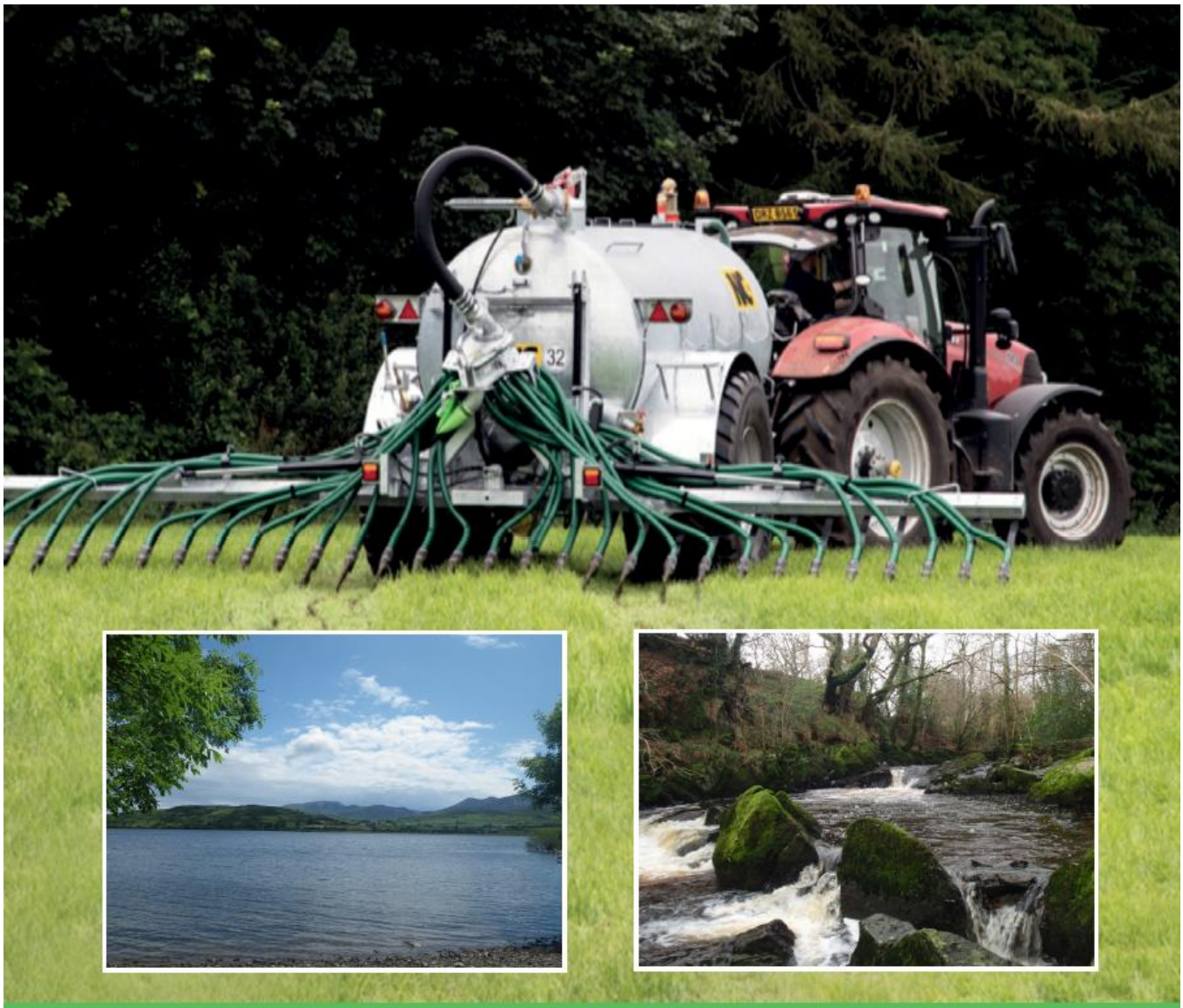


Public Consultation on the Nutrients Action Programme 2026-2029

Department of
Agriculture, Environment and Rural Affairs

An Roinn
Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe

Depairtment o'
Fairmin, Environment an' Kintra Matthers

www.daera-ni.gov.uk

Purpose of this Document

The purpose of this document is to present the findings of the review of the current Nutrients Action Programme (NAP) 2019 and the proposals for the next Nutrients Action Programme 2026-2029.

The Department of Agriculture, Environment and Rural Affairs (DAERA) (the Department) would welcome any comment you may wish to make on the proposals made and the issues raised in this consultation document.

Where you disagree with any proposal, please provide evidence in support of alternative proposals. Please structure your responses in line with 'Questions for Stakeholders', where possible.

The Department is using Citizen Space Hub which is accessible via the relevant page on the DAERA website, as the primary means of response, in order to make it as accessible as possible.

However, you may also response by email or hard copy to:

By Email: NutrientsActionProgramme@daera-ni.gov.uk

By Post:

Nutrients Action Programme Review
Environmental Farming Branch
Clare House
1st Floor West
303 Airport Road West
Sydenham Intake
Belfast
BT3 9ED

The consultation will run for a twelve week period until the 24 July 2025.

All responses to this consultation should reach the Department by 23.59 on Thursday 24 July 2025, to ensure they can be fully considered.

This consultation paper is available on the DAERA website, can be accessed using the following link:

www.daera-ni.gov.uk/consultations/public-consultation-proposed-nutrients-action-programme-2026-2029

Further Information

Should you require a copy of this document in an alternative format, it can be made available on request.

If you require any further information, please email NutrientsActionProgramme@daera-ni.gov.uk .

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

Freedom of Information Act 2000 – confidentiality of consultations

The Department 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 Department can only refuse to disclose information in exceptional circumstances. **Before** you submit your response, please read the paragraph below with respect to the confidentiality of consultation, as they will give you guidance on the legal position about any information given by you in response to this consultation.

The Freedom of Information Act gives the public a right of access to any information held by a public authority, namely, the Department in this case. This right of access to information includes information provided in response to a consultation. The Department cannot automatically consider as confidential information supplied to it in response to a consultation. However, it does have the responsibility to decide whether information provided by you in response to this consultation, including information about your identity, should be made or treated as confidential.

This means that information provided by you in response to this consultation is unlikely to be treated as confidential except in very particular circumstances. The Lord Chancellor's Code of Practice on the Freedom of Information Act provides that: -

- The Department should only accept information from third parties in confidence if it is necessary to obtain information in connection with the exercise of any of the Department's functions and it would not be otherwise provided.
- The Department should not agree to hold information received from third parties 'in confidence' which is not confidential in nature; and
- Acceptance by the Department 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: Information Commissioner's Office (ICO)

Contents

Chapter 1 Introduction

Purpose of the Consultation

The Nutrients Action Programme Regulations (Northern Ireland) 2019 and the Nutrients Action Programme (Amendment) Regulations (Northern Ireland) 2019 (the 2019 Regulations) implemented an action programme to reduce pollution from agricultural sources entering the aquatic environment. The purpose of this consultation is to seek your views on the Department's proposals to revise and update the action programme by revoking the 2019 Regulations and making the Nutrients Action Programme Regulations (Northern Ireland) 2025 (the 2025 Regulations).

This consultation will also seek your views on two proposed mandatory measures in the Proposed Ammonia Strategy: the proposal to move to 100% use of Low Emission Slurry Spreading Equipment (LESSE) by 2030; and the proposal to prohibit the use of urea fertilisers without an inhibitor by 2027. These measures will be implemented through the new NAP and 2025 Regulations.

Background

The aim of the Nutrients Action Programme (NAP) is to improve water quality and the wider environment by reducing and preventing pollution caused or induced by nutrients from agricultural sources. A key objective is to promote efficient management of livestock manures, manufactured fertilisers and other nutrient-containing materials spread onto land to reduce environmental impacts.

The EU Nitrates Directive required member states to set out action programmes to reduce nitrate levels in surface and groundwaters and eutrophication in surface waters. The Nitrates Directive allowed Member States to either designate discrete areas of land as Nitrate Vulnerable Zones (NVZs) or establish an action programme to be applicable to the whole territory.

In bringing forward the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004, the Department is required to establish and apply an action programme to regulate farming activities throughout Northern Ireland to reduce and prevent water pollution from agricultural sources. This approach was supported by a scientific report in 2002, which identified eutrophication as a major pollution problem throughout Northern Ireland’s water environment and highlighted the extent of the agricultural contribution to the problem.

The first Nitrates Action Programme, to apply across the whole of Northern Ireland was introduced in 2007. The Nitrates Action Programme established a range of measures and controls on livestock manures and chemical fertilisers. Key measures include closed periods for the application of organic and inorganic fertilisers, a livestock manure application limit to land of 170 kg nitrogen/ha/year and the requirement for sufficient slurry storage capacity on farm. The aim is to provide greater protection for surface waters and groundwaters in Northern Ireland. The 2007 Action Programme was reviewed and revised in 2010, 2014 and 2019.

Following the introduction of the Nitrates Action Programme in 2007, Northern Ireland also successfully applied to the European Commission for a derogation enabling farmers who meet the criteria to apply up to 250 kg nitrogen/ha/year from grazing livestock manures. This derogation was successfully renewed at each review, with the most recent derogation decision being granted in March 2019.

The existing Action Programme was introduced in April 2019, through the Nutrient Action Programme (NAP) Regulations (Northern Ireland) 2019, which consolidated the Nitrates Action Programme Regulations and the Phosphorus (Use in Agriculture) Regulations.

When the United Kingdom left the EU, the Nitrates Directive was retained and the functions contained in the Directive were transferred to the Department, by the Environment (Legislative Functions from Directives) Regulations 2019.

NAP Review Process

In accordance with the 2019 Regulations a review of the NAP has been undertaken, jointly by the Department and the Agri-Food & Biosciences Institute (AFBI). The review has assessed the effectiveness of the NAP to date through analysis of the results of water quality monitoring, evaluation of changes in farming practice and examination of compliance data.

The review has also considered several actions which were included in the Lough Neagh Report and Action Plan.

The findings of the review, including details of research projects, have been collated into a report 'Review of the Nutrients Action Programme 2019'. The conclusions and recommendations from the review are presented in this consultation document and the full review report is available on the Department's website at:

www.daera-ni.gov.uk/consultations/public-consultation-proposed-nutrients-action-programme-2026-2029

The Department also held stakeholder meetings on 26 June and18 November 2024, to highlight key findings from the Implementation Report for 2020-2023 and the scientific research related to the review respectively.

As part of the review process the Department has engaged an external contractor to carry out a Strategic Environmental Assessment (SEA) and Habitats Regulation Assessment (HRA) of the proposals coming out of the review. This process requires appropriate consideration of the potential effects upon United Kingdom National Sites (SACs and SPAs) and upon broader aspects of the environment, as identified within the SEA and HRA assessments carried out in respect of the proposal included in this revised action programme.

These assessments are intended to serve as a guide for the appropriate implementation of the action programme, and to identify a framework for delivery of the appropriate mitigation measures to ensure that no preventable adverse effects occur upon the integrity of any United Kingdom National Sites, and to maximise the potential for positive effects and minimise the potential for negative effects on the wider environment.

The findings of the Environmental Report and the Report to Inform Appropriate Assessment (RIAA) have been integrated into the review of the NAP and has influenced the proposed new measures for the draft NAP 2026-2029.

The Department is now proposing a revised Action Programme as detailed in this document and is seeking your views and feedback.

Derogation

In 2019 following the granting of a derogation from the Commission, this was transposed into domestic Regulations by the Nutrients Action Programme (Amendment) Regulations (Northern Ireland) 2019.

The derogation allows an increase in the amount of grazing livestock manure that may be applied to land from 170 kg nitrogen/ha/year up to a limit of 250 kg nitrogen/ha/year on grassland farms which meet certain criteria. Following EU exit, unlike in previous reviews the Department will not apply to the Commission to renew the derogation, rather the derogation is being reviewed as part of the review process, in accordance with the 2019 Regulations.

The derogation is important to some Northern Ireland cattle farms with higher stocking rates. Subject to meeting specific nutritional management and environmental criteria, it enables farmers to better utilise the nutrients with grazing livestock manures and operate more efficiently with reduced chemical fertiliser requirements.

A derogation can only be applied to those farms with at least 80% grassland and is applicable only to manure from grazing livestock. The derogation does not apply to manure from pigs or poultry. To have an approved derogation farms must not exceed a phosphorus balance of 10 kg phosphorus/ha/year and soil test at least every four years. Annual fertilisation accounts and a fertilisation plan must also be produced. This is in addition to maintaining compliance with all other NAP statutory requirements.

The principle of the derogation is that farms operating under derogation should not represent a greater risk to water quality. The requirements of other environmental legislation continue to apply to derogated farms. The derogation is based on a scientific case and the additional requirements for farms under derogation were originally set by the European Commission.

Chapter 2 Summary of the NAP Review

The key findings and recommendations of the review are outlined in the following paragraphs.

Water Quality

Nitrates in surface waters

A vast majority of surface water sites have an average of nitrates concentration below 10 mg NO_3/l. However, the proportion of these sites has been in decline since 2012. The overall annual average nitrate concentrations in surface water rivers and lakes were generally stable or decreasing at 77.6% of sites when compared to the previous reporting period. However, a higher proportion of sites are showing an increase in annual nitrate concentrations compared to the previous reporting period when 98.1% were reported as stable or decreasing. The percentage of monitoring sites showing an increasing long-term trend went from 4.6% in 2016 to 9.8% in 2020. The percentage of monitoring sites showing an increasing long-term trend in 2024 is 23.6%.

Rivers – Trophic Assessment

Trophic status refers to the level of nutrient enrichment and biological productivity in a water body. It's a way to classify the ecological condition of a water body based on the total biomass or living material present.

Using the WFD 2021 classification data shows that 51% of rivers across Northern Ireland were of High/Good trophic status at an individual river site level. At the river water body level data shows that 44.4% of water bodies across Northern Ireland were of High/Good trophic status. This is a decrease from the previous two classification periods.

With the overall trophic assessment of rivers, most river sites showed stable or decreasing soluble reactive phosphorus (SRP) concentrations at monitored sites compared to the previous reporting period. 58.5% of rivers were classified as High or Good for SRP status, whilst 41.5% of river sites had a WFD SRP classification of less than Good Status which means they are at risk from eutrophication or are eutrophic.

Although seasonal trends over a 25-year period show a stable or decreasing trend, the high baseline levels since 1998 masks the recent increases in phosphorus, particularly over the last 10 years. This recent increasing trend is a cause for concern.

Lakes – Trophic Assessment

Of the 21 lakes monitored in Northern Ireland, 18 lakes were classed as Moderate, Poor or Bad trophic status (indicative of eutrophic conditions). When trophic status classes were applied only three lakes were in a non-eutrophic state, a further two lakes were assessed as may become eutrophic.

Transitional and Coastal Marine Waters

A comparison of nitrate values with previous reporting periods indicates that most water bodies were stable. However, when absolute values are considered, over 60% of water bodies exhibited an increase in mean and maximum nitrate values relative to the previous reporting periods. Long-term trends in nitrate levels indicate that, although a decline was observed over the period 2008-2017, values have shown a steady increase from 2017 onwards.

Eutrophication status showed that transitional (estuarine) waters or nearshore sea loughs were most affected (moderate or worse). A preliminary analysis of individual eutrophication quality elements has revealed an increase in nutrient concentration and a decline in the quality of eutrophication response variables such as phytoplankton, macroalgae, and dissolved oxygen for numerous of water bodies. In addition to nutrients, high levels of some pesticides and herbicides indicate that catchment-based agricultural activities are a contributing factor to the water quality status of transitional and coastal waters.

Land Use

Northern Ireland farming continues to be a predominantly grass-based system. In general, whilst there have been increases and decreases within livestock sectors, overall livestock numbers on farms in Northern Ireland have remained relatively stable over the last five years.

Chemical fertiliser purchases in Northern Ireland vary from year to year but are at a relatively low level when compared to historic levels. Nitrogen inputs to farms in Northern Ireland have remained stable while outputs have increased, the average gross efficiency of nitrogen usage increased between 2004-2006 and 2021-2023 from 20.2% to 26.3% respectively.

However, the Northern Ireland agricultural sector is operating at a significant phosphorus surplus. This has caused a build-up of soil phosphorus levels and over 40% of fields are now above the agronomic optimum. This has resulted in diffuse phosphorus losses to rivers and lakes which are a main cause of poor water quality across Northern Ireland. In 2023, the Northern Ireland agricultural phosphorus surplus was 11 kg phosphorus/hectare.

Advisory Support

To help support farmers in understanding the requirements of the NAP, and to continue to promote best working practice, updated guidance documents are published on the DAERA website.

There are a range of online nutrient calculators to help farmers with nutrient management planning and compliance with the NAP. There continues to be a range of advisory services including training and Knowledge Transfer events, to improve farmer awareness and understanding of the NAP requirements.

Compliance

Compliance with the 2019 NAP Regulations is one of the Cross Compliance Statutory Management Requirements. Therefore, farmers claiming Basic Payment Scheme and other direct payments are required to comply with the Nutrient Action Programme Regulations.

Cross compliance inspection rates are currently 1% of all farms and 5% of derogated farms however this does not include other administrative checks and inspections because of whistleblower reports.

Key areas of non-compliance are related to water pollution and often associated with poorly managed or inadequate manure storage facilities and exceeding livestock manure limits. There was also an increase in non-compliance relating to record keeping in 2022 and 2023, mostly relating to the new requirements for fertilisation plans since 2019. There was also an increase in those not submitting manure export records discovered at inspection when checking their N loading.

The Department is continuing to raise awareness of these issues, through guidance and knowledge transfer events, to increase awareness of regulatory requirements and how to comply with the NAP Regulations.

Derogation

The derogation continues to be an important measure to facilitate more efficient use of manure in intensive grassland agriculture in Northern Ireland.

From 2019 – 2024, the number of derogated farms has remained consistent around a mean of 427, ranging from 418 – 441 farms approved for derogation over this period. It is largely the same farms applying from year to year with only a small turnover of farms leaving and entering.

Although numbers remain consistent there are several factors which may have discouraged other farms from applying. These include concerns over additional record keeping and nutrient management requirements, higher inspection rates, a lack of knowledge or understanding of the legislation where any issue / breach would lead to a penalty under cross compliance. However, inspection results over the period 2019-23 indicate that non-compliance rates for derogated farms are lower than non-derogated with an average of 6.6% of derogated farm businesses being breached compared to an average of 22% for non-derogated farms.

Evidence from the monitoring carried out by AFBI shows that the risk of phosphorus losses from derogated farms is less than that of non-derogated holdings. The better nutrient management on derogated farms, with regular soil testing, checks on grass yields, and the phosphorus balance limits means that over application of nutrients is less likely.

Other Associated Issues

Recent scientific and technical developments on issues related to the NAP Regulations have also been appraised during the review, as have regulatory and policy developments in the United Kingdom and Ireland.

Through this, a need to improve/amend regulatory control in several areas has been identified. These include measures to address ammonia emissions, reduce surplus phosphorus, improve recording of manure exports, and controls on the spreading of anaerobic digestate.

The review of the current NAP and implementation of a revised programme will contribute towards the aims of the:

- Lough Neagh Action Plan published in July 2024,
- the Environmental Improvement Plan published in September 2024,
- Programme for Government 2024-2027 published in March 2025,
- the Draft Ammonia Strategy - the Department is currently consulting on an update on the Ammonia Strategy, Revised Operational Protocol and related Environmental Report,
- the Northern Ireland Climate Change Adaptation Programme (NICCAP3) which is due to be published in 2025 and
- the third Cycle River Basin Management Plan, which is due to be published in 2025.

Research

A comprehensive programme of research has been in place over many years to deliver further scientific evidence in relation to several of the measures.

To underpin the implementation of the NAP and the derogation for Northern Ireland, the Department commissioned the Agri-Food and Biosciences Institute (AFBI) to carry out a broad range of research studies aimed at understanding the sources and pathways of nutrient use within farming systems, their loss from agricultural land to water and air and the resulting impacts on ecosystems.

Investment in high resolution monitoring stations, measuring at hourly to 7-hourly frequencies, has provided valuable insights into the processes and timing of nutrient loss from land to water at field to farm to catchment scales. The importance of short-duration storm events in mobilising and transporting large proportions of annual loads has been highlighted alongside the potential for future climate change to exacerbate these effects.

The research and the Northern Ireland-wide Soil Nutrient Health Scheme (SNHS) have provided additional information on how soils and water quality are responding to the measures and will assist the industry to continue to increase nutrient efficiency and environmental protection through improved agricultural practice.

Stakeholder engagement

The following stakeholder events have taken place during the current review:

- June 2024, to provide an update on the findings of the NAP Implementation Report 2020 – 2023, and
- November 2024, to present the preliminary findings of the review and related scientific research.

The events provided useful and constructive feedback from stakeholders.

The Department will consider all suggestions made by stakeholders on how to improve the implementation of the NAP during this consultation process.

There will also be further stakeholder engagement events held during the consultation to provide additional information on the science and evidence surrounding the proposals included. The Department encourages you to attend these events, details of these will be provided on the Department's website.

Conclusions and Recommendations

Conclusions

- Long-term trend analysis for Northern Ireland shows a significant decreasing slope across all years for the mean monthly nitrate and phosphorus concentrations of the river sites (31-year dataset and 25-year dataset respectively). However, more recent data does not follow this trend.

- Nitrate levels in surface freshwaters are showing signs of increasing concentrations when compared between the reporting periods (2016-2019 and 2020-2023). The proportion of surface freshwater sites with an annual average nitrate concentration below 10 mg NO3/l has been declining from 89.3% in the reporting period 2012-2015 to 85.2% in the reporting period 2020-2023. The percentage of monitoring sites showing an increasing long-term trend in 2024 is 23.6%.

- Evidence remains of eutrophication in a significant proportion of rivers, lakes and transitional and coastal marine waters. Whilst increases in nutrient levels have recently stalled, 42% of river sites had a WFD SRP classification of less than Good Status[1] which means they are at risk from eutrophication or are eutrophic.

- It will take time for a response to changes in nutrient inputs to be detected in biological indicators of trophic status, particularly in lakes and marine waters.

- In the five years following the implementation of the NAP in 2007, an improvement in water quality occurred with a downward trend (a decrease) in SRP levels. However, since 2013 there has been a general upward trend in SRP concentrations in rivers, despite significant advisory effort and support in relation to the NAP. Therefore, either the measures are not being implemented or not implemented correctly, and additional measures are required to address identified pressures.

Recommendations

- The existing NAP measures should be carried forward into the new NAP. However, based on scientific evidence and/or technical, regulatory and policy developments, a range of amendments and additions to the NAP measures should be considered. These are summarised in Annex B.

- The online process for recording manure exports needs to be enhanced and more robust. Movements need to be recorded in real-time (or within days) with the importing farmer verifying receipt of the manure to show acceptance of the import. This would provide corroborating verification of export and import of manures between farms.

[1] Nutrients Action Programme Implementation Report for 2020 – 2023 | Department of Agriculture, Environment and Rural Affairs

- The monitoring and research programmes should continue to be supported and funded over the next NAP period to inform the next review and comply with reporting requirements of the NAP Regulations.

- Stakeholder engagement should continue to play a key role in the implementation of the revised NAP.

- The Department, working in partnership with industry, should provide support and guidance to farmers to enable them to understand and comply with the measures in the NAP.

- The Department and industry need to look at ways to ensure that there is full implementation of measures at farm level and to improve compliance with NAP.

- The Department should consider how to mitigate against potential impacts on protected sites because of granting derogations and consider if a habitats assessment under the Habitats Regulations should be carried out in certain circumstances.

Chapter 3 Proposed Changes to the NAP

Background

Following the NAP Review, the Department is proposing revisions and additions to the measures in the 2019 NAP Regulations. The proposals are underpinned by a broad range of analysis and research studies, including those carried out by AFBI, aimed at understanding the sources, transportation and resulting impacts on aquatic ecosystems, of farm nutrients.

With exception of the revisions outlined within this document, it is proposed that the measures contained in the 2019 NAP Regulations will be carried forward to the revised Action Programme.

A copy of the proposed draft 2025 NAP Regulations is attached at Annex C. There are also other minor changes within the draft Regulations which should improve clarity (e.g. clearer definitions or re-ordering text) or are legal drafting issues arising (e.g. the expiration of deadlines).

Please note that while the draft Regulations are indicative of proposed revisions, they have not been scrutinised by the Departmental Solicitor's Office (DSO) and may, therefore, be subject to drafting revisions after scrutiny.

It is proposed that the revised Action Programme will come into effect from 1 January 2026, for all measures unless otherwise stated or where a phased approach has been proposed for that specific measure. The existing measures and action programme will remain in place and implemented through the Nutrient Action Programme Regulations (Northern Ireland) 2019 until such times as they are revoked, amended or repealed.

Water Protection: intercepting / breaking nutrient pathways

Reference: WP 1 - 3

Revision:

1. The Department proposes the requirement for a 3 m uncultivated buffer alongside a waterway in arable fields, from 1 January 2026.

2. From 1 January 2026, the Department proposes to revise the requirements for the storage of silage bales in field, by increasing the distance from a waterway to 20 m and if stacked, not more than two bales high.

3. The Department proposes to reduce the maximum volume of slurry which can be applied during February and between 1st-15th October from the current figure of 30 m^3 per hectare per single application to 25 m^3

Rationale:

1. The inclusion of an uncultivated buffer alongside a waterway is proposed in arable fields to reduce the risk of run-off where there is bare soil.

   During rainfall events phosphate can be lost from land, both in its solid (particulate) form (particulate) and soluble forms, as rainfall mobilises and entrains loose material and transfers it downslope. Where soil is bare losses can be significant, particularly during more intense rainfall events.

   The particulate component can be captured at least partially through the introduction of a vegetative buffer to interact with water flowing across the soil surface, slowing it and allowing particulate to settle out before entering the watercourse. A review of experiments by Collins et al. 2009[2] reports that the sediment removal efficacy of a 1 m buffer ranges from 30-90%, compared to 55-90% for a 3 m buffer.

   The report also highlights the impact of storm events and the influence of soil type and topography.

   It is proposed through the NAP that a 3 m uncultivated buffer (sown in grass or other unharvested vegetative cover) is included on arable fields along a waterways or waterbodies, which have been identified from a 1:5000 OSNI map (e.g. viewable here ACEmap plot | OSNI Map Shop | nidirect). It is also proposed that this area should not be treated with plant protection products or fertiliser.

   In doing so this buffer will retain a level of vegetation which will help to reduce the loss of particulate matter and bound nutrients such as phosphate.

2. There are already existing measures within NAP for storage of silage bales, this amendment is proposed to strengthen the protections already in place. Silage effluent has the second highest Biochemical Oxygen Demand (BOD) value after milk making it over 200 times more damaging than raw domestic sewage. Stacking of silage bales

[2] (PDF) Mitigating diffuse water pollution from agriculture: Riparian buffer strip performance with width

greater than two bales high increases the risk of effluent release.

Therefore, to further mitigate the risk of pollution from silage bales we proposed to increase the distance to which these are stored in field from 10 m to 20 m from waterways. It is recommended that these bales must also not be located where there is a critical risk pathway to a waterway.

Farmers who participate in the Department's Soil Nutrient Health Scheme can use their run-off risk maps to determine where a critical risk pathway exists. These will identify areas at high risk of nutrient loss during rainfall events. This will be a useful tool for farmers, to use to mitigate against storing silage bales in areas known to be at higher risk of delivering runoff to waterbodies.

If silage bales are stored in a location where there are silage effluent collection facilities then the stacking of two bales high will not apply.

3. During February and October daily grass growth will typically be at a lower level compared to later in the season when soil temperature and day length increases. A reduced application of slurry during these months is proposed from the current maximum application limit of 30 m^3/ha to 25 m^3/ha.

   This is so that the nutrients supplied by the slurry better reflect the expected grass growth that can normally be achieved through nutrient applications during these months. The potential for reduced soil temperature and wetter soil conditions resulting in lower nutrient uptake, and more erratic weather patterns, mean there is greater risk of underutilised nutrients being lost in runoff to watercourses.

Please note all questions in the consultation paper are worded as they appear on Citizen Space Hub.

Questions:

1. **Do you agree that a 3-metre buffer in arable fields is wide enough to protect waterways from nutrient pollution?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

2. **Do you agree that storage of silage bales 20 metres from a waterway is a wide enough buffer to protect waterways from nutrient pollution?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

3. **Do you agree that stacking of silage bales should be limited to a maximum of two high?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

4. **Do you agree that a reduction in slurry application from 30m^3 to 25m^3 per hectare in February and 1 – 15 October will reduce run off risk of surplus nutrients to watercourses?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Low Emission Slurry Spreading Equipment (LESSE)

Reference: LESSE 1 - 4

Revisions:

1. It is intended to amend the definition of LESSE, to provide clarification and incorporate the terminology throughout the regulations.

2. The Department proposes to move to 100% use of LESSE by 2030 using a tiered approach based on Farm Livestock Manure Nitrogen Production per hectare. The proposed tiers are set out in the table below:

	Farm Livestock Manure Nitrogen Production per hectare	Proposed date of mandatory LESSE
Tier 1	≥150 kg N/ha	1 February 2027
Tier 2	≥100 kg N/ha	1 February 2028
Tier 3	All slurry	1 February 2030

3. It is proposed that all pig slurry should be spread by LESSE, from 1 February 2027.

4. On derogated farms all slurry should be spread by LESSE, from 1 February 2027.

Rationale:

The benefits of LESSE are well established, and this technology is effective in increasing manure nitrogen utilisation efficiency and reducing ammonia emissions. The move to 100% use of LESSE will make the greatest contribution to putting Northern Ireland agriculture on a pathway to meet the United Kingdom National Emissions Ceiling Regulations (NECR) 2018 target for reductions in ammonia emissions by 2030.

Ammonia is a highly reactive form of nitrogen which is emitted following agricultural activities such as manure management and the spreading of chemical fertiliser. When

ammonia emissions are subsequently deposited as nitrogen, they can have negative impacts on sensitive habitats such as peat bogs. Northern Ireland has 6% of the United Kingdom land area and 3% of the population and is responsible for 12% of United Kingdom ammonia emissions. 97% of ammonia emission in Northern Ireland come from the agriculture sector. Reducing ammonia emissions from agriculture is essential to protect our environment and support a sustainable agri-food sector.

Spreading slurry using low emission spreading techniques has been an important part of government policy on reducing the impact of farming on the environment for several years. There are significant agronomic benefits of using LESSE. AFBI research has shown that low emission slurry application can increase grass growth by 18% and 26% for trailing hose and trailing shoe respectively. Inorganic nitrogen fertiliser rates for grass silage crops can be reduced by up to 38 kg per hectare when typical rates of slurry are applied by trailing shoe.

AFBI research has further demonstrated that, based on existing emission factors, implementation of low emission slurry spreading techniques would achieve by itself a 5 to 10% reduction in total ammonia emissions across Northern Ireland agriculture.

LESSE applies slurry at ground level, meaning that more nitrogen is retained, and less nitrogen is lost to the air as ammonia. The best-known LESSE methods are trailing shoe, trailing hose (also referred to as dribble bar) and injection systems.

Slurry application using trailing hose will reduce ammonia emissions by around 30%. The trailing shoe system provides an approximate 60% reduction in ammonia emissions. Shallow and deep injection techniques reduce emissions by 70 – 90% but these are less suitable for most of Northern Ireland's soil types and landscapes. These figures can vary significantly depending on a range of factors including weather, soil and growth conditions.

It was proposed at the last NAP review that the Department would look to move towards the use of LESSE to spread slurry on all farms.

1. The 2019 NAP Regulations includes a definition of LESSE methods. It is proposed to update this to provide clarity that any method whereby small-scale splashplates, or other modifications, which increase the surface area of the slurry being spread, are attached to trailing hoses, is not classified as LESSE .

2. The Department proposes to move to100% use of LESSE compulsory by 1 February 2030 on all farm businesses. It is proposed that this will be phased in as follows:

    i. Farm businesses with Farm Livestock Manure N Production of 150 kg/N/ha or more from 1 February 2027.
    ii. Farm businesses with Farm Livestock Manure N Production of 100 kg/N/ha or more from 1 February 2028.
    iii. All farm businesses by 1 February 2030.

    The existing provisions where it is not practical to use LESSE due to the slope of fields will remain.

3. The regulations already require LESSE for pig farms with a total annual livestock manure nitrogen production of 20,000 kg or more. The Department proposes to amend this to make it compulsory for all pig slurry to be spread using LESSE form 1 February 2027.

4. Currently, farms operating under a derogation must use LESSE when spreading slurry from 15 June of each year. The Department proposes to amend this to make LESSE compulsory all year for derogated holdings from 1 February 2027.

Consideration of further support to help farmers invest in LESSE is part of the ongoing development work for a new Sustainable Farming Investment Scheme to help farm businesses improve their environmental performance.

Questions:

5. **Do you agree with the proposed amended definition of LESSE to provide clarification and to incorporate the terminology throughout the regulations?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

6. **Do you agree with the proposed tier approach to the introduction of LESSE based on Nitrogen Production per hectare?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

7. **Do you agree that all pig slurry should be spread by LESSE from 1 February 2027?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

8. **Do you agree that on derogated farms all slurry should be spread by LESSE from 1 February 2027?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Please note that the responses to these questions will also be used to help inform the Proposed Ammonia Strategy.

Additional Phosphorus Controls

Reference: APC 1 - 2

Revisions:

1. The Department proposes to introduce further restrictions on use of chemical fertiliser containing phosphorus on grassland. Use will be restricted to the following criteria: grass reseeding, establishment of clover, where a farm has deficit of phosphorus that cannot be met by import of organic manures/fertilisers or chemical phosphorus is needed for animal health reasons, Soil analysis and a nutrient management plan demonstrating a crop requirement is also required.

   An exemption and supporting evidence to allow use under the above criteria must be registered with NIEA. This measure will come into operation from the commencement of the Regulations. Action 23 of the Lough Neagh Action Plan.

2. The Department proposes to introduce a Farm Phosphorus Balance limit for more intensively stocked farms. Defined as those with annual livestock manure nitrogen production at and above 150kg N/ha per year. There are approximately 3100 farms in this category, in addition to derogated farms where a limit of 10 kg/P/ha/year already applies. The purpose of this limit is to reduce surplus phosphorus and limit the buildup of excess soil phosphorus levels. The limit would be phased in as follows:

   i. 2027 – limit of 10 kg/P/ha/year
   ii. 2029 – limit of 8 kg/P/ha/year

   These limits will also apply to any farms that are producing less than 150 kg/N/yr but subsequently import manure leading to a total N loading (N produced plus N imported) of 150 kg/N/yr and above.

   The limit of 10 kg/P/ha/year which already applies on derogated farms will reduce to 8 kg/P/ha/year in 2029 in line with ii above.

   Farms will be required to submit annual records to NIEA to demonstrate compliance with the P Balance limit.

   These limits will be reviewed in 2029 and as part of the next NAP review. If necessary, lower limits will be set for the subsequent NAP (2030-2033) to achieve the 2033 objective of an overall phosphorus surplus for the Northern Ireland agricultural sector of no more than 7 kg/P/ha/year. Factors to consider in determining the need for lower limits in NAP 2030-2033 include:

   - Reductions achieved in the overall phosphorus surplus for the Northern Ireland agricultural sector.
   - Water quality status, particularly SRP levels
   - Capacity developed for slurry processing facilities and phosphorus export
   - Any reductions achieved in phosphorus inputs from WWT or other inputs.

Rationale:

Monitoring data and evidence shows that in recent years there has been an increase in the number of monitoring sites showing increase of phosphorus across Northern Ireland waters.

The Department has published the Lough Neagh Action Plan and the Environmental Improvement Plan, which both identify phosphorus as a major cause of poor water quality in Northern Ireland. Under both the Department has undertaken to address losses of phosphorus from agriculture and how this nutrient can be better managed.

It is widely recognised that the intensification of agricultural production has had negative impacts on the environment. It is estimated that 62% of the phosphorus inputs to waterways are from Agriculture. In terms of actions under the Lough Neagh Action Plan, it is recognised that action must be taken to halt and address the decline and that the significant amount of pollution getting into Lough Neagh is reduced.

The objective is to have more sustainable nutrient management on farms with chemical and organic fertilisers only being applied based on soil nutrient status and crop requirements.

1. A fundamental cause of agriculture contributing 62% of the phosphorus inputs to waterways is that the Northern Ireland agricultural sector is operating at a high phosphorus surplus. This is not sustainable and the surplus needs to be reduced if we are to improve water quality.

   The two sources of phosphorus inputs to the Northern Ireland Agricultural sector are concentrate livestock feeds and chemical phosphorus fertiliser. Cutting chemical phosphorus fertiliser inputs is a relatively straightforward way to reduce the Northern Ireland agricultural phosphorus surplus. Most livestock farms do not need chemical phosphorus fertiliser as phosphorus is coming onto the farm in concentrate livestock feed.

   At Northern Ireland level, there is more than enough phosphorus (P) in manure/slurry available to meet crop requirements. Recent modelling of stocks and flows of phosphorus in the catchment area of Lough Neagh (Rothwell et al, 2025[3]), for example, indicates that 123% of P requirements for crops and grass are met from organic manure alone. This emphasises the need for better distribution and efficient use of manure/slurry and a significant reduction in the overall P surplus in the NI agricultural sector.

   At present some 40% of agricultural land has excess soil P. Research has shown a direct link between the surplus soil test P in a catchment and SRP concentrations in rivers (Scott et al, 2024[4]). Where soil P is above the agronomic requirement for a crop

[3] Rothwell, S, A., Ross, K, J., and Withers, P, J, A. (2024). Material Flow Analysis Methodology Report. New Harmonica report D20, www.newharmonica.eu.

[4] Reference: Scott, A., Cassidy, R., Arnscheidt, J. and Jordan, P. 2024. Soil phosphorus, hydrological risk and water quality carrying capacities in agricultural catchments. Catena 240, 107964, Soil phosphorus, hydrological risk and water quality carrying capacities in agricultural catchments - ScienceDirect.

the P not taken up by the crop is available for loss to water therefore a significant source of diffuse nutrient pollution.

The P balance limits of 10 and 8 kg/P/ha/year have been set to reduce surplus phosphorus and limit the buildup of excess soil phosphorus levels on the more intensively stocked farms. Higher limits would not be effective in preventing the further build up in soil P on these farms and would therefore lead to more diffuse phosphorus pollution as a result of the increase in soil P above the agronomic optimum.

2. The water quality improvements achieved from introduction of the Nitrates Action Programme in 2007 up to 2012 have in general been offset by intensification of the agricultural sector over the last 10 years. The increased imports of concentrate feedstuff and consequent rise in the Northern Ireland agricultural phosphorus surplus have resulted in higher losses of phosphorus to waterways.

   From 2012 to 2022 average Soluble Reactive Phosphorus (SRP) levels in our rivers increased by 55%. Therefore, the agricultural phosphorus surplus needs to be reduced significantly to improve water quality.

   The phosphorus surplus can be calculated at overall Northern Ireland level for the entire agricultural sector. The Department calculates annual nutrient balances for both phosphorus and nitrogen annually and has a long time series of data. It can also be calculated at individual farm level.

   A phosphorus balance is the difference of external inputs of phosphorus in fertilisers (chemical and organic) and feedstuffs less outputs of phosphorus exported from the farm in agricultural products (meat, milk, eggs and crops) and organic manures.

   All farms operating under the NAP derogation are required to meet a phosphorus balance limit of no more than 10kg P/ha/year. It has been a requirement since 2011, and the legislative and administrative procedures are in place. An online P Balance calculator is also available to all farmers in the CAFRE suite of Nutrient Management calculators.

Farms impacted by proposed P Balance limits

The proposed Farm Phosphorus Balance limit will apply to approximately 3100 farms more intensively stocked farms. with annual livestock manure nitrogen production at and above 150kg N/ha per year. This is in addition to some 420 derogated farms where a P Balance limit already applies.

In total, these farms account for 17% of all farms yet produce some 50% of total manure nitrogen. They will also represent a significant proportion of surplus phosphorus because of their greater reliance on feed inputs. Therefore, implementing the P Balance limits on these farms will have the greatest impact while reducing the regulatory burden on a much greater number of lower stocked farms.

National Farmgate Phosphorus Balance (NFPB) and link to water quality.

There is strong scientific evidence linking the National Farmgate Phosphorus Balance (NFPB) to water quality, based on measured river soluble reactive phosphorus (SRP) concentrations across 93 rivers in Northern Ireland (Jordan et al, (2024)[5].

A model was developed to predict water quality (as average annual SRP concentrations) in rivers using the NFPB. Using this model, the study estimated NFPB values that will support water quality targets in rivers across Northern Ireland after a time-lag of one year.

This research concluded: "To significantly improve river and lake water quality we propose a NFPB midpoint value of 6.9 kg ha^{-1} yr^{-1} (i.e., between 5.5 and 8.2 kg ha^{-1} yr^{-1}), to account for P management measures from non-farm sources such as sewage. This would in some part reduce the burden on the agricultural sector and support the achievement of an NFPB that represents a more viable shorter-term target. Without remediation of non-farm sources, a target NFPB would need to be 5.5 kg ha^{-1} yr^{-1}. "

Actions required at farm and industry level

Achievement of the P Balance limits will rely on action taken at an individual farm level and supported by action at industry level. This will require the Department to work closely with industry to enable farmers to comply.

Actions required will include the adoption of best management practices, eliminating the use of chemical P fertiliser and using feedstuffs designed to minimise P in excreta without compromising animal health. Many farms will also need to process/separate slurry to export P in separated slurry solids to meet the limits and maintain production levels. The alternative would be to reduce feed inputs, production levels and/or livestock numbers.

During the next NAP 2026-2029 the Department proposes to work with industry stakeholders to develop and publish a "Roadmap for Phosphorus efficiency on farm". This will detail the various management practices that farms can adopt to use P more efficiently and reduce surplus P. The Roadmap will be a key element of advisory support. Industry endorsement of the Roadmap would help drive uptake of the actions it recommends and ensure consistent messaging for farmers

Achieving the limits will require substantial changes to the management of phosphorus within the entire agricultural sector in Northern Ireland. Therefore, it is proposed that the limits are implemented in stages.

While it is desirable from the water quality perspective to reduce the phosphorus surplus rapidly, the practical implications, logistics, deliverability and ability of the industry to adapt have been taken into consideration in setting the proposed phased reduction in limits.

[5] https://doi.org/10.1016/j.jenvman.2024.123427)

An alternative to the proposed P Balance limits would be to introduce a mandatory requirement for all farms to produce a nutrient management plan and to limit all manure and slurry applications to crop requirement for P. Chemical fertilsers are already limited to crop requirement for P.

However, the P Balance limit is proposed because it will achieve the greater impact from a lower number of farms. It also provides a constraint on P inputs to reduce the overall national P surplus. While nutrient management planning requires better distribution of P on farm, it does not constrain P inputs as effectively as a P Balance limit to directly reduce the overall P surplus.

Questions

9. **Do you agree with the proposal that the use of chemical phosphorus (P) should be limited to the criteria listed, to prevent surplus phosphorus being applied to land?**

   If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

10. **Do you agree with the phasing in of a P Balance limit for more intensively stocked farms, operating at nitrogen production at and above 150kg N/ha?**

    Limits proposed are:
    (a) Limit of 10 kg/P/ha/year by 2027 and
    (b) Limit of 8 kg/P/ha/year by 2029

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Review of Standard Values for calculation of Nitrogen and Phosphorus

The Department has carried out a review of several of the standard values included in the NAP Regulations and the revised figures are outlined in this section.

Reference: SVNP 1 - 4

Revisions:

From 1 January 2026, the Department proposes the following updates to:

1. dairy cow nitrogen (N) excretion rates based on most recent AFBI data to ensure consistency with data used for the ammonia inventory. Proposal that rates are banded based on annual milk yield. This would ensure more accurate accounting of nutrients produced by various dairy production systems, particularly high input herds.

2. dairy cow phosphorus (P) excretion rates, banded based on annual milk yield.

3. poultry nutrient excretion figures to reflect current poultry systems.

4. standard values for separated manures and slurries

Rationale:

1. An annual N excretion value for dairy cows in Northern Ireland of 91 kg per head was established in 2006, based on an annual milk output of 6206 litres/cow. While the use of a common excretion value introduced simplicity into the practical outworkings of the system, it also potentially 'penalised' farms operating lower input/lower output systems. In contrast, the system introduced by DEFRA within Great Britain included 'banding', with bands determined by annual milk yields/cow.

   Given the increasing spread of milk yields across herds within Northern Ireland, and the strong relationship between milk yield and manure nitrogen excretion, dairy cow N excretion values were re-examined in 2019. The use of banding was examined in that review as it was recognised that banding would ensure more precise calculation of manure N loading on farms.

   The bands proposed were as follows: <6000 litres, 6000 - 8500 litres, and >8500 litres of milk. The middle band was centred (7250 litres), which was approximately the average 'annual milk production' in Northern Ireland between 2013 and 2017 (7228 litres), as derived from the Statistical Review of Northern Ireland Agriculture[6]. The calculation of manure N excretion at that time took account of recent AFBI research which demonstrated a reduction in N excreted as a proportion of N consumed, and a reduction in the Crude Protein content of dairy cow diets. The proposed change to banding was not adopted, and a single value of 100 kg manure N output/cow/year was adopted, based on a mean annual output of 7220 litres.

   Milk output per cow in Northern Ireland has continued to increase, with milk output over the four-year period (2020 – 2023) now averaging 8015 litres (Statistical Review of

[6] https://www.daera-ni.gov.uk/publications/statistical-review-ni-agriculture-2007-onward

Northern Ireland Agriculture, DAERA). Given the significant increase since the last review, it is important to re-examine N excretion levels for dairy cows. While the approach taken in this revision is different from that taken previously, the current approach aligns closely with that used in the Northern Ireland Ammonia Inventory. Where possible, common values and assumptions have been adopted in both.

The approach adopted can be summarised as follows: dairy cow energy requirements over a 12-month period have been determined (based on equations in the Feed-into-Milk: FiM model) taking account of total calculated energy requirements for maintenance, milk production, pregnancy, growth, movement, and feeding. This energy requirement was then converted into a total Dry Matter intake value, and this was portioned into intakes of concentrates, grass silage, maize/whole crop silage and fresh grass. Typical protein concentrations were then applied to these feeds based on values adopted within the ammonia inventory, and a total N intake value calculated. An efficiency value (0.665: as per the 2019 review) describing the proportion of N consumed that was subsequently excreted in manure was then applied to the N intake value, and the total quantity of N excreted in manure determined.

The approach adopted has allowed N excretion values to be determined across a wide range of milk production levels. As milk production level increases, changing assumptions on a range of management issues have been introduced into the model, including, cow size, milk composition, degree of housing, inclusion of alternative forages in the diet, and concentrate quality and composition.

It is proposed that a range of N excretion bands will now be adopted within Northern Ireland. However, concerns associated with the use of 'banding' are recognised and addressed. Namely the 'jump' in manure N excretion values associated with moving from one band to the next, as this creates an issue for farmers on the 'edge' of two bands. This concern has been addressed in the Netherlands through the adoption of 22 individual milk yield bands, established at 250 litre intervals. The use of multiple bands largely mitigates the large step in N excretion values that farmers might face when a small increase in milk production pushes them from a lower band to a higher band.

Ten bands are proposed. The band that a farm falls into would be determined from gross farm milk production per calendar year divided by the average number of dairy cows during that year. Gross farm milk production would be calculated from monthly buyer statements, while the average number of dairy cows would be calculated from NIFAIS herd counts. This value for milk yield per cow per year will determine the N excretion band for the farm, based on a rolling three-year average.

The 10 N excretion bands proposed for Northern Ireland, and associated N excretion values for each band, are set out in Table 1 below.

Table 1: Relationship between milk yield and N excretion per cow per year

Milk Yield Band (litres)	N excretion per cow (kg/year)
< 6000 litres	88
6001 - 6500	92
6501 – 7000	96
7001 – 7500	100
7501 – 8000	105
8001 – 8500	109
8501 – 9000	114
9001 – 9500	118
9501 – 10,000	123
>10, 000 litres	128

While the methodology used to determine N excretion values varies considerably from that adopted in 2006 and 2019, calculated N excretion values fully align with those adopted previously.

2. A value of 19 kg P/year is set in the 2019 NAP regulations for dairy cows. This value was derived by applying the N:P ratio of dairy cow slurry, namely 5.4:1 (RB209, January 2023) to the N excretion value for dairy cows. Phosphorus excretion is related to total feed intake and to the P content of feed.

   Total feed intake is related to milk yield, which has increased since the existing figure was established. However, livestock feed manufacturers in NI have reported that the P content of dairy cow feeds have reduced since 2017, and AFBI have validated this reduction. This change in the P content of feeds is also likely to have altered the N:P ratio in manure. However, without widespread sampling and analysis of slurry from Northern Ireland farms we are unable to identify a new N:P ratio for slurry.

   An alternative approach has therefore been adopted to estimate P excretion, similar to that adopted for calculating N excretion. The approach calculates total P intake at each level of milk production. Values for P excreted in milk, P 'lost' in a calf, and P retained by the cow are then deducted from total P intake, with the residual representing P excretion per cow per year in slurry. Revised P excretion values for each milk yield band are presented in Table 2.

   In line with the approach adopted for N excretion values, P excretion values have been banded according to annual milk output/cow per year. These P excretion values are lower than those adopted previously, primarily reflecting a reduction in the P content of concentrates offered.

Table 2: Relationship between milk yield and P excretion per cow per year

Milk Yield Band (litres)	P excretion per cow (kg/year)
< 6000 litres	13
6001 - 6500	14
6501 – 7000	15
7001 – 7500	15
7501 – 8000	16
8001 – 8500	17
8501 – 9000	17
9001 – 9500	18
9501 – 10,000	18
>10, 000 litres	19

3. Since the NAP regulations came into operation, some of the livestock nutrient excretion values contained within the schedules have been highlighted by stakeholders, advisors and regulators as potentially being incorrect or likely to lead to nitrogen loading and/or crop nitrogen requirements being under or overestimated.

   These values were reviewed and updated in the last two NAP reviews. The Department has completed a further review of the N and P livestock excretion rates in the NAP Regulations tables relating to poultry manures across a range of poultry production and management systems.

   Alterations and additions to better reflect the current poultry production systems and to improve the ease of use and read-across between regulations, guidance documents and on-line calculators are also proposed to the lay-out of the table.

   Details on the scientific research carried out on this is included in the NAP Review document – project E&I 15/04/07 and AFQCC 27-05-001.

   It is proposed that the nitrogen and phosphorus excretion rates for poultry are updated as set out in Table 3.

Table 3: Nitrogen and Phosphorus excretion rates for poultry (Table 1c of Schedule 2 of the Regulations)

Livestock type	Dry matter (%)*	Nitrogen (N) produced per 1000 birds per crop (kg N)	Phosphorus (P) produced per 1000 birds per crop (kg P)	Crop length (weeks)	Litter output per 1000 birds per crop (t)	Litter output per 1000 birds per week (t)
Broilers – indirect heating systems	72	33.8	7.0*	6	1.0	0.170
Free range broilers (0d – finish)	57	44.9	11.4	8	1.7	0.213
Free range broilers (0-28d)	65	18.6	4.4	4	0.53	0.133
Free range broilers (28d-finish	56	44.9	11.4	4	1.6	0.395
Turkeys(1) 0 – 6 weeks	62	103.9	30.3	6	3.9	0.650
Turkeys(1) 6 weeks – kill	59	305	73.8	8	12.3	1.538
Turkeys(1) 0 – kill	61	408.9	104.4	14	16.2	1.157
Fattening ducks	25	139	65	6	21.4	3.567

Livestock type	Dry matter (%)*	Nitrogen (N) produced per 1000 birds per week (kg N)	Phosphorus (P) per 1000 birds per week (kg P)	Crop length (weeks)	Litter or manure output per 1000 birds per crop (t)	Litter or manure output per 1000 birds per week (t)
Broiler breeders 0 – 18 weeks	55	2.9	2.0	18	3.0	0.167
Broiler breeders 18 – 60 weeks	60	7.2	3.9	42	14.7	0.350
Broiler breeders 0 – 60 weeks	58	5.9	3.3	60	17.7	0.295
Pullets	72	4.7	1.7	16	2.3	0.144
Free range laying hens – single tier	46	5.4	2.2	60	17.3	0.288
Free range laying hens – multi tier	32	6.6	2.1	60	25.3	0.422
Housed hens	31	7.4	2.3	60	29.0	0.483

Dry matter may vary depending on litter/manure drying systems. Adjust litter/manure output and nutrient profile accordingly. As DM increases, total weight of litter manure will decrease, and nutrient content/kg will increase.

These figures will then be carried across into the subsequent table in the regulations: Total nitrogen (N) and phosphorus (P) contents of fertilisers and proportion of total phosphorus to total nitrogen (all on a fresh weight basis) in so far as the poultry figures are set out in Table 4.

Table 4: Total Nitrogen and phosphorus content of fertilisers and proportion of total phosphorus to total nitrogen (Table 2 of Schedule 2 to the Regulations)

Solid manure type	Dry matter content (%)*	Total nitrogen content by weight (kg N/t)	Total phosphorus content by weight (kg P/t)	Proportion of total phosphorus to total nitrogen
Poultry manures				
Broiler – indirect heating systems	72	33.8	7.0	0.21
Free range broilers 0d-finish	57	26.4	6.7	0.25
Free range broilers 0-28d	65	34.5	8.2	0.24
Free range broilers 28d-finish	56	28.5	7.0	0.25
Broiler breeders 0 – 18 weeks	55	17.5	11.8	0.67
Broiler breeders 18 – 60 weeks	60	20.7	11.0	0.53
Broiler breeders 0 – 60 weeks	58	19.1	11.4	0.60
Turkeys 0 – 6 weeks	62	26.6	7.7	0.29
Turkeys 6 – kill	59	24.8	6.0	0.24
Turkeys 0 – kill	61	25.7	6.9	0.27
Pullets	72	32.7	12.0	0.37
Free range laying hens – single tier	46	18.8	7.5	0.40
Free range laying hens – multi tier	32	15.6	5.0	0.32
Housed hens	31	15.4	4.7	0.31

Dry matter may vary depending on litter/manure drying systems. Adjust litter/manure output and nutrient profile accordingly. As DM increases, total weight of litter manure will decrease, and nutrient content/kg will increase.

In the regulations this table also includes ducks, farmyard manures and miscellaneous manures, these figures have not been reviewed and remain unchanged.

4. There are two fundamental methods of mechanical separation for animal slurries and digestates: (i) settling (or separation based on density) and (ii) forced filtration.

   Decanter centrifuges are an active form of density-based separation where digestates or slurries are accelerated in a cylindrical bowl to separate the denser solid particles from the liquid fraction. Other methods of density-based separation include settling tanks or lagoons (passive) and thickeners (low-energy).

   There are many forms of forced filtration including brushed screens, belt separators, strainer boxes, weeping walls, and screw presses. All forced filtration separation devices operate on the same principle: pushing digestate through a screen to retain particles larger than the pore size, while the liquid and particles smaller than the pore size pass through to the liquid fraction. In recent years the market seems to have settled on screw presses as the preferred form of forced filtration owing to ease of use, small footprint, few moving parts, ease of maintenance and comparative affordability. A 2009 paper by Hjorth et al. provides an overview of different mechanical separators.

   Following a review of the standard values for separated manures and digestates it is recommended that the standard values for screw press separated slurry fractions be included. Due to the variety of feedstocks for Anaerobic Digestate (AD) and consequent variability of digestate, no standard values are proposed. A specific nutrient content analysis should be provided for digestates, as is required by the 2019 NAP Regulations.

   It appears that the industry has settled on screw press as the preferred method of forced filtration. The values for strainer box and weeping wall will be retained in the regulations as there may be some still in use.

   The following tables contain AFBI generated data on separated liquid and solids respectively, it is proposed that the Department includes in the Regulations the mean as a standard value in the 2025 NAP Regulations.

Table 5 - Separated liquid from screw press separation of cattle slurry

Separated liquid source	Dry matter content	Total Nitrogen (N) (kg N/m^3)	Total phosphorus (P) (kg P/m^3)	P:N ratio	Source
Separated liquid from 8% DM dairy slurry	6	3.5	0.6	0.17	AFBI data
Separated liquid from 7.8% DM dairy slurry	5.2	3.8	0.6	0.16	Fournel et al. 2019
Separated liquid from 6.3% DM dairy slurry	5	3.5	0.58	0.17	Fournel et al. 2019
Separated liquid from 8.6% DM cattle slurry	4.3	3.75	0.34	0.09	Fangueiro et al. 2008
Mean values	**5.1**	**3.64**	**0.53**	**0.15**	**Calculation**

Table 6 - Separated solids from screw press separation of cattle slurry

Separated solid source	Dry matter content	Total Nitrogen (N) (kg N/m^3)	Total phosphorus (P) (kg P/m^3)	P:N ratio	Source
Separated solid from 8% DM dairy slurry	23.7	4.8	1.21	0.25	AFBI data
Separated solid from 7.8% DM dairy slurry	24.3	4.85	1.27	0.26	Fournel et al. 2019
Separated solid from 6.3% DM dairy slurry	26.2	4.81	1.36	0.28	Fournel et al. 2019
Mean values	**24.7**	**4.82**	**1.28**	**0.27**	**Calculation**

The revised values for the mechanical separation of slurry results in the solid portion becoming a high phosphorus manure. This means that if retained on farm consideration must be given to the provisions within the regulations for application of high phosphorus manures.

Questions

11. **Do you agree that the proposed banding of nitrogen excretion rates for dairy cows based on milk yield will ensure more accurate accounting of nutrients in dairy production systems?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

12. **Do you agree that the revised phosphorus excretion rates from dairy cows will ensure more accurate accounting of nutrients in dairy production systems?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

13. **Do you agree that the revised standard values for nitrogen and phosphorus excretion for poultry systems will ensure more accurate accounting of nutrients in poultry production systems?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

14. **Do you agree that the revised standard figures for separated manures and slurries will ensure more accurate accounting of nutrients?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Nitrogen Fertiliser

Reference: NF 1 - 4

Revisions:

1. From 1 January 2026 to prohibit the use of granular urea fertilisers unless they contain urease inhibitors.

2. The Department has reviewed the current Chemical Nitrogen fertiliser limits for grassland and proposes to include the updated figures in the Schedule within the Regulations.2

3. The Department proposes to introduce an allowance/limit for fertilisers derived from processed livestock manures.

4. The Department proposes to introduce mandatory liming programmes for grassland farms with manure nitrogen production of 150 kg N per hectare per year or more.

Rationale:

1. Urea is a highly concentrated chemical nitrogen fertiliser which has an NPK (nitrogen-phosphorus-potassium) ratio of 46-0-0. Protected (or stabilised) urea is urea which is treated with an active ingredient called a urease inhibitor. Urease is the enzyme which catalyses the conversion of urea to ammonium. It is during this conversion that ammonia gas is lost from untreated urea. A urease inhibitor blocks the active site of the urease enzyme, and this slows the rate at which urea is converted to ammonium, thus stabilising it.

   Switching from straight urea to protected (or stabilised) urea could potentially reduce total ammonia fertiliser emissions in Northern Ireland by 32%. Between 7% and 53% of the nitrogen in urea fertiliser can be lost as ammonia compared with an average of 4% for Calcium Ammonium Nitrate fertiliser (CAN). However, CAN is susceptible both to nitrate leaching and to denitrification, having significantly higher nitrous oxide (a potent Greenhouse Gas) emissions than urea. Results from a study by AFBI and Teagasc have shown considerable benefit from using urea in combination with the urease inhibitor NBPT (N-(n-butyl) thiophosphoric triamide). Urea + NBPT offered a reduction in ammonia losses of 78.5% compared with straight urea, whilst maintaining similar agronomic yields to CAN.

   The current ammonia inventory recognises that a 70% reduction in ammonia emissions could be achieved by switching from straight urea fertiliser to protected urea. With urea representing 11% of total fertiliser use in Northern Ireland in 2023, and 12% in 2024, there is potential for a notable saving in ammonia emissions.

   Provision for the use of unprotected urea in liquid form will be retained due to its typically lower and more accurate application rates.

When using Protected Urea, these products must comply with the relevant fertilisation standards and approvals to ensure that there is no risk to the food chain.

2. **Chemical Nitrogen fertiliser limits for grassland**.

For effective nutrient management it is essential that the correct amount of nitrogen is applied at the correct time. Most agricultural soils do not contain enough readily available nitrogen to meet the needs of growing crops; therefore, nitrogen inputs are necessary. To make the best use of nitrogen, fertiliser and organic materials should be applied when crops are growing most – generally spring and early summer. Depending on the conditions at the time of application or in the days immediately after, a high percentage of the nitrogen applied through fertiliser and slurry can be lost via ammonia and nitrous-oxide emissions in the days after application.

Following the completion of trials by AFBI, it is the Department's proposal to align the 2025 NAP Regulations with the United Kingdom Fertiliser manual RB209, in terms of making the nitrogen recommendations production-based, similar to what has been adopted for phosphorus in the 2019 NAP regulations.

In a grassland system, crop nitrogen requirements are met through both slurry and inorganic fertiliser inputs. Slurry can supply a large proportion of crop nutrients necessary, but application limits should not be exceeded, particularly if soil phosphorus levels are above optimum. Slurry contains nitrogen in both organic and inorganic forms. Organic forms of nitrogen are less readily available (typically 40% availability in cattle slurry, RB209).

For derogated farms operating at the 250 kg N/ha/yr limit for livestock manure, the amount of plant-available N supplied by this slurry is 100 kg N/ha/yr (40% of 250). The remainder of the crop nitrogen requirement can be met through inorganic fertiliser. Likewise, for a non-derogated farm operating at the 170 kg N/ha/yr limit from livestock manure, this rate of slurry would supply 68 kg N/ha/yr (40% of 170), with any remaining crop nitrogen requirement being met via inorganic fertiliser.

Extensive, lower-input farms in Northern Ireland are classified as farms where the nitrogen input from livestock manures does not exceed 120 kg N/ha/yr, and no more than 60 kg N/ha/yr from inorganic fertilisers is applied (whole farm average). Silage fields will receive proportionally more nitrogen, and grazed fields a lower amount.

Nitrogen fertiliser limits for grassland systems, based on UK RB209 (2019 edition) and target yields, are presented in Table 7. These limits refer to readily available nitrogen (nitrogen immediately available to the crop following fertiliser application) and are whole farm limits. Inorganic fertiliser is considered 100% readily available nitrogen. However, when considering slurry, it must be remembered that the nitrogen in slurry contains 40% immediately available N, and this must be calculated accordingly (as explained above).

Research by AFBI has shown that typical grass silage yields across Northern Ireland, of a 3 cut system, would be in the range 9 – 12 t DM/ha/yr. Some very high-yielding fields are capable of producing 12 – 15+ t DM/ha/yr, and this would more likely be within an intensive high-input system. Generally 9 – 12 t DM/ha/yr is more common.

Total crop N requirement of a typical silage field in NI, yielding 9 – 12 t/ha/yr is 250 kg N/ha, which can be provided by a mixture of slurry and inorganic N fertiliser, operating within the limits of 170 kg N/ha/yr from slurry or 250 kg N/ha/yr from slurry on a derogated farm. Higher yielding fields (12 – 15+ t/ha) can apply proportionally more inorganic N fertiliser to meet target yields (Table 7).

Nitrogen limits based on RB209 for a grazed fields are presented in Table 8.

In drought conditions, grass growth and therefore nutrient uptake is curtailed due to lack of moisture. There should be no application of nitrogen during this time, as it will not be utilised, and this presents an economic disadvantage for farmers. In addition, when the rain returns following a period of drought, it stimulates the microbial biomass within the soil, and there is high risk of a flush of nitrogen loss to the environment, either through leaching or as gaseous emissions.

It is proposed that the following limits will be applied from 1 January 2026.

Table 7: N Fertiliser Limits for Grass Silage

Farm *Enterprise Type*	*Typical number of silage cuts per year*	*Target annual DM yield (t/ha)*	*Total crop N requirement (kg N/ha/yr) RB209 (2019)*	*Derogated farm operating up to 250 kg N/ha/yr limit. Additional fertiliser N required**	*Non-derogated farm operating up to 170 kg N/ha/yr limit. Additional fertiliser N required***	*Extensive farm operating up to 120 kg N/ha/yr. Additional fertiliser N required****
Extensive, low input	1-2	5-7	70	N/A	N/A	22
Extensive	2	7-9	130	N/A	N/A	82
Dairy & Intensive beef	3	9-12	250	150	182	N/A
Intensive, high yielding, high input	3-4	12-15+	310	210	242	N/A

*A derogated farm with input of up to 250 kg N/ha/yr from livestock manure. This slurry would supply 100 kg N/ha/yr plant available N. The remainder of crop requirement should come from inorganic fertiliser.
** A non-derogated farm with input of up to 170 kg N/ha/yr from livestock manure. This slurry would supply 68 kg N/ha/yr plant available N. The remainder of crop requirement should come from inorganic fertiliser.
*** All of the above are whole-farm limits. Silage fields will require proportionally more nitrogen and grazed fields lower

During drought conditions, there should be no application of nitrogen fertiliser.

Table 8: N Fertiliser Limits for Grazed Fields

Indicative DM yield (t/ha)	*Total N Applied*
4-7	50
7-9	130
9-12	180

3. **Limit/allowance for Processed Organic Fertilisers derived from agricultural sources.**

   It is proposed that the revised NAP will include a specific allowance/limit for "Processed Organic Fertilisers" derived from agricultural sources. These fertilisers will be classified separately from "livestock manure" and will count towards the limit for "Chemical Fertiliser or organic nitrogen supply other than livestock manure".

   This is logical, as the aim is to encourage use of "processed organic fertilisers" as a substitute for chemical fertilisers." The allowance/limit would not result in an increase in the current total N fertiliser application limit and ensure that crop requirements are not exceeded. Any N fertilisers derived from processed livestock manures that are applied would be deducted from the Chemical N fertiliser limit. Processed is defined as chemical and/or heat treatment and excludes simple mechanical processing such as pelleting or composting.

   There is likely to be an increasing supply of such fertilisers as a result of increased manure processing being encouraged through the Sustainable Use of Livestock Slurry (SULS) Small Business Research Initiative (SBRI) as well as a number of other slurry / nutrient processing developments. This proposal is an important step in facilitating the processing of manure/slurry in Northern Ireland to remove excess phosphorus and reduce the national nutrient surpluses for both phosphorus and nitrogen while encouraging a low emissions (GHG, NH3, P) circular economy.

   For the Next NAP 2026 – 2029, the provision for "Processed Organic Fertilisers" will be limited to those derived from agricultural sources. This is to mitigate against the risk of substances and contaminants, such as trace and heavy metals, which may be contained in other feedstock sources, entering agricultural production systems. The NAP will limit the use of "Processed Organic Fertilisers" to a maximum of 100 kg Nitrogen/ha/year. The proposed Farm P Balance limits, measures on high P manures and anaerobic digestate will prevent any potential overapplication of P through the use of "Processed Organic Fertilisers".

   This measure is similar to, but much more limited in scope, than the proposal to amend the Nitrates Directive in relation to recycled nitrogen from manure (RENURE) which is currently being progressed in the EU.

4. **Liming Programme on farms with high stocking rates**

   In ROI, mandatory liming is a statutory requirement for holdings with previous year

grassland stocking rates of 170 kg N per hectare or above from grazing livestock manure prior to export of livestock manure from the holding.

The liming programme is four years in duration, with a minimum of 25% of the lime required per farm spread in year one, and the balance applied over the remaining three years. The lime requirements per farm are determined via soil testing and the production of a farm nutrient management plan. Lime applied just prior to the commencement of the programme can be counted.

It is proposed that a similar approach is adopted within Northern Ireland for farms with manure nitrogen production at or above 150 kg N per hectare per year. The SNHS is currently providing a soil pH and lime recommendation for all agriculturally managed fields across Northern Ireland participating in the scheme. This is a comprehensive database of baseline soil pH, along with associated background information on the drivers of the current spatial variation in soil pH such as farm enterprise type, management intensity, geology and climate.

Initial SNHS results across Zones 1 and 2 have shown that mean soil pH in Zone 2, for those fields eligible for liming, was 5.75, and in Zone 1 it was slightly higher at 5.91, reflecting variations in farm enterprises and physical conditions, such as higher rainfall as you move west.

In general, the average pH across both zones sits below the optimum levels which would be most effective at maximising nutrient uptake. For intensive grass or silage fields, lime applications are one of the quickest and most cost-effective methods to increase nutrient use efficiency. In addition, research has shown that optimum pH will stimulate phosphorus mineralisation (Higgins et al. 2012), which can improve the uptake by plants of legacy soil P stores within the soil. Optimum pH will also enhance nitrogen use efficiency, ultimately leading to reduced emissions to the environment.

Liming is one of the most effective management practices to improve overall soil health. By improving soil health and nutrient use efficiency, more can be gained from the nutrients applied, and overall N&P inputs can be lower. Soil pH data is already being collected across Northern Ireland, and farmers participating in the SNHS currently receive lime recommendations.

A mandatory liming programme is proposed as part of the revised NAP. As part of this programme farms with a manure nitrogen production figure at or above 150 kg N per hectare per year must have a valid soil analysis for the area being farmed.

As in ROI, the liming programme would only be applicable to intensively managed farms on mineral soils. There would be no lime applications to peat soils, species rich grassland and protected sites.

Questions

15. **Do you agree that the use of urea should be prohibited unless they contain an inhibitor (protected urea) from 1 January 2026?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

16. **Do you agree with the proposed changes to the Chemical Nitrogen Fertiliser limits?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

17. **Do you agree that a limit for processed organic fertilisers from processed manures should be introduced to help support recycling of organic nitrogen?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

18. **Do you agree that a mandatory liming programme should be introduced for grassland farms?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Please note that responses to question 15 will also help to inform the Proposed Ammonia Strategy.

Derogation

Reference: DER 1 - 5

Revisions:

From 1 January 2026 Department proposes to retain the derogation limit of up to 250kg N/ha/year as last applied by the Commission to Northern Ireland with the following amendments:

1. To change the eligibility requirements for a derogation so that if the Department finds that a controller's nutrient management account is false or misleading, they will not be eligible to apply for a derogation the following year.

2. The Department proposes to change in legislation the dates for applications and submission of nutrient management accounts to a date specified by the Department. It is proposed that the closing date for derogation applications will be 31 January and the closing date for the submission of accounts to remain the 1 March.

3. Derogated farms will be required to provide a copy of valid Soil analysis for the whole farm along with the nutrient management account.

4. The Department proposes to include in the regulations a cross reference to the Habitat Regulations. This is to enable additional conditions to be included in a derogation where required following completion of a Habitats Regulations Assessment.

5. The Department proposes to amend the application process for Derogated Farms and amend the circumstances and timescale for when an application will be approved.

Rationale

The derogation applies to grassland cattle farms who must meet certain criteria, by law, to farm above 170kg N/ha/year up to a limit of 250kg N//ha/year from grazing livestock manure. It is vital to some Northern Ireland cattle farms with higher stocking rates. Uptake is stable from year to year and these farms cover approximately 4% of the agricultural land in Northern Ireland

The derogation enables farmers to maximise grass-based production and efficient use of manures produced on farm. This helps to reduce inputs of concentrate feeds and chemical fertiliser. On derogated farms phosphorus inputs are constrained as they must operate within a farm phosphorus balance limit. This is an important measure, given that excess phosphorus and nitrogen are a main cause of water quality problems in Northern Ireland.

Farmers must apply to the Department (managed by NIEA) each year for a derogation via an online process and fertilisation accounts for the previous year must also be submitted on an annual basis.

Farms operating under derogation must implement additional nutrient management measures and land spreading restrictions to prevent adverse impacts on water quality from operating at a higher grazing livestock manure limit. They must also meet all other NAP requirements.

The main requirements of a derogation are that a farm must: -

- have at least 80% of land in grass;
- apply to NIEA each year;
- prepare a fertilisation plan on farm by 1 March each year and keep updated in year;
- prepare and submit a fertilisation account for the previous calendar year to NIEA on or before 1 March each year (the closing date is set by the Department);
- have a farm phosphorus balance that does not exceed 10 kg P/ha/year;
- apply at least 50% of slurry produced on the holding on or before 15 June;
- use LESSE after 15 June; and
- comply with some additional restrictions on crop rotation and soil management.

The principle of the derogation is that farms operating under derogation should not represent a greater risk to water quality. The requirements of other environmental legislation also continue to apply to derogated farms. As a result of the Dutch Nitrogen ruling there is consideration to be given when granting such approvals if there is significant impact to designated habitats.

1. The Department proposes to amend the eligibility criteria so that should false or misleading nutrient management accounts (fertilisation accounts) be submitted that they will not be eligible to apply for the derogation.

   At present, applications are only deemed ineligible should they have failed to fulfil the derogation conditions set out in Schedule 8 of the current Regulations

2. The closing date for derogation applications are not set in legislation, the regulations simply specify '…by such date as may be specified…'. It is proposed that from January 2026, this date will be brought forward to 31 January in that year.

   The 2019 NAP Regulations specify that for derogated holdings that they must submit their nutrient management plans and accounts by 1 March in the following year. There may be occasions where Department would need to amend the date by which nutrient management plans are required to be submitted. In order to simplify this and for ease of administration of the process, the Department intends to amend the regulations to say '…by such date as may be specified…'. The intention is that the date will remain as it currently by the 1 March of the following year. However, this amendment will enable the Department to amend the date administratively if required.

3. For all derogated farms, results from a valid soil analysis test must be submitted along with their nutrient management accounts.

   A valid soil analysis will be one which is dated within four years and complies with the NAP regulation requirements. If applying for a derogation for the first time a farm must have a valid soil analysis, which must be submitted with a nutrient management

account, to satisfy the requirements of being derogated.

The Department's SNHS is providing farms with soil analysis results and also have access to download and view a run-off risk map. This information is provided to those farms who participate in the scheme. This data will assist farmers to complete a nutrient management plan and provide evidence of a soil analysis test result.

4. The Department is at risk of contravention of the Habitat Regulations in the application of NAP without giving due consideration to the impact on habitats through the land application of manures.

   As the Derogation permits a higher amount of manure to be spread on land, it is essential that as part of the application process that due consideration is given to the potential impacts of this on habitats and species within Designated sites.

   In order to ensure that a derogation application is not having a significant impact, the Department is proposing to include in the regulations provisions to ensure that the application may be subject to an appropriate assessment under the Habitats Regulations. This may result in some additional restrictions to the land application of manures and derogation requirements in certain areas.

   This will mean that all Derogation applications will be screened for likely significant effects on designated habitats across Northern Ireland. Those applications which have the potential to have significant effects on a designated site will require further assessment under the Habitats Regulations.

5. As required by the Habitats Regulations, it will be necessary for all derogation applications to undergo a Habitats Regulations Screening which will inform the decision to grant, refuse derogation applications or apply further conditions. Therefore, it is proposed that the closing date for applications will be brought forward to 31 January, to provide additional time for these assessments to be carried out.

   At present the 2019 Regulations state that applications will be deemed to be granted after 28 days from the closing date of the applications. In order to ensure that all the necessary assessments are carried out and to ensure compliance with other environmental legislation this timescale is no longer feasible. Therefore, the Department is proposing to include that 'deemed to be granted' will only apply in circumstances where an application has not been refused or where the Department has not notified the applicant that a further assessment of their application is required.

   Following the completion of any necessary further assessments, a decision will be provided to the applicant on the outcome and if there are any additional restrictions which may apply to their holding.

   The Department may ask applicants to provide further information relating to their holding such as soil analysis and run-off risk mapping.

Questions

19. **Do you agree that controllers who are proven to have submitted false or misleading nutrient management accounts should not be eligible to apply for a derogation in the following year?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

20. **Do you agree:**

    (a) That the date for the submission of derogation accounts should be set administratively, therefore agreeing to amend the wording in the legislation to be 'by a date specified by the Department'?

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

    (b) To bring the closing date for derogation application forward from 1 March to 31 January?

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

21. **Do you agree that all nutrient management accounts must be supported with a valid soil analysis?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

22. **Do you agree that the circumstances for when an application will be 'deemed to be granted' after 28 days will be amended to allow further time to assess the likelihood of significant effects on Designated sites**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Storage Requirements

Reference: SR 1 - 3

Revisions & Recommendations:

1. The Department intends to raise awareness of existing storage requirements and how dirty water storage, rainwater and parlour washings can impact this.

2. The Department proposes from 1 January 2026, to amend the requirement for pre-notification of new slurry storage, to prior to construction rather than 28 days prior to use. The Department will still seek verification that construction has been completed and complies with standards.

3. Clarification of existing requirement for new above ground stores that the cover must only be a tensioned fitted / fixed cover.

Rationale:

1. The existing storage requirements remain unchanged, where farms are required to have a minimum of 22 weeks slurry storage, unless they are a pig and poultry enterprises where they are required to have a minimum of 26 weeks.

   However, climate change and changes to the 2019 Regulations could impact on the storage capacity available on farms. Point source pollution from farmyards is a contributing factor to our poor water quality status across Northern Ireland.

   Therefore, the Department intends to raise awareness of the existing storage requirements and best practice on how to maximise the storage facilities already on farm.

   The Department is also working in priority catchment areas, with external bodies who are available to provide support and advice on how farms can mitigate against point source pollution.

2. All new or substantially modified slurry or silage stores are currently required to be notified to the Department 28 days prior to use. It is intended to amend this so that notification of the location and design is provided 28 days prior to construction beginning.
   It will mean that the Department can consider the location and design of the facility and in doing so enable any modifications to be made prior to construction commencing, which otherwise may be costly to remedy afterwards.

   This is an amendment to the existing provision already included in NAP and will not amend the storage capacity requirements.

3. A tight Lid, Roof or Tent Structure is the best proven and most practicable method to reduce emissions from slurry stored in tanks or silos, with 80% ammonia emission abatement.

Questions

23. Do you agree that more information is needed to help understand the storage requirements under NAP?

If so, please advise how best you think this information could be provided:

(a) In person
(b) Newsletters or mailshots
(c) Online webinars
(d) Social media
(e) Other (please specify)

24. Do you agree that pre-notification of slurry storage will help make sure that facilities are constructed on an appropriate site and are compliant with the Regulations?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

25. Do you agree that above ground stores should only have a tension fitted / fixed cover only?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Provision of false or misleading information

Reference: FI 1
Revision The Department proposes to amend the existing provisions to apply to the Appropriate Person rather than the Controller only.
Rationale The Controller is overall responsible for the management of their holding including the provision of information to the Department as requested. The Department proposes to amend this requirement under the regulation to allow enforcement action to be taken against the appropriate person responsible for providing false or misleading information acting on behalf of the controller. An appropriate person is defined in the regulations as: (i) The controller (ii) Any person, whether or not permitted by the controller to carry out any activity described in these Regulations. (iii) The owner of any storage facilities for storage of organic manure, silage and silage effluent and (iv) Any person using such storage of organic manure, silage and silage effluent. Should the Department receive false or misleading information as required by the Regulations, then appropriate action will be taken.

Questions

26. Do you agree that the existing provisions around providing false and misleading information should extend to the appropriate person?

Technical Amendments

Reference: TA 1 - 11

1. Definition – “Dirty Water” ‘mater’ change to ‘matter’

2. Regulation 21(4)(e) – ‘katsitified’ change to ‘karsified’

3. Regulation 27(1)(n) – ‘time’ change to ‘type’

4. Regulation 32(10) – ‘period’ change to ‘person’

5. Schedule 2, table 2 – title insert regulation 14

6. Schedule 3, table 3 – Goat manure – dry content change ’25’ to ‘40’; Horse Manure – dry content change ‘30’ to ‘25’

7. Schedule 6, paragraph 12, after ‘Any slurry storage tank’ insert ‘except lagoons’

8. Definition – “Appropriate Person” (c) Amend ‘Livestock Manure’ to ‘Organic Manure’

9. Definition – farmyard manure to include stackable organic manures

10. Schedule 5, paragraph 4 – ‘sampling every 4th year shall be satisfactory…’ amend to ‘sampling every 4th year must…’

11. Regulation 27(1)(f) – Authorisation changed to notification

The Department will be amending the following terms within the 2025 Regulations to align with terminology used across the Department and industry:

‘Fertilisation Account’ will be amended to ‘Nutrient Management Account’ and ‘Fertilisation Plan’ will be amended to ‘Nutrient Management Plan’.

Rationale:

As part of the review there are a number of technical amendments identified which will be corrected.

The amendments outlined in 1 to 6 are changes to correct typing errors or data which has been copied across incorrectly.

Following the last consultation the Department agreed that the covering of lagoons would not be included, the amendment at point 7 above corrects the legislation to reflect this.

The amendments outlined at points 8 to 12 are technical amendments each of these update the regulations to either provide clarity or to expand the scope of the regulations as follows:

8. In the definition of Appropriate Person in sub-paragraphs (c) and (d) 'Livestock Manure' will be replaced with 'Organic Manure'. In doing so keeps this in line with the wording used for storage requirements already within the regulations.

   It is also proposed that as part of the controls on NAP that there is a requirement to notify the Department of movement all organic manures on and off a farm. This amendment will extend the definition of an appropriate person to beyond those who have custody or control of livestock manures.

9. Farmyard manure includes any stackable organic matter that can be used as a fertiliser.

10. The wording in Schedule 5, paragraph 4 currently states that sampling every fourth year shall be satisfactory as a basis for phosphorus fertiliser recommendation. The Department wishes to strengthen and clarify that a soil test for phosphorus fertiliser recommendations must be carried out every four years.

    A soil test carried out in line with the requirements of Schedule 5 is valid soil test / analysis which can be used to satisfy the requirements within the NAP Regulations. This includes any soil test which has been carried out under the Department's Soil Nutrient Health Scheme. Farmers can submit the results from these tests to satisfy the requirements within the NAP Regulations.

11. Requirement is for notification, not authorisation, to align with the requirement under regulation 24(2), which was amended in the 2019 Regulations.

Question

27. Do you agree with the amendments listed, are technical amendments which either provide clarification or correct errors in the regulations?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Updated Procedure and IT System for recording Slurry / Manure exports and imports

Reference: IT 1 - 2

Recommendations:

1. The Department proposes to introduce an enhanced online system to record exports and imports of slurry and manures to ensure up to date and accurate reporting of movements. All slurry / manure movements to be recorded on the system within four days of the movement and verified by the receiving farm where it will be land spread.

2. The system will be developed to extend it to include movements of processed/separated slurry solids from farms and digestate to farms, subject to appropriate legislative powers being available.

Rationale:

Farms which are exporting nitrogen fertiliser or organic manures off the holding are required to record details and notify the Department of the movement including the quantity, destination and timing. In practice this will mean exporting the manure to another farm where it will be land spread or to other outlets, such as Anaerobic Digestors or other manure processing facilities.

The importing farmer must ensure that in receiving the organic manure they must not exceed 170 kg N/ha/year. The importing farmer is required to keep records similar to those kept by the exporting farm.

The movement and use of manure/slurry under the action programme is intended to promote the use of slurry as a nutrient and encourage its substitution where possible for inorganic fertiliser.

These records are currently submitted to the Department annually. It is proposed to update the existing system. The new system will also be used to record the movement of all organic manures, including anaerobic digestate which are imported onto farms.

The Department is proposing that the new system will be used to record the movement of all organic manures enabling full traceability. This will include the movement of manures from farms to anaerobic digestate plants and digestate from anaerobic digestion plants to farms.

It is proposed that the new system will be closer to real time and will require the importing farm to verify receipt of the export within four days of the movement taking place. Manure movements will only be accepted upon verification by both the exporting and importing entities. This will ensure improved validity and accuracy over the current system and will aid the future calculation of nutrient loading at a farm level.

As with the current system, it will be mandatory for all farms exporting or importing manure who are required to keep these records, to use the new recording system.

The change on this requirement is that the Department also want anaerobic digestion plants and farms and who export or import anaerobic digestate to use the new system to provide information on date moved, quantity and where it has been applied to land.

The Department will use the information provided on the system to monitor the movement of all organic manures and compliance with the 170kgN/Ha limit. It will also be used to focus inspection and enforcement where there is risk identified or non-compliance with the notification and verification requirements within the specific timeframes.

Questions

28. **Do you agree with the introduction of a system that requires all slurry / manure movements to be recorded within 4 days of the movement and verified by the receiving farm where it will be land spread?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

29. **Subject to appropriate legislative powers being available, do you agree with that the system should be extended to include the movement of processed / separated slurry solids from farms and digestate to farms?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Information System for Slurry Spreading conditions

Reference: IS 1

Recommendation

The Department proposes to introduce a simple information system to provide a warning when widespread heavy rainfall is forecast, and conditions are unsuitable for slurry spreading. (Action 9 of the Lough Neagh Action Plan.)

It is proposed that from February 2026, that failure to comply with early warning notifications will be a breach under the NAP Regulations.

Rationale

Research has demonstrated a correlation between the occurrence of precipitation events and losses of phosphorus to rivers in runoff when there have been recent applications of nutrients to land. The 2019 NAP Regulations already prohibit slurry spreading when heavy rain is falling or is forecast within 48 hours. This measure will be retained in the 2025 NAP Regulations.

To aid decision making and provide clarity during such rainfall events, temporary forecast-based closed periods would be implemented. These would be based on Met Office weather warnings.

Farmers would be notified by an alert on the Department's website and by text message or email. The alert would include the start time and duration of the temporary closed period.

Evidence from available rain records supports a temporary closed period on spreading when a Yellow Rain (or higher) Met Office warning is in place.

The aim is to reduce diffuse source nutrient losses from agriculture.

It is proposed to include in the regulations a mandatory requirement to comply with notifications from the early warning system. Failure to adhere to this would be a breach of the regulations.

Question

30. Do you agree that this type of system would be beneficial?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

31. What are your views on the helpfulness of this system?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Fertiliser Database

Reference: FD 1

Recommendation

The Department proposes to introduce a Fertiliser Database to record fertiliser sales and usage along the supply chain in Northern Ireland. It is also proposed to include livestock feed sales as part of the database. This project will be developed and implemented during NAP 2026-2029. Action 24 of the Lough Neagh Report and Action Plan.

Rationale/Reason

Accurate tracking of fertiliser sales and usage will show who bought what product and when it was dispatched to provide information on where fertiliser is applied to land.

Recording fertiliser sales data at farm level will allow monitoring and traceability regarding fertiliser use. The database will be used to support the administration, implementation and control of the NAP in relation to fertiliser limits.

The inclusion of livestock feed sales and linkage to the manure movements system will provide an overall picture of nutrient loading at a farm level with the aim of improved nutrient management and farm efficiency.

This will encourage better nutrient use efficiency and improve water quality, especially in specific catchment areas.

The Department of Agriculture, Food and the Marine (DAFM) implemented its own National Fertiliser Database (NFD) in September 2023. It has facilitated improved compliance with nitrogen and phosphorus limits and is informing policy development regarding the use of chemical fertilisers and climate targets.

A Fertiliser Database is under development and it is aimed to introduce this by 2027. The responsibility for recording sales would lie with the fertiliser / feed merchant or with the supplying farm in the case of farm to farm transfers. End users with closing stocks of fertiliser each September will be required to notify the department of those stocks. End users with no closing stocks will not need to take action as the database will automatically set to zero closing stock. End users will be able to use the database to check quantities and type of fertiliser and feed purchased.

Questions

32. Do you agree this database would help farmers to manage their fertiliser records?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

33. Do you agree that this would help reduce unnecessary purchase and use of fertiliser?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

34. Do you agree that the database would help farmers achieve compliance with the NAP measures?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Anaerobic Digestate Measures

Through NAP the objective is to contribute to development of a framework for processing of slurry / manure via anaerobic digestion, the removal of excess phosphorus and the sustainable management of digestate.

Sustainable Utilisation of Livestock Slurry

Following the successful conclusion of a £600,000 Sustainable Utilisation of Livestock (SULS) proof of concept Phase 1 in 2023, the Department is funding a £12m three-year SULS large scale demonstration Phase 2 programme which commenced in October 2024. The core aim of the programme is for three lead Northern Ireland companies which have been awarded SULS 2 contracts to remove 1,000 tonnes of P from livestock slurry and export it from Northern Ireland on an annual basis by the end of year 3 of the programme.

The process begins with large mobile slurry separators facilitating the removal of separated slurry solids from farms for use as a feedstock for anaerobic digestion plants to produce renewable energy. Crucially, SULS Phase 2 is focused on the extraction P from the resulting digestate to produce marketable products high in P which can be sold outside Northern Ireland to reduce the P loading on agricultural land in Northern Ireland.

The NAP is key to facilitating the movement of nutrients from farms to AD plants and vice versa and encouraging the further processing and exportation of excess nutrients outside Northern Ireland. The Department is already aware from SULS how a revised NAP can facilitate the sustainable movement of P via the movement of processed organic nutrients between farms and AD plants. The Department is keen to obtain further input from stakeholders on the proposals in this NAP consultation.

The processing models being developed through SULS offer significant potential to help reduce the P surplus of Northern Ireland Agriculture and therefore improve water quality.

Reference: AD 1 - 5

Recommendation:

The Department proposes that:

1. From 2027 all digestate should be separated to reduce phosphorus content before it can be land spread. Where liquid digestate has a P:N ratio of 1:10 or lower, it can be land spread, in line with regulations covering cattle slurry.

2. Where digestate is not separated, or it has a P:N ratio of greater than 1:10, it must be applied to crop requirement for phosphorus and nitrogen according to a Nutrient Management Plan.

3. If digestate is produced using feedstocks from outside Northern Ireland, it must be applied to crop requirement for phosphorus and nitrogen according to a Nutrient Management Plan, regardless of digestate separation or processing technology.

4. AD plants will be required to record movements of separated slurry solids and slurry from farms and nutrients moved to farms in processed digestate from AD plants.

5. These movements to be recorded and notified on an update online system that the Department will implement during NAP 2026-2029. This will be a comprehensive nutrient tracking system for recording movement of organic nutrients including both farm-to-farm movements and movements to and from AD plants and other manure processing facilities.

As a means of reducing the Northern Ireland Farmgate Phosphorus Balance and lead to reduced Soluble Reactive Phosphorus (SRP) levels in rivers and lakes (Jordan et al, November 2024[7]), the following measures are proposed in order to reduce excess phosphorus loading on agricultural land.

1. The NAP currently contains controls on the land spreading of digestate. The updated NAP proposes measures for the regulation of digestate that has been separated, which recognise its reduced phosphorus content. It also proposes enhanced recording of nutrient movements.

2. This takes into account processing models being developed under the Sustainable Use of Livestock Slurry (SULS) initiative, Action 10 of the Lough Neagh Action Plan.

3. It also contributes to the development of a new regulatory framework for the processing of slurry for nutrient partitioning and biogas production – Action 25 of the Lough Neagh Action Plan. **……** "Engage and fully consult with stakeholders regarding a new regulatory framework for the processing of slurry to reduce land spreading of excess phosphorus, resulting in renewable energy production and recycling/reuse of organic nutrients. Reduce phosphorus loading to land."

4. The existing NAP measures on AD – specifically the management of digestate - can discourage AD plants from using P rich feedstocks such as separated slurry solids. This is contrary to the objectives of SULS and utilising AD plants combined with nutrient separation technology to help reduce the Northern Ireland Farmgate Phosphorus Balance and improve water quality.

5. Through the revised NAP the aim is to introduce further measures to:

   - Encourage farmers to actively separate or have slurry separated to remove phosphorus from farms, which have an excess of phosphorus, with the separated solids destined for AD feedstock to generate biogas (includes the Farm Phosphorus Balance measure).
   - Drive and enable the sustainable management of digestate, including the efficacious separation and removal of phosphorus.
   - Accurately record the nutrients removed from farms in separated slurry solids and slurry to AD plants. Thereby, formally providing a legitimate and verifiable route for the movement of nutrients from farms.
   - Accurately record the nutrients moved from AD plants in processed digestate to farms where those nutrients are needed.
   - Ensure that separated slurry solids are stored appropriately ensuring that regardless of where they are stored, they should always be covered.

[7] Jordan et al November 2024; https://doi.org/10.1016/j.jenvman.2024.123427

Note: subject to appropriate primary powers being available in NAP to extend to AD plants and other manure processing facilities.

Questions

35. **Do you agree with the proposals requiring separation of digestate before it can be land spread?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

36. **Do you agree that where digestate does not meet the reduced N:P ratio or where it has been produced from feedstocks from outside Northern Ireland regardless of its N:P ratio, that a nutrient management plan is required and that it must be applied to crop need?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

37. **Do you agree with the proposals for record keeping for AD plants on the movement of organic manures received and the solids moved from the plants?**

    If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Focused approach for high-risk areas and sensitive sites

Reference: FA 1
Recommendations: The Department proposes to develop and implement a focused approach for NAP, with focused measures applied in high-risk areas.
Rationale The trend in water quality is showing a decline in some areas with agricultural activity identified as a key pressure contributing to this decline. The initial assessments from the SEA process recommends that the Department consider a focused approach, with an increase in measures that can be implemented in areas of declining water quality. Should the Department fail to act to prevent decline in water quality it is at risk of contravening the Water Framework Regulations. Further assessments show that a significant proportion of habitats and species within European sites are not at favourable management conservation status. Contributing

factors to this unfavourable status are water pollution and nutrient deposition as a result of agricultural activities. Should the Department fail to act on this it is at risk of contravening the Habitats Regulations.

Therefore, to address these issues and strengthen environmental protection, the Department is planning to develop a focused approach which could be used in high-risk / priority areas. This will be developed as a pilot, which will establish a method to identify these high risk / priority areas. It will also identify a mix of voluntary and mandatory additional focused measures which will apply in these areas over and above the existing NAP measures.

A Pilot Focused Approach to Improve Water Quality

In order to do this the Department is proposing the following steps:

1. During 2025 and 2026 develop and deliver a pilot project to improve water quality

2. Identify a methodology for selecting high risk / priority areas, using information and data already available.

3. Develop a set of new focused NAP measures and supporting non-regulatory measures and apply these in the selected areas.

4. Develop a monitoring programme to test the effectiveness of these measures in improving water quality and nutrient management.

5. As part of the pilot develop, assess transferability and potential to scale up the interventions to larger areas.

6. Review the impact of the focused approach on water quality trends.

A Northern Ireland Approach to Improve Water Quality

In 2027, based on the outcome of the pilot, the success of the implementation of the focused approach will be assessed to establish:

1. If the selected metrics of change (both proxies and actual water quality measurements) indicate that the measures are contributing to improved water quality, noting the different time scales of recovery possible depending on whether nutrient source or pathway interventions, and diffuse or point sources.

2. To put plans in place to scale up the pilot to deliver a focused set of measures in other high-risk / priority areas across Northern Ireland.

3. If the pilot does not show a positive change, develop additional mandatory measures, and implement in the pilot.

4. From January 2028, implement the focused approach, to ensure that the right measures are implemented in the right place. In areas where no high risks are identified, the farms would be subject to the standard measures in the NAP Regulations

and related monitoring and review. Where the focused approach identifies that farms are in at-risk areas, focused measures will be introduced to address the risks from agricultural activities.

5. Where subsequent monitoring and assessment shows that the focused measures are achieving the desired objectives (e.g. good status of catchment / water body water quality, favourable conservation status of designated sites), no further action will be needed, with maintenance of focused measures, as required.

6. However, where subsequent monitoring and assessment shows that the focused measures are not achieving the desired objectives, strengthen and / or additional focused measures will be required, subject to an assessment of the wider catchment / water body contributing source/pressures.

Focused Measures within the Focused Approach

The focused measures will be based on the need of a particular site and could include the following:

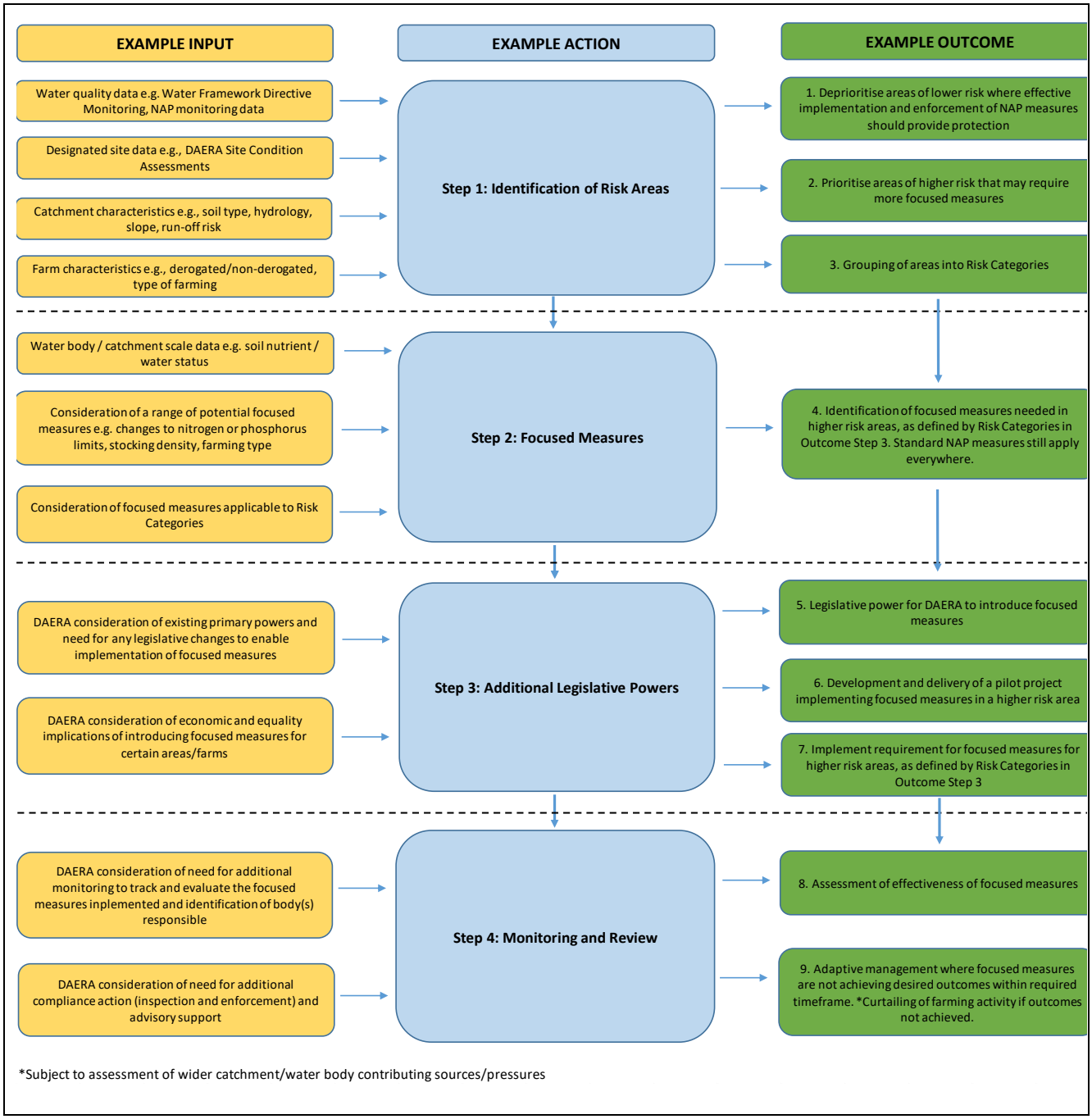
- Non-regulatory measures

  - Knowledge Transfer on Nutrient Management and Water Quality.
  - Non Regulatory advisory farm visits and signposting to financial support to implement riparian margins, planting of buffer zones and other pollution prevention measures
  - Slurry separation and processing to export excess nutrients from farms.

- Regulatory measures:

  - Phosphorus balance limits for all farms
  - Reduced stocking rates / manure Nitrogen loading limits for all farms
  - Reduced chemical fertiliser Nitrogen and Phosphorus limits for all farms.
  - Longer closed period for organic manure and / or additional spreading restrictions such as minimum distance from waterways or application rates.

The following diagram provides more information on implementation of the NAP and the proposed focused approach:



Questions

38. Do you agree that applying additional focused measures is an appropriate way to improve water quality in areas where it is most needed, rather than applying these additional measures to every farm?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

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. NIEA will 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 are 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 (SMR) for cross compliance under direct aid payment schemes, in time this will be replaced with the Department's Farm Sustainability Standards. If a non-compliance is identified on a controllers agricultural holding, the breach will be reported to the relevant branch within the Department. This may lead to a reduction being applied to the farm business's direct aid payments.

Reference: ES 1 - 2

Revisions / Recommendations:

1. From January 2027, the Department proposes to increase the number of on the spot inspections in focused areas. These focused inspections will be in addition to those undertaken to assess compliance with the new Farm Sustainability Standards.

2. The Department is proposing to introduce fixed and variable monetary penalties for offences / breaches under the NAP Regulations, when primary powers are available.

Rationale

Excess agricultural nutrients are having major adverse impact on water quality in Northern Ireland. There is a need for the Department to improve how it enforces its legislation on protecting the environment.

As part of the review of the 2019 NAP Regulations, it was identified that there is a need to strengthen enforcement capabilities.

1. The Department will be reviewing how environmental legislation is enforced, including NAP. Compliance with the new Farm Sustainability Standards will apply to all farms claiming support payments, however the NAP Regulations apply to all Agricultural Businesses irrespective of whether they are in receipt of support payments or not.

   The inspection regime and rate for NAP via the current cross compliance regime is relatively inflexible and is not deemed sufficient, therefore the Department proposes to

increase the number of inspections focusing on key issues impacting on water quality. These inspections may include those farm businesses not in receipt of farm support payments.

2. The Department will be seeking primary powers to enhance the available enforcement powers to include a fixed or variable monetary penalties. This will enable the Department to apply a variable or fixed monetary penalty for breaches of the NAP Regulations outside of the cross-compliance regime. This will be an additional deterrent within the existing enforcement powers and in other areas has proven to be an effective enforcement mechanism.

   This approach will ensure that minor and moderate breaches are dealt with more swiftly and prove an immediate deterrent to non-compliant operators regardless of whether they are claiming support aid from the Department.

   It will also be more efficient and less costly to the Department and PPS than the prosecution route.

   The Department will continue to consider this further and if there are sufficient primary powers a full proposal and process will be developed in the next cycle of NAP which is proposed for 2030.

Questions

39. Do you agree that inspections should focus on key areas of non-compliance and in areas of poor water quality?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

40. Do you agree that the number of inspections should be increased in these areas?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

41. Do you agree that fixed /variable monetary penalties should be introduced to help act a deterrent against non-compliances?

If you disagree, please let us know why and if there is an alternative solution, if you could please provide the supporting evidence for the alternative solution via email at NutrientsActionProgramme@daera-ni.gov.uk

Chapter 4 Impact Assessments

Screening of equality, regulatory and rural needs considerations has been carried out for the Nutrients Action Programme as a whole.

The screening documents are available on the Department's website as part of this wider consultation exercise. The Department welcomes views on these screening exercises as part of this consultation process.

Full screening processes will be undertaken following this consultation exercise.

Equality Considerations

An Equality and Disabilities Duties Screening Template has been completed for the Nutrients Action Programme.

It has demonstrated that there will not be a differential impact because of an individual's religious belief, national identity, racial group, age, marital status, sexual orientation, gender, disability or whether or not he/she has dependants. Therefore, the Department considers that the action programme has been screened it out from a full Equality Impact Assessment to be necessary.

Questions

42. Are there any equality comments you wish to raise at this point?

43. Do you have any evidence that would be useful to the Department?

If so, can you describe the evidence and provide a copy to NutrientsActionProgramme@daera-ni.gov.uk

Rural Needs Considerations

The Department has a statutory duty to implement the statutory requirements of the Rural Needs Act. A Rural Needs Impact Assessment has been carried out and determined that no further action is required at this stage to address rural issues. It is published alongside this document on the DAERA website.

Questions

44. Are there any rural needs comments that you wish to raise at this point?

45. Do you have any evidence that would be useful to the Department?

If so can you describe the evidence and provide a copy to NutrientsActionProgramme@daera-ni.gov.uk

Regulatory Impact Assessment (RIA)

An initial Regulatory Impact Assessment (RIA) has been carried out and is published alongside this document on the DAERA website. We welcome any comments or views you may have in respect of the initial RIA.

Questions

46. Are there any regulatory impact comments that you wish to raise at this point?

47. Do you have any evidence that would be useful to the Department?

If so can you describe the evidence and provide a copy to NutrientsActionProgramme@daera-ni.gov.uk

Strategic Environmental Assessment (SEA)

The Department has engaged an external contractor to complete the SEA on the NAP.

The Department has now considered the initial findings of the SEA and the assessment outcomes for the proposed new NAP measures, as well as any specific mitigation measures. These have help shape the measures included in this consultation paper.

An Environmental Report has been produced as part of the SEA, and it is published alongside this document on the DAERA website.

Questions

48. Are there any comments that you wish to raise at this time regarding the Strategic Environmental Assessment (SEA) Report at this point?

49. Do you have any evidence that would be useful to the Department?

If so can you describe the evidence and provide a copy to NutrientsActionProgramme@daera-ni.gov.uk

Habitats Regulation Assessment (HRA)

The Department has engaged an external contractor to undertake an HRA on the whole programme.

The Report to Inform Appropriate Assessment has been produced and is published alongside this document on DAERA website.

Questions

50. Are there any environmental impact comments you would wish to raise at this point?

51. Do you have any evidence that would be useful to the Department?

If so can you describe the evidence and provide a copy to NutrientsActionProgramme@daera-ni.gov.uk

Glossary of Acronyms

AD	Anaerobic Digestate
AFBI	Agri-Food and Biosciences Institute
BOD	Biochemical Oxygen Demand
CAFRE	College of Agriculture, Food and Rural Affairs
CAN	Calcium Ammonium Nitrate
CP	Crude Protein
DAERA	Department of Agriculture, Environment and Rural Affairs
DEFRA	Department of Environment, Food and Rural Affairs
DM	Dry Matter
DSO	Departmental Solicitor's Office
E&I	Evidence and Innovation
EU	European Union
FPB	Farm Phosphorus Balance
HRA	Habitats Regulation Assessment
LESSE	Low Emission Slurry Spreading Equipment
N	Nitrogen
NAP	Nutrients Action Programme
NECR	National Emissions Ceiling Regulations 2018
NICCAP3	Northern Ireland Climate Change Adaptation Programme3
NIEA	Northern Ireland Environment Agency
NIFAIS	Northern Ireland Food Animal Information System
NFPB	National Farmgate Phosphorus Balance
NPK	Nitrogen Phosphorus Potassium
NVZ	Nitrate Vulnerable Zone
OSNI	Ordnance Survey Northern Ireland
P	Phosphorus
PPS	Public Prosecution Service
RB209	Nutrient Management Guide UK
RIAA	Report to Inform Appropriate Assessment
ROI	Republic of Ireland
SAC	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SMR	Statutory Management Requirement
SNHS	Soil Nutrient Health Scheme
SPA	Special Protection Area
SRP	Soluble Reactive Phosphorus
SULS	Sustainable Utilisation of Livestock Slurry
WFD	Water Framework Directive

Annex A

Correlation Table and Summary of changes: Nutrient Actions Programme Regulations (Northern Ireland) 2019 (as amended) and the Draft Nutrients Action Programme Regulations (Northern Ireland) 2025

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
1	Citation and Commencement	How the Regulations are to be cited and when they are to come into operation.	Yes	1	2019 changed to 2025.
2	Purpose and application of the Regulations	Describes the purpose of the regulations and where they are to apply.	No	2	N/A
3	Interpretation	Definitions of terms within the Regulations.	Yes	3	Amendments have been made to the following definitions: appropriate person – "livestock manure" changed to "organic manure". dirty Water – "mater" changed to "matter" fertilisation plan – "fertilisation plan" changed to "nutrient management plan" fertiliser technical standards – updated the AHDB Nutrient Management Guide (RB209)

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
					Low emission slurry spreading equipment (LESSE) - definition amended to exclude the use of splashplates or modification which increase the surface area of slurry spread, attached to equipment. Amendments throughout the regulations related to these amendments.
4	Duty on the Controller to Prevent Water Pollution	Controller should not permit the entry of fertiliser into any waterway or any water contained in an underground strata.	No	4	N/A
5	Duty of the Controller to Comply with these Regulations	Controller must follow any guidance issued and the Code of Good Agricultural Practices as amended.	No	5	N/A
6	Exemption Granted by the Department	Sets out conditions where the department is exempt from the requirements of these regulations.	No	6	N/A
7	Prohibited Application of Fertiliser	Sets out when land application of fertiliser is not to be permitted.	Yes	7	Inserted new provision to prevent the use of granular urea fertilisers unless they include an inhibitor.
8	Requirements as to the Manner of Land Application of Fertiliser to any Agricultural Land.	Sets out conditions for when and when not to apply fertiliser to agricultural land.	Yes	8	8(2)(e) – inserted “or a warning has been issued through the Department’s warning system”.

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
					8(11) – amended to include phasing to spread 100% of slurry by LESSE.
9	General Measures Governing the Limits on Land Application of Nitrogen Fertiliser.	Sets out limits for land application of nitrogen fertiliser.	No	9	N/A
10	Measures Governing the Limits on Land Application of Nitrogen	Sets out the total amount on nitrogen permitted to be applied to grassland.	No	10	N/A
11	Measures Governing the Limits on Land Application of Nitrogen Fertiliser to Land Other Than Grassland.	Sets out limits for Nitrogen fertiliser application in each year to grassland.	No	11	N/A
12	Measures Governing the Application of Anaerobic Digestate.	Sets out requirements for application of anaerobic digestate to land, including possession of a nutrient content analysis, shall not exceed recommendations, etc.	Yes	12	Regulation numbering updated as follows: 12(4A) – now 12(5) 12(5) – now 12(6). New provision sub-paragraph 7, sets out exemptions applying to requirement to prepare and retain a nutrient management plan.

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
13	Measures Governing the Limits on the Land Application of Chemical Phosphorus Fertiliser.	Grounds for when the controller may apply chemical fertiliser and limits the total phosphorus in chemical fertiliser to what has been set out in the recommendations.	Yes	13	New sub-paragraph (1) inserted – exemptions to when application of Chemical Fertiliser may be applied. Regulation numbering updated as follows: 13(1) – now 13(2) 13(2) – now 13(3) 13(3) – now 13(4) 13(5) – removed no longer required.
14	Measures Governing the Limits on Land Application of Organic Manures with a High Proportion of Phosphorus.	Sets out limits on levels of high phosphorus organic manure that can be applied, along with exceptions to these limits.	No	14	N/A
15	Measures Governing the Location of Supplementary Feeding Sites and Livestock Drinking Points.	Prevents supplementary feeding sites from being located within 20 metres of a waterway. Also prevents supplementary livestock drinking points from being located 10 metres from any waterway.	No	15	N/A

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
N/A	Measures governing cultivation close to waterways	Sets out requirement for uncultivated buffers along a waterway in arable fields	New	16	New provision inserted – requires an uncultivated buffer along a waterway which can be identified using a 1:5,000 scale OSNI map, in arable fields.
16	Fertilisation Plans	Sets out requirements for controller to prepare and retain a nutrient management plan and provides details on what this plan must include.	Yes	17	In 17(2)(f) – removed words "if available", nutrient management plans must include the results of soil analysis.
17	General Obligations as to Storage Facilities for Livestock Manure and Silage Effluent.	Sets out requirements for storage facilities, such as storage capacity, prevention of runoff and structural soundness.	No	20	N/A
18	Obligations as to Livestock Manure Storage Capacity on Pig and Poultry Enterprises.	Sets out how livestock manure is to be stored on pig or poultry enterprises depending on different factors.	Yes	21	Corrects a technical error in the regulation, paragraph 4 is now part of paragraph 3.
19	Manner of Storage of Slurry.	Sets out more grounds for slurry storage along with requirements for a slurry storage system to be considered an exempt structure.	Yes	22	Paragraph (7) inserted – from January 2026, must notify the Department 28days prior to construction and use for all new or substantially enlarged stores.

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
20	Manner of Storage of Farmyard Manure and Location of Storage Facilities.	Requirements for storage of manure, such as effluent collection capabilities and location from waterways.	No	23	N/A
21	Manner of Storage of Poultry Litter or Anaerobic Digestate Fibre and Location of Storage Facilities.	Requirements for holdings storing poultry litter or anaerobic digestate fibre, including distance from waterways.	Yes	24	Paragraph (7) removed – operational date for 2019 Regulations – No change to regulatory content.
22	Manner of Storage of Dirty Water.	Sets out requirement for dirty water to be stored when weather and ground conditions are unsuitable for land application.	No	25	N/A
23	Calculation of Livestock Manure Storage Capacity.	Lists factors to take into account when calculating the livestock manure storage capacity of a holding.	No	26	N/A
24	Making and Storage of Silage	Measure governing how slurry is made and how it is stored.	Yes	27	27(1)(b) inserted requirement for silage bales to not be stacked more than two high. 27(1)(b) and (2) - Distance bales are to be kept from waterways changed from 10 to 20 metres. 27(1)(d) changed to 27(c)(iv).

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
					27(7) inserted paragraph to include requirement to notify the Department 28 days prior to construction and again prior to use of a Silo.
25	Cover in Winter	Sets out measures to be taken by a controller following the harvesting of a crop other than grass.	No	28	N/A
26	Crop Management	Where grass leys are grown in rotation with arable crops the first crop shall be sown as soon as possible after the grass has been ploughed.	No	29	N/A
N/A	Nutrient Management	Introduces the requirement for non-derogated farms to operate at a phosphorus balance and include a liming programme as part of their nutrient management	New	30	30(1) – Introduces a phosphorus balance for farms with a livestock manure production rate of 150 kg per hectare per year including imports. The phosphorus balance will be phased in, with an exemption only applying if a scientific case can be proven. 30(2) – introduces the requirement for farms with a livestock manure production rate of 150 kg per hectare per year including imports to include a liming plan as part of their nutrient planning.

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
27	Records Required	Governs what records are to be kept on all holdings.	Yes	31	Paragraph (1)(k) – subparagraph (vii) added to include requirement to evidence the exemption which applies under regulation 13(1) including field number. Paragraph (1)(n) – was originally (1)(o), paragraph numbering changes as a result. Paragraph (1)(o) (was (1)(n)) "time" changed to "type". Paragraph (3) amended to include updated referencing and also requirement to record information on a Departmental database for fertilisers or manure movements as may be specified by the Department. Paragraph (6) inserted requirement to retain records relating to the calculation of the farms phosphorus balance. Paragraph (7) inserted to include requirement to retain a liming plan for its duration (4 yearly).

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
28	Duty on the Controller not to Provide False or Misleading Information.	Prohibits the controller from providing false or misleading information in any notice or other document for the purposes of these Regulations.	Yes	32	Amended from the controller to the appropriate person. This is to ensure that everyone who is required to provide the Department with information under the regulations or if they are acting on behalf of the controller has a duty under the regulations.
29	Enforcement	Sets out the enforcement authority for these regulations and permits an authorized person to exercise any of their functions to ensure compliance.	No	33	N/A
30	Notices	Sets out who the Department is permitted to serve notice on as well as time limits for the notice and when the notice may be withdrawn.	No	34	N/A
31	Appeals Against Notices Requiring Works etc.	Sets out the right of the appropriate person to appeal against a notice.	No	35	N/A
32	Offences	Outlines offences for controller / appropriate person.	Yes	36	New offences created in 2019 Regulations aligned to the main provisions – paragraphs 1 to 5; New offences created due to new provisions, those that are being phased in are included in paragraphs 7 to 12.

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
33	Penalties	Sets out the penalties for those guilty of offences, those being fines imprisonment.	No	37	N/A
34	Implementation Report	Outlines what should be contained in the four-yearly implementation report and how it should be published.	No	38	N/A
35	Reviewing the Action Programme	Requires the Department to conduct a review of the action programme in four-yearly intervals and outlines the requirements for this review.	No	39	N/A
36	Transitional Provisions	Rules on when a notice is to be deemed a notice.	Yes	40	Updated to reflect transitional arrangements from 2019 NAP Regulations to new Regulations.
37	Consequential Amendments	Amendments to be made to the regulations.	Yes	41	Updated to reflect consequential amendments to other legislation referencing the 2019 NAP Regulations.
38	Revocation and Saving Provisions	Sets out revoked regulations.	Yes	42	Revokes 2019 NAP Regulations.
37	Derogation from measures governing the limits on land application of livestock	Sets out requirement to submit an annual application for a derogation for grazing livestock of up to 250kg nitrogen per hectare for that year	Yes	18	Paragraph (4) inserted – cross reference to the Habitat Regulations

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
38	Derogation from measures governing the limits on land applications of livestock	Sets out the administrative controls and circumstances for granting a derogation including a right of appeal	Yes	19	Paragraph (2) amended to outline department's requirement to notify decision on the application.
Schedule 1	Livestock units of Cattle	Sets out livestock units in respect of bovine animals	No	Schedule 1	N/A
Schedule 2	Criteria for nutrient management	Sets out the nitrogen and phosphorus figures to be used as part of the nutrient management calculations	Yes	Schedule 2	Table 1a – Dairy Cow banding based on annual milk yield; Table 1c – Updated poultry figures for nitrogen and phosphorus excretions rates Table 2 – replaces Mechanical Separator with Screw Press nitrogen and phosphorus content of fertilisers, updates poultry manure systems and separated cattle slurry (solid portion) figures. Table 7 – updated standard figures for phosphorus content of agricultural products and feedstuff.
Schedule 3	Criteria as to nutrient management for phosphorus	Sets standard figures to be used in calculating phosphorus for nutrient management planning	Yes	Schedule 3	Table 3 – Goat and Horse manure figures amended

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
Schedule 4	Risk Assessment for fertiliser application	Sets out factors to be considered in making the risk assessment to ascertain whether fertiliser application is permitted	No	Schedule 4	N/A
Schedule 5	Soil test for Phosphorus	Sets out criteria and requirement for a valid soil test and analysis for the purposes of these Regulations	Yes	Schedule 5	Paragraph 4 – minor amendment for clarification – soil test / sample must be completed every four years.
Schedule 6	Requirement for slurry storage systems	Sets out the requirements which have to be satisfied in relation to slurry storage systems	Yes	Schedule 7	Schedule Number changes. Paragraph 12 inserts 'except lagoons'
Schedule 7	Requirement for Silos	Sets out the requirements which have to be satisfied in relation to silos	No	Schedule 8	Schedule Number changes.
Schedule 8	Conditions applying in relation to a Derogation	Sets out the criteria to be complied with by a controller operating under a derogation	Yes	Schedule 6	Paragraph 4 – amended to emphasis that nutrient management accounts must not be false or misleading, it also amended to enable date nutrient management accounts are to be submitted to the Department to be amended administratively if required. Paragraph 8 – Amended to reflect the proposed phasing in of a farm gate P Balance. Thereby, reducing the existing requirement for

NAP Regulations 2019	Title	Description	Change?	NAP Regulations 2025	Desc of Change
					Derogated farms from 10kg/ha/yr to 8kg/ha/yr from January 2029. Paragraph 9 – moved requirement to use LESSE to regulation 8(11) for derogated farms; this will apply all year now rather than from 15 June.

Annex B

Summary of NAP 4 Review – main proposed additional measures for next NAP 2026-2029.

<table>
<tr><th>Proposed measures</th><th>Detail</th></tr>
<tr><td>Low Emission Slurry Spreading Equipment (LESSE)</td><td>1. Further mandatory use of LESSE introduced on a phased basis.

Proposed LESSE Tiers to 2030.
<table><tr><th></th><th>Farm Livestock Manure Nitrogen Production per hectare</th><th>Proposed date of mandatory LESSE</th></tr><tr><td>Tier 1</td><td>≥150 kg N/ha</td><td>1 February 2027</td></tr><tr><td>Tier 2</td><td>≥100 kg N/ha</td><td>1 February 2028</td></tr><tr><td>Tier 3</td><td>All slurry</td><td>1 February 2030</td></tr></table>
2. Proposed that all Pig slurry should be spread by LESSE.</td></tr>
<tr><td>Additional Phosphorus Controls:-

• Chemical fertilisers</td><td>1. Introduction of further restrictions on use of Chemical fertiliser containing Phosphorus on grassland. Use will be restricted to grass reseeding, establishment of clover, where a farm has deficit of Phosphorus, chemical Phosphorus that cannot be met by the import of organic manures or where Chemical Phosphorus is needed for animal health reasons. An exemption and supporting evidence to allow use under the above criteria must be registered with NIEA. Action 23 of the Lough Neagh Action Plan.</td></tr>
</table>

• **Farm Phosphorus Balance limits**	2. Introduction of a **Farm Phosphorus Balance limit** for more intensively stocked farms. Defined as those with annual livestock manure Nitrogen production at and above 150kg N/ha per year. Approx. 3100 farms in addition to derogated farms which already operate within a P Balance limit. The purpose of this limit is to reduce surplus phosphorus and limit the buildup of excess soil Phosphorus levels. The limit would be phased in as follows: ➢ 2027 – limit of 10 kg/P/ha/year ➢ 2029 – limit of 8 kg/P/ha/year These limits will be reviewed in 2029 and as part of the next NAP review. If necessary, lower limits will be set for the subsequent NAP (2030 - 2033) to achieve the 2033 objective of an overall P Surplus for the Northern Ireland Agricultural sector of no more than 7kg P/ha/year.
Updated procedure and IT System for recording Slurry/Manure exports and imports and movements of other organic nutrients	An enhanced online system to record exports and imports of slurry and manures to ensure up to date and accurate reporting of movements. All slurry / manure movements to be recorded on the system within 4 days of the movement and verified by the receiving farm where it will be land spread. Extend the system to include movements of processed/separated slurry solids from farms and digestate to farms, subject to appropriate legislative powers being available.
Nitrogen and Phosphorus excretion rates for dairy cows	Updated N excretion rates based on most recent AFBI data to ensure consistency with data used for the Ammonia inventory. Proposed that rates are banded based on annual milk yield. This would ensure more accurate accounting of nitrogen produced by various dairy production systems, particularly high input herds. Also, updated P excretion rates banded by milk yield based on most recent AFBI analysis.
Nitrogen fertiliser and liming	1. A ban on the use of granular Urea fertiliser without a urease inhibitor. 2. Proposed amendments to the current Chemical Nitrogen fertiliser limits for grassland. 3. Consult on the introduction of an allowance/limit for fertilisers derived from processed livestock manures and other agricultural feedstocks. This allowance/limit would not result in an increase in the total N fertiliser application limit. 4. Consult on the introduction of a mandatory liming programme for grassland farms with manure nitrogen production of 150 kg N/ha/year and above.

NAP Derogation – additional requirements	1. Derogated Farms – condition for eligibility – application for a derogation will be rejected if a fertilisation account is found to be false or misleading (schedule 8, paragraph 4) of NAP Regs 2019. 2. To amend legislation to enable the Department to set closing dates for derogation applications and accounts administratively. Administrative closing date for derogation applications will be 31st January and Closing date for the submission of accounts to remain as1st March (of year following derogation). 3. Copy of valid Soil analysis to submitted to the Department at the same time as Nutrient Management (Fertilisation) account. 4. To include in the regulations a cross reference to the Habitat regulations. This is to enable additional conditions to be included in a derogation where required following completion of a Habitats Regulations Assessment. 5. To amend the application process for Derogated Farms and amend the circumstances and timescale for when an application will be approved.
Information system for slurry spreading conditions	Introduce a simple information system for slurry spreading. To provide a warning when widespread heavy rainfall is forecast, and conditions are unsuitable for slurry spreading. Consult on mandating adherence to this advice through NAP. **Action 9 of the Lough Neagh Action Plan.**
Fertiliser and Feed database	1. Consult on introduction of a Fertiliser and Feed Database to record chemical fertiliser and livestock feed movements along the supply chain in Northern Ireland from merchants/suppliers to farmers. **Action 24 of the Lough Neagh Action Plan.** 2. A fertiliser database will provide for accurate tracking of fertiliser sales and usage along the supply chain in Northern Ireland. Information entered by fertiliser merchants would show who bought what product and when it was despatched to provide a realistic picture of where fertiliser is applied to land. 3. The proposed inclusion of livestock feed sales and usage in the database would provide a comprehensive system for nutrient inputs, enhance functionality and potential benefits.

	4. The database would simplify record keeping and reporting for farmers. Records would be entered on the database largely by merchants selling feed and fertiliser to farmers against Farm Business ID numbers. Sales/transfers between farms would also need to be recorded by farmers. 5. The data would complement the implementation of DAERA's Soil Nutrient Health Scheme and enable sharing of high level data with industry and farmers. Data on individual farms would not be shared. 6. It would also help to inform policy development on the use of chemical fertilisers and progress on meeting carbon reduction targets. Legislation for a fertiliser database would be separate to the NAP Regulations.
AD measures – through NAP contribute to development of a framework for processing of slurry/manure for AD and the sustainable management of digestate	1. The NAP currently contains controls on the land spreading of digestate. Develop proposals for the regulation of digestate that has been separated, which recognise its reduced phosphorus content. 2. This would take into account processing models being developed under the Sustainable Use of Livestock Slurry (SULS) initiative, **Action 10 of the Lough Neagh Action Plan.** 3. It would also contribute to the development of a new regulatory framework for the processing of slurry for nutrient separation and biogas production – **Action 26 of the Lough Neagh Action Plan.** 4. Through NAP develop and consult on measures to; - ➢ Encourage farmers to separate slurry to remove phosphorus from farms, which have excess phosphorus, and supply separated solids for AD feedstock to generate biogas. ➢ Accurately record the nutrients removed from farms in separated solids. ➢ Drive and enable the sustainable management of digestate, including separation of excess phosphorus. ➢ Accurately record the nutrients returned to farms, where those nutrients are needed, in processed digestate. Consult on the proposal that from 2027 all digestate should be separated to reduce phosphorus content before it can be land spread. Where liquid digestate has a P:N ratio of 1:10 or lower proposed that it can be land spread as per the requirements for cattle slurry.

	If digestate is not separated, it must be applied to crop requirement for nitrogen and phosphorus and a nutrient management plan produced. AD plants will be required to record movements of separated slurry solids and slurry from farms and nutrients moved to farms in processed digestate from AD plants. These movements to be recorded and notified on an online system that the Department will implement during NAP 2026-2029. Note: the primary powers currently available in NAP do not extend to AD plants but do cover the spreading of digestate. DSO advice being sought on this issue.
Additional Measure – Arable Buffer strips	Introduce a new measure requiring a 3-metre-wide grass buffer strip along specific watercourses for arable fields where there is bare soil. To reduce sediment and nutrient run off.
Storage Requirements – new slurry stores and silage bales	1. **Pre-Notification of new slurry storage facilities – prior to construction** rather than 28 days prior to use (regulation 24(6)). Notification will be followed by verification that construction has been completed and complies with standards – 28 days prior to use. This would ill bring Northern Ireland in line with the rest of the United Kingdom. 2. **Silage bales** should not be stored within 20m of a waterway and if stacked, no more than two bales high in field..
Focused Approach for high-risk areas and sensitive habitats	1. To develop a focused approach for NAP, with focused measures in high-risk areas: ➢ Pilot additional measures in high-risk areas ➢ Based on the outcome of the pilot develop a focused approach, where farm businesses will be required to implement more focused measures to protect sensitive habitats and waterbodies at higher risk from pollution from agricultural sources ➢ Develop a range of additional focused measures to be used in high-risk priority areas ➢ Implement a more focused approach as part of NAP.
Enforcement	1. Proposal to increase the number of inspections. 2. Proposal to include **fixed and variable monetary penalties** for breaches under the NAP regulations, once appropriate primary powers are available.

Annex C

Draft Regulations – Nutrients Action Programme Regulations (Northern Ireland) 2025

STATUTORY RULES OF NORTHERN IRELAND

2025 No. 0000

ENVIRONMENTAL PROTECTION

The Nutrients Action Programme Regulations (Northern Ireland) 2025

Made - - - - xxth *xxxx 2025*

Coming into operation - *xxth xxxx 2025*

CONTENTS

SCHEDULES

The Department of Agriculture, Environment and Rural Affairs, in exercise of the powers conferred by the Environment (Legislative Functions from Directives) Regulations 2019([8]) and in exercise of the powers conferred by Article 32 of the Waste and Contaminated Land (Northern Ireland) Order 1997([9]), and now vested in it([10]) makes the following Regulations.

In accordance with Article 32(3) of that Order the Department has published in the Belfast Gazette a notice indicating the effect of these regulations and specifying the matters referred to in sub-paragraph (a)(i) to (iii). The Department has taken into consideration the representations made to it in accordance with that notice.

([8]) S.I. 2019 No. 1350, Chapter 8
([9]) S.I. 1997 No.2778 (N.I. 19)
([10]) S.R. 2016 No. 76, article 8(1)(c)

PART 1

Preliminary

Citation and commencement

1.—(1) These Regulations may be cited as the Nutrients Action Programme Regulations (Northern Ireland) 2025 and come into operation on 1st January 2026.

Purpose and application of the Regulations

2.—(1) These Regulations shall apply to the whole territory of Northern Ireland as required under the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004([11]).

(2) The purpose of these Regulations is to give effect to Northern Ireland's Nutrient Action Programme for the protection of waters against pollution caused by agricultural sources. The measures in these Regulations provide a basic level of protection against possible adverse impact to waters arising from potential agricultural expansion.

Interpretation

3.—(1) The Interpretation Act (Northern Ireland) 1954([12]) applies to these Regulations as it applies to Act of the Assembly.

(2) In these Regulations—

"action programme" means measures regarding the protection of water against pollution caused by nutrients from agricultural sources as set out in these Regulations;

"adequate effluent collection facilities" means effluent collection facilities that meet the requirements of regulation 20(4);

"agricultural area" means any land suitable for agricultural activities, including any common land used for grazing and excludes area under farm roads, paths, buildings, woods, dense scrub, rivers, streams, ponds, lakes, sandpits, quarries, areas of peat cutting, bare rock, area of forestry and areas of 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 Agricultural Act (Northern Ireland) 1949([13]);

"anaerobic digestate" means a stable, sanitised material resulting from the mesophilic and thermophilic biological decomposition and stabilisation of biodegradable waste carried out under controlled anaerobic conditions, and which can be applied to land for the benefit of agriculture or to improve the soil structure or nutrient in land;

"anaerobic digestate fibre" means the solid material separated out of anaerobic digestate;

"Appeals Commission" means the Water Appeals Commission for Northern Ireland as constituted in accordance with Article 292 of the Water and Sewage Services (Northern Ireland) Order 2006([14]);

"appropriate person" means—

(a) the controller;

(b) any person, whether or not permitted by the controller to carry out any activity described in these Regulations;

(c) the owner of any storage facilities for storage of organic manure, silage and silage effluent; and

(d) any person using such storage facilities for storage of organic manure, silage and silage effluent;

"authorised person" means a person authorised by the Department in accordance with Article 72 of the Order;

"available nitrogen" means forms of nitrogen that can be taken up by a crop immediately or within a short period;

"available phosphorus" means forms of phosphorus that can be taken up by a crop immediately or within a short period, the proportion of which contained in fertilisers is set out in Table 3 of Schedule 3;

([11]) S.R. 2004 No. 419
([12]) 1954 c.33 (N.I.)
([13]) 1949 c.2 (N.I.)
([14]) S.I. 2006/3336 (N.I. 21)

"chemical fertiliser" means any fertiliser in which the declared plant nutrients are in the form of minerals obtained by extraction or by physical or chemical industrial processes;

"chemical nitrogen fertiliser" means any fertiliser containing one or more nitrogen compounds which is manufactured or blended by an industrial process;

"chemical phosphorus fertiliser" means any fertiliser containing one or more phosphorus compounds which is manufactured or blended by an industrial process;

"Code of Good Agricultural Practice" means the "Code of Good Agricultural Practice for the Prevention of Pollution of Water, Air and Soil" published by the Department (as may be amended from time to time);

"construct" includes install;

"controller" means in relation to a holding, the person charged with management of the holding for the calendar year in question and will be taken to be the person claiming direct agricultural aid payments for the agricultural area or, where direct agricultural aid payments are not being claimed, the person who enjoys the decision making power, benefits and financial risks in relation to the agricultural activity carried out on the land;

"crop requirement" means the amount of nitrogen, phosphorus and other plant nutrients in 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 nutrient 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, with regard to nitrogen, regulations 9, 10, 11 and 12;

"Department" means the Department of Agriculture, Environment and Rural Affairs;

"derogated holding" means a grassland holding for which a derogation has been granted;

"derogation" means a derogation from the limit of livestock manure that can be applied to land each year, granted by the Department in accordance with regulation 18;

"derogation application" means an application for derogation submitted by the controller to the Department in such manner as it may require;

"direct agricultural aid payments" means the Basic Payment Scheme as referred to in Title III of Regulation (EU) No 1307/2013([15]) or payments to areas facing natural or other specific constraints as referred to in Article 31 of Regulation EU No 1305/2013([16]);

"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 mater contents no greater than set out in Table 2 of Schedule 2;

"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;

"fertiliser" means any substance containing plant nutrients utilised on land to enhance growth of vegetation and may include livestock manure, the residues from fish farms and sewage sludge;

"fertiliser technical standards" means—

(e) the "AHDB Nutrient Management Guide (RB209) January 2023" (as may from time to time be reissued) and any supplementary guidance;

(f) with regards to phosphorus recommendations for grassland, Tables 1 and 2 of Schedule 3; and

(g) any other publication by Department for Environment, Food and Rural Affairs or the Department substituting any of the standards referred to in paragraphs (a) and (b);

"forage crop" means any crop grown as food for animals;

"grassland" means any land on which the vegetation consists predominately 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;

([15]) OJL 347, 20.12.13, p. 865-883
([16]) OJL 347, 20.12.13, p. 487-547

"heavy rain" means more than 4 mm of rain per hour;

"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 enterprise" means any enterprise where livestock are kept;

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

"livestock unit of cattle" has the meaning given in Schedule 1;

"low emission slurry spreading equipment" means equipment which is used to spread slurry by bandspreading, dribble bar, trailing hose, trailing shoe, soil incorporation or soil injection methods, excludes the use of splashplates or other modifications which increase the surface area of slurry spread, attached to equipment;

"midden" means a storage facility with an impermeable base for solid, stackable organic manure;

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

"nitrogen fertiliser" means any substance, including chemical fertiliser, containing one or more nitrogen compounds utilised on land to enhance growth of vegetation;

"notice" means notice in writing;

"nutrient management plan" means a plan prepared in accordance with regulation 16

"the Order" means the Waste and Contaminated Land (Northern Ireland) Order 1997([17]);

"organic manure" means—

(h) livestock manure; and

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

"phosphorus fertiliser" means any substance, including chemical fertiliser, containing one or more phosphorus compounds utilised on land to enhance growth of vegetation;

"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 Department—

(j) 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

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

"reception pit" means a pit used for the collection of slurry before it is transferred into a slurry storage tank or for the collection of slurry discharged from such a tank;

"scientific case" means a reasoned case, as set out in guidance issued by the Department, designed to demonstrate that the proposed deviation from the values set out in Tables 1a to 1c or 2 of Schedule 2 will have no worse effect on the environment than that caused by using those values;

"silage" means any forage crop which is being, or has been, conserved by fermentation or preservation (including the use of additives), or both;

"silage effluent" means—

(l) effluent produced from any forage crop which is being made, or has been made, into silage; or

([17]) S.I. 1997/2778 (N.I. 19)

(m) a mixture consisting wholly of or containing such effluent, rain or water coming from a silo, silage effluent collection system or drain;

"silo" means any structure used for making or storing silage;

"slurry" means—

(n) excreta produced by livestock whilst in a yard or building;

(o) 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

(p) 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;

"slurry contractor" means a person who, in the course of a business, spreads slurry on an agricultural area and who is not claiming direct agricultural payments on that agricultural area;

"slurry storage system" means—

(q) a slurry storage tank;

(r) any reception pit and any effluent tank used in connection with the slurry tank; and

(s) any channels and pipes used in connection with the slurry storage tank, any reception pit or any effluent tank;

"slurry storage tank" includes a lagoon, pit (other than a reception pit) or tower used for the storage of slurry;

"soil phosphorus index" means the index number (0 to 4) assigned to the soil in accordance with Schedule 5 to indicate the amount of phosphorus available from the soil to the crop;

"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;

"total nitrogen" means the sum of all nitrogen forms including nitrate, ammonia and organic nitrogen;

"underground strata" has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999([18]);

"Waste Regulations" means the Waste Management Licensing Regulations (Northern Ireland) 2003([19]);

"water pollution" means the discharge, directly or indirectly, of nitrogen or phosphorus 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 interference with other legitimate uses of water;

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

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

(3) A requirement in these Regulations for a silo or slurry storage tank to conform to a British Standard (in whole or in part) is satisfied if the silo tank conforms to a standard or specification that provides an equivalent level of protection and performance and is recognised for use in a Member State, Iceland, Liechtenstein, Norway or Turkey.

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—

(a) the entry of fertiliser into any waterway; or

(b) the entry or risk of entry of fertiliser into water contained in any underground strata.

([18]) S.I.1999/662 (N.I. 6)
([19]) S.R. 2003 No. 493

Duty of the controller to comply with these Regulations

5. In complying with a 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 for the purposes of these Regulations and the Code of Good Agricultural Practice as may be amended from time to time.

Exemption granted by the Department

6.—(1) The Department may exempt from the requirements of these Regulations—

(a) research activities of the Department, and institutes or agencies authorised by the Department, for the purpose of—

(i) protecting or improving water quality;

(ii) increasing nutrient efficiency in agricultural systems; and

(b) activities carried out by the Department, and institutes or agencies authorised by the Department, so as to address emergency situations where there is a risk of—

(i) impact on human health;

(ii) widespread impact on animal health; or

(iii) impact on the quality of the environment as a whole.

(2) The Department shall record all exemptions under this regulation.

PART 3

Prevention of water pollution from the application of fertilisers

Prohibited application of fertiliser

7.—(1) The land application of chemical nitrogen fertiliser and chemical phosphorus fertiliser to grassland shall not be permitted from 15th September in any year to 31st January of the following year.

(2) The land application of chemical fertiliser to any land shall not be permitted from 15th September in any year to 31st 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 15th October in any year to 31st January of the following year.

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

(5) The land application of granular urea fertiliser shall only be used if it includes an inhibitor.

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

8.—(1) The land application of fertiliser shall be done in an accurate and uniform manner and in accordance with paragraphs (2) to (13).

(2) The land application of fertiliser shall not be permitted when—

(a) soil is waterlogged;

(b) land is flooded or is likely to flood;

(c) the soil is frozen;

(d) land is snow covered;

(e) heavy rain is falling, is forecast within 48 hours or a warning has been issued through the Department's early warning system;

(f) the land is steeply sloping land and where, taking into account the risk assessment set out in Part 1 of Schedule 4, there is significant risk of causing water pollution;

(g) taking into account the risk assessment set out in Part 2 of Schedule 4, there is a significant risk of causing water pollution.

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

(4) Subject to paragraph (6), the land application of chemical fertiliser shall not be permitted within 2 metres of any waterway.

(5) Subject to paragraphs (6) and (9), the land application of organic manure shall not be permitted within—

(a) 20 metres of lakes;

(b) 50 metres of a borehole, spring or well;

(c) 250 metres of a borehole used for a public water supply;

(d) 15 metres of exposed, cavernous or karstified, limestone features (such as swallow-holes and collapse features); or

(e) 10 metres 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 or aggregate; except that

(f) the distance mentioned in sub-paragraph (e) may be reduced to 3 metres of any waterway where the land has an average incline of less than 10% towards the waterway and where—

(i) organic manure is spread close to the ground using low emission slurry spreading equipment;

(ii) the adjoining area is less than 1 hectare in size; or

(iii) the adjoining area is not more than 50 metres in width.

(6) On grassland with an average incline of greater than 15% and any other land with an average incline of greater than 12%, the land application of fertilisers shall not be permitted—

(a) for organic manures within—

(i) 30 metres of lakes;

(ii) 15 metres of any waterways, 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 or aggregate; and

(b) for chemical fertilisers—

(i) 10 metres of lakes; or

(ii) 5 metres 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 or aggregate.

(7) 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 9(1) and a period of at least 3 weeks shall be left between such land applications.

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

(9) During the month of February and the period of 30th September to 15th October—

(a) paragraph (5)(a) shall apply as if for 20 metres there were substituted 30 metres;

(b) paragraph (5)(e) shall apply as if for 10 metres there were substituted 15 metres;

(c) paragraph (8) shall apply as if for 50 cubic metres there were substituted 25 cubic metres;

(d) paragraph (5)(f) shall apply as if for 3 metres there were substituted 5 metres.

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

(11) The land application of slurry shall only be permitted by spreading close to the ground using inverted splash plate spreading, or low emission slurry spreading equipment, except—

(a) when applied by a slurry contractor, it shall be permitted only by spreading close to the ground using low emission slurry spreading equipment;

(b) on holdings with—

(i) pigs with a total annual livestock manure nitrogen production of 20,000kg or more from pigs;

(ii) bovine animals—

(aa) with an average in any calendar year of 200 or more livestock units of bovine animals,

(bb) with a total annual livestock manure nitrogen production at or above 150kg N/ha per year, from 1 February 2027;

(cc) with a total annual livestock manure nitrogen production at or above 100kg N/ha per year, from 1 February 2028;

(dd) all slurry from 1 February 2030.

where it shall be permitted only by spreading close to the ground using low emission slurry spreading equipment;

(c) on derogated holdings where it shall only be permitted by spreading close to the ground using low emission slurry spreading equipment;

(d) where it is not practicable to comply with sub-paragraph (a), (b) or (c) or paragraph (13), on a field due to the slope, the appropriate person may then spread on that field, close to the ground using inverted splash plate spreading and must keep a record of such spreading, in such format as the Department may specify.

(12) The land application of dirty water shall be permitted only by spreading close to the ground using inverted splash plate spreading or low emission slurry spreading equipment.

(13) The land application of anaerobic digestate shall be permitted only by spreading close to the ground using low emission slurry spreading equipment.

General measures governing the limits on land application of nitrogen fertiliser

9.—(1) Except where regulation 18 applies, the amount of total nitrogen in livestock manure and anaerobic digestate containing digested livestock manure applied to the agricultural area of a holding, both by land application and by the animals themselves, shall not exceed 170 kg of nitrogen per hectare per year when calculated in accordance with paragraphs (2) and (3).

(2) The total nitrogen from livestock manure from animals kept on the holding is calculated in accordance with Table 1 of Schedule 2.

(3) The total nitrogen from imported livestock manure and other fertilisers is calculated in accordance with Table 2 of Schedule 2.

(4) The amount of nitrogen available to a crop from organic manure or chemical fertiliser, in the year of application of that fertiliser, is the percentage specified in Table 3 of Schedule 2.

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

(6) A controller may appeal the decision by the Department in paragraph (5) in accordance with the procedure set out in regulation 35.

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

10. For each holding, the total amount of available nitrogen in organic manure and chemical fertiliser, excluding livestock manure and anaerobic digestate containing digested livestock manure, applied to grassland each year, shall be in proportion to the crop requirement for nitrogen of the holding and shall not exceed the amounts as defined in Table 4 of Schedule 2, when calculated in accordance with regulation 9.

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

11.—(1) For each holding, the total amount of available nitrogen in organic manure and chemical fertiliser applied to land other than grassland or land under cultivation for the crops set out in Table 5 of Schedule 2 both by land application and by the animals themselves each year shall not exceed the recommendations contained in the fertiliser technical standards for crop requirement for nitrogen when calculated in accordance with regulation 9.

(2) For each holding, the total amount of available nitrogen in organic manure and chemical fertiliser applied to land under cultivation for crops set out in Table 5 of Schedule 2 both by land application and by the animals themselves each year shall be applied in accordance with the recommendations contained in the fertiliser technical standards for crop requirements for nitrogen when calculated in accordance with regulation 9 and shall in no case exceed the limits set out in Table 5 of Schedule 2, adjusted in accordance with the notes to the table.

Measures governing the application of anaerobic digestate

12.—(1) The controller shall not apply or permit the application of anaerobic digestate to the land unless he has in his possession the nutrient content analysis, containing the percentages of those substances listed in paragraph (5).

(2) Where the controller applies anaerobic digestate to the land that application shall not exceed the recommendations contained in the fertiliser technical standards for crop requirements for phosphorus taking into consideration soil phosphorus index, the recommended soil phosphorus index for the crop and the supply of phosphorus available from the application of livestock manure and other fertilisers.

(3) For the purposes of paragraph (2)—

(a) the soil phosphorus index shall be ascertained in accordance with Schedule 5;

(b) the phosphorus fertiliser recommendations for grassland shall be those set out in Tables 1 and 2 of Schedule 3, adjusted in accordance with the note to Table 1; and

(c) the available phosphorus content of livestock manures and other fertilisers is as set out in Table 3 of Schedule 3.

(4) Where anaerobic digestate is applied, the controller must prepare and retain a nutrient management plan.

(5) Paragraphs (2) and (3) shall not apply in relation to the controller where anaerobic digestate is produced—

(a) on the holding on which it is to be applied; and

(b) from livestock manure or non-waste feedstocks generated on the holding.

(6) The substances mentioned in paragraph (1) are—

(a) dry matter;

(b) total N (nitrogen);

(c) total P_2O_5 (phosphate);

(d) total K_2O (potash) and;

(e) ammonia N or NH_4+.

(7) Form 1 January 2027, paragraph (4) shall not apply in relation to the controller where the anaerobic digestate producer—

(a) is registered with the Department;

(b) uses feedstocks only from Northern Ireland;

(c) separates the anaerobic digestate;

(d) can demonstrate that the digestate through separation has a Phosphorus Nitrogen ratio of 0.10 or less and

(e) notifies the Department in a timeframe and format as specified by the Department of all movements of its digestate to be spread on land.

Measures governing the limits on the land application of chemical phosphorus fertiliser

13.—(1) The controller of a holding must not apply chemical phosphorus fertiliser except when—

(a) establishment of grass reseed;

(b) establishment of clover

(c) the holding's phosphorus deficit cannot be met by use of organic manures;

(d) there is a phosphorus deficiency in livestock;

(e) a scientific or agronomic case has been provided to and accepted by the Department; or

(f) where the soil pH 6 or more or a verified liming plan is in place.

(2) If paragraph (1) applies, the controller of a holding shall ensure that the total amount of available phosphorus in chemical phosphorus fertiliser applied each year to grassland and to land other than grassland shall not exceed the recommendations contained in the fertiliser technical standards for crop requirement for phosphorus taking into consideration soil phosphorus index, the recommended soil phosphorus index for the crop and the supply of phosphorus available from the application of organic manures.

(3) For the purposes of paragraph (2)—

(a) the soil phosphorus index shall be ascertained in accordance with Schedule 5;

(b) the phosphorus fertiliser recommendations for grassland shall be those set out in Tables 1 and 2 of Schedule 3, adjusted in accordance with the note to Table 1; and

(c) the available phosphorus content of livestock manures and other fertilisers is as set out in Table 3 of Schedule 3.

(4) Where chemical P fertiliser is applied to grassland, the controller shall prepare and retain a nutrient management plan.

Measures governing the limits on land application of organic manures with a high proportion of phosphorus

14.—(1) Where an organic manure contains more than 0.25 kg of total phosphorus per 1 kg of total nitrogen calculated in accordance with Table 2 of Schedule 2 it shall not be applied to land unless the controller of a holding can demonstrate that the total amount of available phosphorus applied does not exceed the recommendations contained in the fertiliser technical standards for crop requirement for phosphorus taking into consideration soil phosphorus index, the recommended soil phosphorus index for the crop and the supply of phosphorus available from the application of other fertilisers.

(2) For the purposes of paragraph (1)—

(a) the soil phosphorus index shall be ascertained in accordance with Schedule 5;

(b) the phosphorus fertiliser recommendations for grassland shall be those set out in Tables 1 and 2 of Schedule 3, adjusted in accordance with the note to Table 1; and

(c) the available phosphorus content of livestock manures and other fertilisers is as set out in Table 3 of Schedule 3.

(3) Paragraph (1) does not apply where—

(a) the organic manure is applied in accordance with the Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990 or a licence or exemption granted under the Waste Regulations; or

(b) the organic manure arises from a livestock enterprise contributing no more than 7 kg of nitrogen per hectare per year applied to the agricultural area of a holding, both by land application and by the animals themselves.

(4) Where paragraph (1) applies, the controller shall prepare and retain a nutrient management plan.

Measures governing the location of supplementary feeding sites and livestock drinking points

15.—(1) Where there is significant risk of pollution to any waterway, supplementary feeding sites shall not be located within 20 metres of any waterway.

(2) Where there is a significant risk of pollution to any waterway, supplementary livestock drinking points shall not be located within 10 metres of any waterway.

Measures governing cultivation close to waterways

16.—(1) In arable fields no cultivation shall take place within 3 metres of a waterway identified on a modern 1:5,000 scale OSNI mapping or better, except in the case of grassland establishment or the sowing of grass crops.

(a)

Nutrient management plans

17.—(1) Where the controller is required to prepare and retain a nutrient management plan, describing crop rotation and the planned application of nitrogen and phosphorus fertilisers to their agricultural area, it shall be made available on the holding every year.

(2) Subject to paragraph (3), a nutrient management plan shall include—

(a) the number of livestock on the holding;

(b) the amount of nitrogen and phosphorus from livestock manure produced on the holding calculated in accordance with Table 1 of Schedule 2;

(c) the crop rotation and area of each crop, including a sketch map indicating the location of the area of each crop;

(d) the holding's foreseeable crop requirement for nitrogen and phosphorus in accordance with fertiliser technical standards;

(e) the quantity of each type of organic manure moved on or off the holding;

(f) the results of soil analysis relating to nitrogen and phosphorus soil status;

(g) the amount of nitrogen from nitrogen fertilisers applied in each area of the holding under the same cropping regime and soil type calculated in accordance with Tables 1 to 5 of Schedule 2;

(h) the amount of nitrogen from other organic manures, excluding livestock manures, applied in each area of the holding under the same cropping regime and soil type, calculated in accordance with regulation 9 and Schedule 2;

(i) the amount of phosphorus from chemical phosphorus fertilisers and organic manure applied in each area of the holding under the same cropping regime and with the same soil phosphorus index calculated in accordance with Tables 1 and 2 of Schedule 2; and

(j) in the case of a derogated holding, a description of the housing and manure storage system, including the volume of manure storage available.

(3) Paragraph (2) is satisfied if a controller prepares and retains a nutrient management plan in accordance with the Department's crop nutrient calculator([20]) or such other format as the Department may specify.

(4) Where changes in agricultural practices necessitate changes in the nutrient management plan of a holding the controller shall revise the plan within seven days of such changes taking effect.

PART 4

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

Derogations

18.—(1) A controller may submit to the Department an application for an annual authorisation by such date as may be specified by the Department in a calendar year to apply grazing livestock manure containing up to 250kg nitrogen per hectare in that year.

(2) In the application referred to in paragraph (1), the controller shall undertake in writing to submit to all the controls provided for in regulation 19 and to fulfil the conditions set out in Schedule 8.

(3) An authorisation to apply an amount of livestock manure containing up to 250kg nitrogen per hectare per year shall be granted by the Department, subject to paragraph 4 and the conditions set out in Schedule 6.

(4) Where an application for a derogation is required to undergo a habitats regulation assessment, the outcome of any assessment must be complied with as part of these Regulations.

19.—(1) The Department shall carry out administrative controls in respect of all applications for authorisation for the assessment of compliance with the conditions set out in Schedule 6.

(2) The Department shall refuse a derogation application as follows—

([20]) available from the Department's website: www.daera-ni.gov.uk

(a) where it is demonstrated that those conditions are not fulfilled, and is not subject to an assessment mentioned in 18(4), the Department shall refuse the application within a period of 28 days from the date specified by the Department in accordance with regulation 18(1) and the applicant shall be informed of the reasons for refusal,

(b) where the outcome of an assessment mentioned in 18(4) has been notified to the applicant, it has been demonstrated that the applicant is unable to meet the conditions set out, the Department shall refuse the application within a period of 28 days from the date the assessment is completed, but;

(c) where the Department has not notified the applicant of a refusal within the period mentioned in sub-paragraph (a) or (b), the derogation shall be deemed to have been granted.

(3) Where it is established that in any year, a grassland holding covered by an authorisation did not fulfil the conditions set out in Schedule 6, the controller commits an offence and shall not be eligible for an authorisation the following year.

(4) The controller may appeal the decision by the Department in relation to a refusal under paragraph (2) or in relation to an authorisation under paragraph (3) in accordance with the procedure set out in regulation 35.

(5) Where the derogation has been granted or deemed to have been granted, the controller shall prepare and retain a nutrient management plan.

PART 5

Storage requirements

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

20.—(1) Subject to paragraphs (2) and (3) and regulations 21 to 27, 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 period of wet weather, frozen ground or otherwise, the application to land of organic manure is not permitted.

(3) Subject to regulation 21, 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 regulations 22 and 27.

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

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

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

(3) On any holding 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 the holding shall be sufficient for at least 26 weeks storage for the pig or poultry enterprise and at least 22 weeks for the other livestock enterprise.

Manner of storage of slurry

22.—(1) Subject to paragraph (2), an appropriate person having custody or control of slurry shall store it in a slurry storage system in relation to which the requirements of Schedule 6 are satisfied or which is an exempt structure by virtue of paragraph (3).

(2) Paragraph (1) shall not apply to slurry while it is stored temporarily in a tanker with a capacity not exceeding 18,000 litres which is used for transporting slurry on roads or about a holding.

(3) A slurry storage system is an exempt structure if—

(a) its construction for the purpose of storing slurry was completed before 1st December 2003; and

(b) it has not ceased to be an exempt structure by virtue of paragraph (4).

(4) A structure to which the circumstances set out at paragraph (3) apply shall cease to be an exempt structure if—

(a) any requirement of a notice under regulation 34(1) is not complied with within the period stated in the notice;

(b) it is substantially enlarged; or

(c) it is substantially reconstructed, unless, it appears to the Department, the risks of pollution will be reduced by such works.

(5) Any reference in paragraph (4) to the period stated in a notice is to that period as extended if it has been extended under regulation 34(5) and any reference in that paragraph to a requirement of a notice is to that requirement as modified if it has been modified under regulation 34(5).

(6) Subject to paragraph (7), an appropriate person who proposes to have custody or control of slurry which is to be kept or stored on a holding in a slurry storage system constructed, substantially enlarged or substantially reconstructed on or after 1st December 2003 shall serve notice on the Department specifying the type of structure to be used and its location at least 28 days before it is to be first used for such purpose.

(7) An appropriate person who proposes to have custody or control of slurry which is to be kept or stored on a holding in a slurry storage system constructed, substantially enlarged or substantially reconstructed which is to commence on or after 1 January 2026 must give the Department notice in writing, specifying the type of storage system and its location, at least 28 days before—

(a) work commences and

(b) before it is to be first used.

Manner of storage of farmyard manure and location of storage facilities

23.—(1) Prior to land application, farmyard manure shall only be stored on a holding—

(a) in a midden which shall have adequate effluent collection facilities; or

(b) subject to paragraphs (2) and (3), in the field where land application will take place.

(2) Where stored in a field, farmyard manure shall be stored in a compact heap and such heaps shall not be placed in the same location of the field in consecutive years or within—

(a) 50 metres of lakes;

(b) 20 metres 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 or aggregate;

(c) 50 metres around a borehole, spring or well;

(d) 250 metres from any borehole used for a public water supply; or

(e) 50 metres of exposed, cavernous or karsified, limestone features (such as swallow holes and collapse features).

(3) Where stored in a field, land applications of the farmyard manure shall take place within 120 days from placement in that field, and the farmyard manure heap shall not be placed where—

(a) the soil is waterlogged; or

(b) the land is flooded or likely to flood.

Manner of storage of poultry litter or anaerobic digestate fibre and location of storage facilities

24.—(1) Prior to land application, poultry litter or anaerobic digestate fibre shall only be stored on a holding—

(a) in a midden which shall have adequate effluent collection facilities;

(b) where anaerobic digestate fibre is stored in open midden, it must be covered within 24 hours of storage; or

(c) subject to paragraphs (2) to (6), in the field where land application will take place.

(2) If poultry litter or anaerobic digestate fibre is to be stored in a field heap, the controller must inform the Department in such manner as it may require.

(3) Where stored in a field, poultry litter or anaerobic digestate fibre shall be stored in a compact heap and such heaps shall not be placed in the same location of the field in consecutive years or within—

(a) 100 metres of lakes;

(b) 40 metres 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 or aggregate;

(c) 50 metres around a borehole, spring or well;

(d) 250 metres from any borehole used for a public water supply; or

(e) 50 metres of exposed, cavernous or karsified limestone features (such as swallow holes and collapse features).

(4) Where stored in a field, land application of the poultry litter or anaerobic digestate fibre shall take place within 120 days from storage in that field, and the poultry litter or anaerobic digestate fibre heap shall not be placed where—

(a) soil is waterlogged; or

(b) the land is flooded or likely to flood.

(5) Where stored in a field, poultry litter or anaerobic digestate fibre shall be covered with an impermeable membrane within 24 hours of storage.

Manner of storage of dirty water

25. Provision for the safe storage of dirty water should be available for those periods when weather and ground conditions, as set out in regulation 8(2), are unsuitable for land application.

Calculation of livestock manure storage capacity

26.—(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 23;

(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 controller has with a manure processing facility or demonstrable access to an approved treatment or recovery outlet; and

(e) the quantity of poultry litter or anaerobic digestate fibre stored in a midden or field prior to land application in accordance with regulation 24.

(2) Subject to paragraph (4), the livestock manure storage capacity of a holding may be less than the capacity specified in regulation 20 in relation to—

(a) sheep, deer and goats which are out-wintered at a grassland stocking rate which does not exceed 130 kg of nitrogen at any time during the period specified in regulation 7(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 7(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 140 kg of nitrogen per hectare per year, as calculated in accordance with regulation 9; and

(c) 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 6 of Schedule 2; and

(b) any further procedures for calculating such storage capacity which may be specified in any guidance issued in accordance with regulation 5.

(4) A holding falling with paragraph (2) must ensure that—

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

(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 controller 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 nitrogen, as the case may be, per hectare of the grassland when calculated in accordance with the nitrogen excretion rate of livestock specified in Table 1a of Schedule 2.

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

Making and storage of silage

27.—(1) Subject to paragraph (3), an appropriate person shall not have custody or control of any crop which is being made into silage, or of any silage, which is being stored unless—

(a) it is kept in a silo in relation to which the requirements of Schedule 8 are satisfied or which is an exempt structure by virtue of paragraph (3);

(b) it is compressed in the form of bales which are wrapped and sealed within impermeable membranes (or are enclosed in impermeable bags) and are not stacked more than two high stored at least 20 metres from any waterway that effluent escaping from the bales could enter; or

(c) it is made as bulk bagged silage in bags which—

(i) are made of 1000 gauge polyethylene or material of at least equivalent impermeability and durability;

(ii) are kept sealed to prevent the escape of silage effluent;

(iii) incorporate a facility designed to enable the safe removal of excess effluent when present; and

(iv) are stored at a place at least 20 metres from any waterway that effluent escaping from the bales could enter.

(2) Any appropriate person having custody or control of any crop which is being made, or has been made, into silage in the manner described in paragraph (1)(b) or (c) shall not open or remove the wrapping of any bales or open or empty any bulk bags within 20 metres of any waterway that effluent escaping from the bales or bulk bags could enter.

(3) A silo is for the time being an exempt structure if—

(a) its construction for the purpose of making and storing silage was completed before 1st December 2003; and

(b) it has not ceased to be an exempt structure by virtue of paragraph (4).

(4) A structure to which the circumstances set out at paragraph (3) apply shall cease to be an exempt structure if—

(a) any requirement of a notice under regulation 34(1) is not complied with within the period stated in the notice; or

(b) it is substantially enlarged; or

(c) it is substantially reconstructed, unless, it appears to the Department, the risks of pollution will be reduced by such works.

(5) Any reference in paragraph (4) to the period stated in a notice is to that period as extended if it has been extended under regulation 34(5) and any reference in that paragraph to a requirement of a notice is to that requirement as modified if it has been modified under regulation 34(5).

(6) Subject to paragraph (7), an appropriate person who proposes to have custody or control of any crop which is being made into silage, or of any silage, which is to be kept or stored on a holding in a silo constructed, substantially

enlarged or substantially reconstructed on or after 1st December 2003 shall serve notice on the Department specifying the type of structure to be used and its location at least 28 days before it is to be first used for such purpose.

(7) An appropriate person who proposes to have custody or control of any crop which is being made into silage, or of any silage, which is to be kept or stored on a holding in a silo constructed, substantially enlarged or substantially reconstructed which is to commence on after 1 January 2026, must give the Department notice in writing, specifying the type of silo and its location, at least 28 days before—

(a) work commences and

(b) before it is to be first used.

PART 6

Measures relating to land management

Cover in winter

28. After harvesting a crop other than grass the controller shall ensure that from the date of harvesting to 15th January 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) where soil or weather conditions prevent a subsequent crop from being sown, appropriate measures are put in place to limit soil erosion.

Crop management

29. Where grass leys are grown in rotation with arable crops the first crop shall be sown as soon as possible after the grass has been ploughed.

Nutrient Management

30.—(1) Except for a derogated holding, the controller shall ensure that the phosphorus balance, where a grassland holding has a livestock manure production rate of 150 kg nitrogen per hectare per year or more including import of livestock manure, calculated in accordance with paragraph 1 of schedule 2 and Tables 2 and 7 of that schedule, does not exceed a surplus of—

(a) 12 kg phosphorus per hectare per year from 1 January 2027, and

(b) 10 kg phosphorus per hectare per year from 1 January 2029,

unless a scientific case has been accepted by the Department, for the holding to operate above this limit on a temporary basis

(2) Where a grassland holding has a livestock manure production rate of 150 kg nitrogen per hectare per year or more, a liming programme shall be prepared and must establish the following—

(a) a calculation of liming requirements for each parcel to achieve optimum pH

(b) a lime application programme for the holding.

PART 7

Record keeping and compliance monitoring

Records required

31.—(1) In relation to all holdings and in accordance with paragraphs (2) and (3), the controller of the holding shall keep sufficient records to allow the following information to be ascertained for any calendar year—

(a) the identity of 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, there 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, notification for storage of poultry litter or anaerobic digestate fibre in a field heap, farmyard manure production, out wintered livestock, manure separation and manure processing facilities utilised;

(g) the details of any rental agreement or contract to demonstrate compliance with regulation 26(1)(c) or (d);

(h) where regulation 8(11)(d) applies, particulars of the reason why that regulation applies to any particular field;

(i) the amount of each type of nitrogen fertiliser applied, the certified nitrogen content of any chemical fertiliser applied and the total nitrogen content per tonne of other organic manures as in accordance with Table 2 of Schedule 2;

(j) where regulation 12 applies—

(i) the quantity of anaerobic digestate applied;

(ii) the date of application of any anaerobic digestate; and

(iii) the nutrient content analysis for the anaerobic digestate;

(k) where regulation 12(2), 13(1) or 14(1) applies—

(i) the results of any soil tests carried out in accordance with Schedule 5;

(ii) a statement of the foreseeable crop requirement for phosphorus;

(iii) the quantity of each type of phosphorus fertiliser applied;

(iv) the certified phosphorus content of any chemical fertiliser and the available phosphorus content of all organic manures applied in accordance with Table 3 of Schedule 3;

(v) the date of application of any phosphorus fertiliser;

(vi) the type and date of any crop sown; and

(vii) where regulation 13(2) applies, the exemption satisfied within 13(1) to enable chemical fertiliser to be applied and the field number.

(l) evidence of the right to graze common land;

(m) where regulation 24(2) applies, particulars of any communications given to the Department

(n) the quantity of each type of nitrogen fertiliser moved on to the holding, 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

(o) the quantity of each type of nitrogen fertiliser moved off the holding, 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.

(2) Records under paragraph (1)(a) to (m) shall be prepared for each calendar year by 30th June of the following year and shall be retained for a period of 5 years from that date.

(3) Records under paragraph (1)(n) and (o) shall—

(a) for nitrogen fertilisers

(i) under paragraph (1)(n), be prepared for each calendar year by 30th June of the following year and shall be retained for a period of 5 years from that date;

(ii) under paragraph (1)(o), be prepared for each calendar year and shall be submitted to the Department by 1st March of the following year for derogated holdings and 31st January of the following year for all other holdings, in a format specified by the Department and a copy shall be retained by the controller for a period of 5 years from the date of preparation or submission whichever is later; and

(iii) when specified to do so by the Department, relevant information required to be input on to the Department's Fertiliser Database;

(b) for livestock manure and other organic fertilisers, be recorded in a timeframe and format specified by the Department.

(4) Where the controller is required to prepare a nutrient management plan in relation to a derogated holding for a calendar year they shall prepare that plan no later than 1st March in that calendar year.

(5) Where the controller is required to complete a nutrient management plan, they shall retain the nutrient management plan for each calendar year for that holding for 5 years from the date upon which it was prepared or submitted to the Department, whichever is the later.

(6) Where the controller is required to calculate a farm phosphorus balance, the Department's phosphorus balance calculators should be used and the relevant information retained on the holding for each calendar year.

(7) Where the controller is required to complete a liming plan, they shall retain the liming plan for each calendar year for that holding for 4 years from the date on which it was prepared or submitted to the Department, whichever is later.

(8) Records under paragraphs (1) to (7) shall be made available by the controller for inspection by the Department on request.

Duty not to provide false or misleading information

32. An appropriate person shall not compile records which are false or misleading or furnish any false or misleading information in any notice or other document for the purposes of these Regulations.

PART 8

Enforcement

Enforcement

33.—(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) An authorised person may exercise any of their functions to determine or ensure compliance with these Regulations.

Notices

34.—(1) The Department may serve notice on any appropriate person—

(a) who has custody or control of slurry, or any crop which is being made into silage, or of any silage, in circumstances in which these Regulations apply, requiring that person to carry out such works, take such precautions or take such other steps as are specified in the notice and which, in the opinion of the Department, are appropriate, having regard to any requirements of these Regulations in relation to that substance, for reducing to a minimum any significant risk of pollution of water in a waterway or underground strata arising from the custody or control of that substance; or

(b) where the Department is of the opinion that the appropriate person is in breach or is likely to be in breach of these Regulations.

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

(a) require the person upon whom it is served to carry out such works or to take such precautions and other steps as the Department specifies in the notice as appropriate to reduce to a minimum any significant risk of pollution of water in a waterway or underground strata arising from the custody or control of slurry, or any crop which is being made into silage, or of any silage, or to prevent any breach, to remedy any breach or to prevent the continuation or reception of any breach to which the notice relates;

(b) subject to paragraph (3) state the period within which any such requirement is to be complied with; and

(c) inform the person on whom the notice is served of their right to appeal in accordance with the procedure set out in regulation 35.

(3) The period for compliance stated in the notice pursuant to paragraph (2)(b) shall be such as is reasonable in the circumstances and shall not in any case be less than 28 days from the day on which the notice is served.

(4) Where an appeal is brought under regulation 35, the notice shall be of no effect pending the final determination or the withdrawal of the appeal.

(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 any requirement of the notice.

Appeals against notices requiring works etc.

35.—(1) Any appropriate person upon whom a notice is served under regulation 34 may, within the period of 28 days from the day on which the notice is served, appeal in writing against the notice to the Appeals Commission.

(2) Appeals under regulations 9(6), 19(4) and 34(2)(c) shall be determined by the Appeals Commission in accordance with the procedure pursuant to Article 293 of the Water and Sewerage Services (Northern Ireland) Order 2006([21]) 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

36.—(1) It shall be an offence for the controller to fail to comply without reasonable excuse with regulation 4, 9(1), 17(1) or (3), 19(2), 21, 28, 31(3), (6) or (7) or schedule 6 except paragraph 4.

(3) It shall be an offence for the appropriate person to fail to comply without reasonable excuse with regulation 7(3) or (4), 8(2), (3), (7), (8), (10), (11)(a), (b)(i), (c)(i), (d) or (e) or (13), 23(3) or 24(5).

(4) It shall be an offence for the controller to fail to comply with regulation 9(5), 10, 11(1) or (2), 12(1), (2) or (4), 13(2) or (4), 14(1) or (4), 15(1) or (2), 19(5), 25, 31(1), (2), (4) or (5) or paragraph 4 of Schedule 6.

(5) It shall be an offence—

(a) for the controller in relation to a derogated holding to fail to comply with regulation 16(1) or (4);

(b) for the controller in relation to any other holding to fail to comply without reasonable excuse with regulation 16(1) or (4).

(6) It shall be an offence for the appropriate person to fail to comply with regulation 7(1) or (2); 8(1), (4), (5), (6), (9), (11) or (12), 17(4), 22(1), (6) or (7), 23(1) or (2), 24(1), (2), (4) or (6), 27(1), (2), (6) or (7), 29 or 32.

(7) From 1 January 2027, it shall be an offence for the controller to fail to comply with regulation 30(2).

(8) From 1 January 2027, it shall be an offence for the controller to fail to comply without reasonable excuse with regulation 8(11)(b)(ii) or (c)(ii).

(9) From 1 January 2027, it shall be an offence for the appropriate person to fail to comply with regulation 30(1)(a).

(10) From 1 January 2028, it shall be an offence for the controller to fail to comply without reasonable excuse with regulation 8(11)(c)(iii).

(11) From 1 January 2029, it shall be an offence for the appropriate person to fail to comply with regulation 30(1)(b).

(12) From 1 January 2030, it shall be an offence for the appropriate person to fail to comply without reasonable excuse with regulation 8(11)(c)(iv).

(13) It shall be an offence for the appropriate person to fail to comply without reasonable excuse with any requirement of a notice issued under regulation 34.

Penalties

37. Any person guilty of an offence under regulation 36 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

([21]) S.I. 2006/3336 (N.I. 21)

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

PART 9

Powers, duties and functions of the Department

Implementation Report

38.—(1) The Department must prepare a report on the implementation of these Regulations at four-yearly intervals.

(2) A report in paragraph (1) must contain—

(a) details of any steps taken to promote good agricultural practice;

(b) a summary of the monitoring results on the effectiveness of the action programme;

(c) a summary of the most recent review conducted under regulation 39.

(3) A report under paragraph (1) must be published—

(a) in such manner as the Department considers appropriate;

(b) by the last day of the six month period beginning with the day on which the four-yearly interval ends.

Reviewing the action programme

39.—(1) The Department shall review at four-yearly intervals, in consultation with the public, this action programme and, if appropriate, publish a revised action programme for the protection of waters against nutrients from agricultural sources.

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

(3) The Department shall—

(a) ensure that the public is given early and effective opportunity to participate in the preparation, review or revision of an action 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 sub-paragraph (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 Department 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 Department publish any information, the Department 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 its websites or otherwise.

(6) The Department shall specify in a notice on its 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.

(7) As part of the review conducted under this regulation, the Department must review the overall position of derogations granted under regulation 18(3) against the effectiveness in meeting objectives of reducing water pollution from nutrients and preventing further pollution.

PART 10

Miscellaneous

Transitional provisions

40.—(1) A notice served under regulation 30 (notices) of the Nutrient Action Programme Regulations (Northern Ireland) 2019([22]) shall, notwithstanding the revocation of those Regulations, be deemed to be a notice served under regulation 34 (notices) of these Regulations.

(2) Records required to retain under regulation 27 (type of records required) of the Nutrient Action Programme Regulations (Northern Ireland) 2019 shall, notwithstanding the revocation of those Regulations, be deemed to be records required to be retained under regulation 31 (records required) of these Regulations.

Consequential amendments

41.—(1) Schedule 2 to the Waste Management Licensing Regulations (Northern Ireland) 2003([23]) is amended as follows—

(a) in paragraphs 9(3)(c), 10(10(c), 11(3)(e), 47A(10(d) and 47B(c) of Part I, for "Nutrient Action Programme Regulations (Northern Ireland) 2019" substitute "Nutrients Action Programme Regulations (Northern Ireland) 202x";

(b) in paragraphs 47C(3)(c), 47D(2)(b), 47E(1)(b), and 47F(b) of Part I for "Nutrient Action Programme Regulations (Northern Ireland) 2019" substitute "Nutrients Action Programme Regulations (Northern Ireland) 202x"; and

(c) in paragraph 2(b) of Part III, for "Nutrient Action Programme Regulations (Northern Ireland) 2019" substitute "Nutrients Action Programme Regulations (Northern Ireland) 202x".

(2) For paragraph 1 of Schedule 1 to the Common Agricultural Policy Direct Payments and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2014([24]) substitute "A farmer shall comply with regulations 8(4), (5), (6) and (9) of the Nutrients Action Programme Regulations (Northern Ireland) 20xx".

Revocation and saving provisions

42.—(1) Subject to paragraph (2), the following regulations are revoked—

(a) the Nutrient Action Programme Regulations (Northern Ireland) 2019([25]); and

(b) the Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019([26]).

Sealed with the Official Seal of the Department of Agriculture, Environment and Rural Affairs on xxth xxxx 2025.

[insert name]
A senior officer of the
Department of Agriculture, Environment and Rural Affairs

([22]) S.R. 2019 No. 81 to which there are amendments not relevant to these regulations.
([23]) S.R. 2003 No.493, relevant amending Regulations are S.R. 2006 No. 208, S.R. 2006 No. 489, S.R. 2008 No. 18, S.R. 2010 No. 411 and S.R. 2014 No. 307
([24]) S.R. 2014 No. 291; relevant amending Regulations are S.R. 2014 No. 307
([25]) S.R. 2019 No.81
([26]) S.R. 2019 No. 183

SCHEDULES

SCHEDULE 1

Regulation 3(2)

Livestock units of cattle

Livestock unit in respect of a bovine animal listed in Column 1 means the number of units specified in Column 2 opposite that bovine animal.

Column 1	*Column 2*
Dairy cow	1.0
Beef cow	0.8
Bull kept wholly or mainly for breeding	1.0
Other cattle	
Under 1 year old	0.4
Between 1 and 2 years old	0.6
Over 2 years old	0.8

SCHEDULE 2

Regulations 3(2), 9(2) to (5), 10, 11, 14(1), 26(3) and (6), and 31(1)

Criteria for nutrient management

Table 9a

Regulations 9 and 26 – Nitrogen (N) and phosphorus (P) excretion rates for grazing livestock

Livestock type	*Nitrogen (N) produced per head per year (kg N/yr)*	*Phosphorus (P) produced per head per year (kg P/yr)*
Cattle		
Dairy cow banding (annual milk yield) (litres)		
<6000	88	13
6001 – 6500	92	14
6501 – 7000	96	15
7001 – 7500	100	15
7501 – 8000	105	16
8001 – 8500	109	17
8501 – 9000	114	17
9001 – 9500	118	18
9501 – 10,000	123	18
>10,000	128	19
Dairy heifer (over 2 years)	45	8.3
Dairy heifer (1 – 2 years)	39	7.2
Beef suckler cow (over 2 years)	52	9.6
Bull kept wholly or mainly for breeding	52	9.6
Cattle (over 2 years)	45	8.3
Cattle (1 – 2 years)	39	7.2
Bull beef (0 – 13 months)	30	7.5
Bull beef (6 – 13 months)	23	5.8

Livestock type	*Nitrogen (N) produced per head per year (kg N/yr)*	*Phosphorus (P) produced per head per year (kg P/yr)*
Calf (0 – 1 year)	19	4.7
Calf (0 – 6 months)	7.0	1.7
Calf (6 – 12 months)	12	3.0
Sheep		
Ewe (over 1 year)	9.0	1.0
Ram (over 1 year)	9.0	1.0
Lamb (0 – 6 months)	1.2	0.3
Lamb (6 – 12 months)	3.2	0.3
Lamb (0 – 1 year)	4.4	0.6
Deer		
Deer (red) 6 months – 2 years	12	2.0
Deer (red) over 2 years	15	4.0
Deer (fallow) 6 months – 2 years	7.0	1.0
Deer (fallow) over 2 years	13	2.0
Deer (sika) 6 months – 2 years	6.0	1.0
Deer (sika) over 2 years	10	2.0
Horses		
Horse (over 3 years)	50	9.0
Horse (2 – 3 years)	44	8.0
Horse (1 - 2 years)	36	6.0
Horse (under 1 year)	25	3.0
Donkey or small pony	30	5.0
Goats		
Milking goats	15	1.7
Non milking goat	9.0	1.0
Kid (0 – 1 year)	4.4	0.6
Kid (6 – 12 months)	3.2	0.3
Kid (0 – 6 months)	1.2	0.3

Table 1b

Regulation 9 – Nitrogen and phosphorus (P) excretion rates for pigs

Livestock type		*Nitrogen (N) produced per head per year (kg N/yr)*	*Phosphorus (P) produced per head per year (kg P/yr)*
Adults pigs			
Boar		18	4.2
Maiden gilt		11	5.7
Breeding sow[(1)]		16	8.7
		Nitrogen (N) produced per pig (kg N)	*Phosphorus (P) produced per pig (kg P)*
Pigs weaned at 3 – 4 weeks			
Approximate start weight (kg)	*Approximate sale or transfer weight (kg)*		
6 – 8	18 (7.5 weeks)	0.09	0.08
6 – 8	35 (11 weeks)	0.38	0.23
6 – 8	105 (23 weeks)	2.38	1.09
Growing and finishing pigs			

Approximate start weight (kg)	*Approximate sale or transfer weight (kg)*		
18	35	0.29	0.15
18	105	2.30	1.00
35	105	2.00	0.85

(1) Breeding sows includes served gilts, dry and lactating sows and piglets to weaning.

Table 1c

Regulation 9 – Nitrogen (N) and phosphorus (P) excretion rates for poultry

Livestock type	*Nitrogen (N) produced per 1000 birds per crop (kg N)*	*Phosphorus (P) produced per 1000 birds per crop (kg P)*
Broilers – under indirect heating	33.8	7.0
Free range broilers	44.9	11.4
Turkeys[(1)] 0 – 6 weeks	103.9	30.3
Turkeys[(1)] 6 weeks – kill	305	73.8
Turkeys[(1)] 0 – kill	534	129
Fattening ducks	139	65

[(1)] Male and female turkeys

Livestock type	*Nitrogen (N) produced per 1000 birds per week (kg N)*	*Phosphorus (P) per 1000 birds per week (kg P)*
Broiler breeders 0 – 18 weeks	2.9	2.0
Broiler breeders 18 – 60 weeks	7.2	3.9
Broiler breeders 0 – 60 weeks	5.9	3.3
Free Range Broilers 0-28d	18.8	4.4
Free Range Broilers 28d-finish	45	11
Pullets	4.7	1.7
Free range laying hens – single tier	5.4	2.2
Free range laying hens – multi tier	6.8	2.2
Layers -in housed system	7.7	2.3

Table 10

Regulations 3, 9, 13 and 14 – Total nitrogen (N) and phosphorus (P) contents of fertilisers and proportion of total phosphorus to total nitrogen (all on a fresh weight basis)

Liquid / slurry manure types	*Dry matter content (%)*	*Total Nitrogen (N) content by volume (kg N/m³)[(1) (2)]*	*Total phosphorus (P) content by volume (kg P/m³)[(1) (2)]*	*Proportion of total phosphorus to total nitrogen*
Liquids				
Dirty water	0.5	0.5	0.04	0.08
Cattle slurries				
	2	1.6	0.26	0.16
Cattle slurry	**6**	**2.6**	**0.52**	**0.20**
	10	3.6	0.79	0.22
Separated cattle slurries (liquid portion)				
Screw Press	5.1	3.64	0.53	0.15
Strainer box	1.5	1.5	0.13	0.09
Weeping wall	93	2.0	0.22	0.11
Pig slurries				
	2	3.0	0.35	0.12
Pig slurry	**4**	**3.6**	**0.65**	**0.18**
	6	4.4	0.96	0.22

Separated pig slurry (liquid portion)	3	3.6	0.48	0.13

(1) Figures in bold are the most common values.

(2) For calculation purposes assume 1m^3 of slurry weighs 1 tonne

Solid manure type	*Dry matter content (%)*	*Total nitrogen content by weight (kg N/t)*	*Total phosphorus content by weight (kg P/t)*	*Proportion of total phosphorus to total nitrogen*
Poultry manures				
Broiler – hot water heating	72.2	33.8	7.0	0.21
Free range broilers 0 – 28d	64.6	34.5	18.9	0.24
Free range broilers 28d – finish	56.4	28.5		0.24
Free range broilers 0 – kill	57.2	26.4	6.7	0.25
Broiler breeders 0 – 18 weeks	55	17.5	11.8	0.27
Broiler breeders 18 – 60 weeks	29.7	20.7	11.0	0.53
Broiler breeders 0 – 60 weeks	59	20.2	11.2	0.56
Turkeys 0 – 6 weeks	62	26.6	6.0	0.29
Turkeys 6 – kill	58.5	24.8	6.0	0.24
Turkeys 0 – kill	58	24.8	6.0	0.24
Pullets	72.3	32.7	12.0	0.37
Free range laying hens – single tier	46	18.8	7.5	0.40
Free range laying hens – multi tier	32.3	15.6		0.32
Layer – in housed systems	31.1	15.4		0.30
Duck	25	6.5	2.4	0.37
Farmyard manures				
Cattle manures	25	6.0	1.4	0.23
Sheep manures	25	7.0	1.4	0.20
Goat manures	40	9.5	2.0	0.21
Pig manures	25	7.0	2.6	0.37
Horse manures	25	5.0	2.2	0.44
Miscellaneous manures				
Spent mushroom compost	35	8.0	1.5	0.19
Separated cattle slurry screw press (solid portion)	24.7	4.82	1.8	0.27
Separated pig slurry (solid portion)	20	5.0	1.60	0.32
Other organic manures	Dry matter content, total nitrogen content and total phosphorus content to be declared in accordance with the Waste Regulations. Proportion of phosphorus to total nitrogen to be calculated from these analyses.			
Chemical fertiliser	Dry matter content, total nitrogen content and total phosphorus content as certified by the producers. Proportion of total phosphorus to total nitrogen to be calculated from these analyses.			

Table 11

Regulation 9 – Nitrogen availability in organic manures and chemical fertilisers

Fertiliser	*Nitrogen availability (%)*

Chemical	100
Pig slurry	50
Poultry litter	30
Farmyard manure	30
Cattle slurry	40
Spent mushroom compost	20
Other organic manures	40

Table 12

Regulation 10 – Nitrogen application standards for grassland crops

	Dairy Cattle[2]	*Other livestock*[2]
Balance of crop nitrogen requirement (kg N/ha/yr) (e.g. from chemical fertiliser or organic nitrogen supply other than livestock manure)[1]	272	222

[1] This table does not imply any departure from regulation 9(1) which prohibits the application to the agricultural area on a holding of livestock manure in amounts which exceeds 170 kg N/ha/yr, including that deposited by the animals themselves.

[2] 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 13

Regulation 11 – Maximum permitted nitrogen application and standard yields for cereal crops

Crop type	*Maximum permitted nitrogen (kg N/ha)*[1]	*Standard yield (t/ha)*
Winter Wheat	220	8.0
Spring Wheat	180	7.0
Winter Barley	170	7.0
Spring Barley	140	5.0
Winter Oats	140	6.0
Spring Oats	110	5.0

[1] For all crops in the table, an additional 20 kg N/ha is permitted for every tonne that the expected yield exceeds the standard yield. Evidence of this must be demonstrated by overall farm crop yield in any of the previous three years.

Table 14

Regulation 20 – Livestock manure production figures

Livestock type	*Volume of excreta produced per animal per week (m^3)*[1]
Cattle	
Dairy cow	0.37
Suckler cow	0.23
Cattle (over 2 years)	0.23
Cattle (1 – 2 years)	0.18
Calf (6 -12 months)	0.09
Calf (0 – 6 months)	0.05
Sheep	
Adult ewe or ram	0.03
Fattening lamb (6 – 12 months)	0.01

Livestock type		*Volume of excreta produced per animal per week (m^3)[1]*
Adult pigs		
Maiden gilt or boar		0.05
Dry or lactating sows and served gilts		0.08
Pigs weaned at 3 – 4 weeks		
Approximate start weight (kg)	*Approximate sale or transfer weight (kg)*	
6 – 8	18 (7.5 weeks)	0.01
6 – 8	35 (11 weeks)	0.03
6 – 8	105 (23 weeks) (Meal fed)	0.06
6 – 8	105 (23 weeks) (Liquid fed)	0.08
Growing and finishing pigs		
Approximate stat weight (kg)	*Approximate sale or transfer weight (kg)*	
18	35	0.02
35	105 (Meal fed)	0.03
35	105 (Liquid fed)	0.05
Poultry		
1000 laying hens		0.81

[1] The standard figures for slurry produced by animals do not include water for cleaning buildings.

Criteria as to calculation of phosphorus balance

1.—(1) Phosphorus balance is the difference between phosphorus inputs to the holding less total phosphorus outputs leaving the holding. It is calculated per unit area of agricultural land on the holding for each calendar year.

(2) Phosphorus inputs include, when imported on to the holding—

(a) the total amount of phosphorus in chemical fertiliser;

(b) the total amount of phosphorus feedstuffs (calculated using values from Table 7); and

(c) the total amount of phosphorus in organic manure (calculated using values from Table 2).

(3) Phosphorus outputs include, when exported from the holding—

(a) the total amount of phosphorus in produce, for example, meat, milk and crops (calculated using values from Table 7); and

(b) the total amount of phosphorus in organic manure (calculated using the values from Table 2).

(4) Inputs of phosphorus to agricultural land in precipitation and losses of phosphorus from the holding to any waterway or water contained in any underground strata are excluded from the balance calculation.

(5)

Table 15

Phosphorus (P) content of agricultural products and feedstuff

Agricultural Product	*Phosphorus content (% fresh weight)*
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 kernel	0.63
Pollard	1.00
Soya hulls	0.14
Sugar beet	0.1
Grass fresh	0.06
Whole crop wheat fresh	0.09
Whole crop wheat silage	0.09
Forage maize fresh	0.07
Forage maize silage	0.07

SCHEDULE 3

Regulations 3(2) and 13(3)

Criteria as to nutrient management for phosphorus

Table 1

Phosphorus (as orthophosphate (P_2O_5)) limits for grassland on soils of different soil phosphorus index

	Soil phosphorus index					
	0	1	2-	2+	3	4
	Phosphorus recommendation (kg P_2O_5 ha^{-1})					
At grass establishment	120	80	65	50	30	0
Grazing[(1)]	80	50	35	20	0	0
Silage cut[(1)]						
1st	100	70	55	40	20	0
2nd	25	25	25	25	0	0
3rd	15	15	15	15	0	0
4th	10	10	10	10	0	0
Hay[(1)]	80	55	43	30	0	0

[(1)] The amount of phosphate applied for establishment shall be deducted from the first season's grazing, silage or hay crop requirement for phosphorus.

Table 2a

Maximum phosphate fertiliser application limits (kg P_2O_5 per hectare) for extensively managed grassland (under 60 kg chemical N/ha/year or under 120kg manure N/ha/year loading).

	Soil phosphorus index					
	0	1	2-	2+	3	4
At grass establishment	80	65	50	30	0	0
Grazed grass (whole season)	50	35	20	0	0	0
First cut silage[1]	70	55	40	0	0	0
Hay[1]	55	43	30	0	0	0

[1] Subject to Table 2b.

Table 2b

If silage or hay crops receive over 80 kg chemical fertiliser N/ha/year, the following maximum phosphate fertiliser application limits apply.

	Soil phosphorus index					
	0	1	2-	2+	3	4
First cut silage	100	70	55	40	0	0
Hay	80	55	43	30	0	0

Table 3

Available phosphate (P_2O_5) values for fertilisers

Liquid or slurry manure types	*Dry matter content (%)*	*Soil phosphorus index of 0 or 1, available phosphorus (kg P_2O_5/m^3)[1]*	*Soil phosphorus index of 2- or greater, available phosphorus (kg P_2O_5/m^3)*
Liquids[2]			
Dirty water	0.5	0.05	0.10
Cattle slurries[2]			
	2	0.3	0.6
Cattle slurry[3]	**6**	**0.6**	**1.2**
	10	0.9	1.8
Separated cattle slurries (liquid portion)[2]			
Strainer box	1.5	0.15	0.3
Weeping wall	3	0.25	0.5
Mechanical separator	4	0.6	1.2
Pig slurries[2]			
	2	0.5	0.8
Pig slurry[3]	**4**	**0.75**	**1.5**
	6	1.1	2.2
Separated pig slurry (liquid portion)	3	0.55	1.1
Solid manure types	*Dry matter content (%)*	*Soil phosphorus index of 0 or 1, available phosphate (kg P_2O_5/t)*	*Soil phosphorus of 2- or greater, available phosphate (kg P_2O_5/t)*
Poultry manures[4]			
Broiler litter	66	9.6	16
Layer manure	30	7.8	13
Turkey litter	60	15	25

Duck manure	25	3.3	5.5
Farmyard manures[4]			
Cattle manures	25	1.9	3.2
Sheep manures	25	1.9	3.2
Goat manure	40	1.7	2.8
Pig manure	25	3.6	6.0
Horse manure	25	3.0	5.0
Miscellaneous manures[2]			
Spent mushroom compost	35	1.7	3.4
Separated cattle slurry (solid portion)	20	1.0	2.0
Separated pig slurry (solid portion)	20	2.3	4.6
Other organic manures	Dry matter content and total phosphorus content to be declared in accordance with the Waste Management Licencing Regulations (Northern Ireland) 2003([27]). 60% phosphate availability assumed at soil phosphorus index or 0 or 1[1], 100% phosphate availability assumed at soil phosphorus index greater than 1. For anaerobic digestate the record of nutrient content analysis as required by regulation 12(1) shall be used.		
Chemical fertilisers	Dry matter content and total phosphorus content as certified by the producer. Phosphate availability assumed to be 100% for all soil phosphate indices.		

[1] For potatoes and vegetable crops, these availabilities should be used regardless of soil phosphorus index.

[2] 50% phosphate availability assumed at soil phosphorus index of 0 or 1 and for potatoes and vegetables.

[3] Figures in bold are the most common values.

[4] 60% phosphate availability assumed at soil phosphorus index of 0 or 1 and for potatoes and vegetables.

([27]) S.R. 2003 No. 493

SCHEDULE 4

Regulation 8(2)(f)

Risk assessments for fertiliser application

PART 1

Risk assessment for fertiliser application to steeply sloping land

1. If an application of organic manure (including livestock manure) or chemical fertiliser to steeply sloping land is proposed, a risk assessment must be undertaken in addition to meeting all relevant requirements of these Regulations. The factors set out in Table 1 shall be considered in making this risk assessment. Table 2 shall be consulted to ascertain whether fertiliser application is permitted.

Table 1

Fertiliser application to steeply sloping ground – risk assessment factors

Factor	*Risk*	*Liquid organic manures*	*Solid organic manures*	*Chemical fertiliser*
Distance from spreading area to waterway other than lake	High	less than 20 metres	less than 20 metres	less than 5 metres
	Medium	20 – 30 metres	20 – 30 metres	5 – 10 metres
	Low	greater than 30 metres	greater than 30 metres	greater than 10 metres
Distance from spreading area to lake	High	less than 30 metres	less than 30 metres	less than 10 metres
	Medium	30 – 40 metres	30 – 40 metres	10 - 15 metres
	Low	greater than 40 metres	greater than 40 metres	greater than 15 metres
Level of fertiliser applied	High	more than $25m^3$/ha	more than 25 tonnes/ha	greater than 120 kg/N/ha
	Medium	15 – $25m^3$/ha	15 – 25 tonnes/ha	80 – 120 kg/N/ha
	Low	less than $15m^3$/ha	less than 15 tonnes/ha	less than 80 kg/N/ha
Soil conditions	High	very wet, compacted soil	very wet, compacted soil	very wet, compacted soil
	Medium	wet, poached soil	wet, poached soil	wet, poached soil
	Low	dry, firm trafficable soil	dry, firm trafficable soil	dry, firm trafficable soil
Forecast weather conditions for next 48 hours	High	heavy rainfall (more than 4 mm per hour)	heavy rainfall (more than 4 mm per hour)	heavy rainfall (more than 4 mm per hour)
	Medium	moderate rainfall (0.5 – 4 mm per hour)	moderate rainfall (0.5 – 4 mm per hour)	moderate rainfall (0.5 – 4 mm per hour)
	Low	low rainfall (less than 0.5 mm per hour)	low rainfall (less than 0.5 mm per hour)	low rainfall (less than 0.5mm per hour)

Factor	*Risk*	*Liquid organic manures*	*Solid organic manures*	*Chemical fertiliser*
Arable land only – time to incorporation	High	more than 48 hours	more than 5 days	n/a
	Medium	12 – 48 hours	3 – 5 days	n/a
	Low	less than 12 hours	less than 3 days	n/a

Table 2

Risk assessment determination

Risk level	*Number of factors applicable*	*Is the land application of fertiliser permitted*
High Risk	One or more factors	No
Medium Risk	Two or more factors	No
	One factor	Yes
Low Risk	One or more factors	Yes

PART 2

Risk assessment for fertiliser application to and other than steeply sloping land

2. If an application of organic manure (including livestock manure) or chemical fertiliser to sloping land is proposed, a risk assessment must be undertaken in addition to meeting all relevant requirements of these Regulations. The factors set out in Table 3 shall be considered in making this risk assessment. Table 4 shall be consulted to ascertain whether application is permitted.

3.

Table 3

Risk assessment for fertiliser application to land other than steeply sloping land

Factor	*Risk Level*	*Organic Manures*		*Chemical Fertiliser*	
		Grassland	Other land	Grassland	Other Land
Slope percentage incline	High	20% or more (see Part 1)	15% or more (see Part 1)	20% or more (see Part 1)	15% or more (see Part 1)
	Medium	10 to less than 20%	10 to less than 15%	10 to less than 20%	10 to less than 15%
	Low	Less than 10%	Less than 10%	Less than 10%	Less than 10%
Distance from spreading area to waterway other than lakes	High	Less than 10 metres (see Note 1)		Less than 2 metres	
	Medium	10 to 20 metres (see Note 2)		2 – 5 metres	
	Low	More than 20 metres		More than 5 metres	
Distance from spreading area to lakes	High	Less than 20 metres		Less than 10 metres	
	Medium	20 to 30 metres		10 to 15 metres	
	Low	More than 30 metres		More than 15 metres	
Amount applied per hectare per application	High	More than 50m^3 (liquid) or 50 tonnes (solid) (see Note 2)		More than 150kg Nitrogen	
	Medium	25 to 50m^3 (liquid) or 25 to 50 tonnes (solid)		120 to 150kg Nitrogen	
	Low	Less than 25m^3 (liquid) or 25 tonnes (solid)		Less than 120kg Nitrogen	
Soil conditions at time of proposed slurry application	High	Very wet, compacted soil		Very wet, compacted soil	
	Medium	Wet, poached soil		Wet, poached soil	
	Low	Dry, firm trafficable soil		Dry, firm trafficable soil	
Forecast weather conditions for next 48 hours	High	Heavy rainfall (more than 4mm per hour)		Heavy rainfall (more than 4mm per hour)	
	Medium	Moderate rainfall (0.5 to 4mm) per hour		Moderate rainfall (0.5 to 4mm) per hour	

	Low	Low rainfall (less than 0.5mm per hour)		Low rainfall (less than 0.5mm per hour)
		Liquid	Solid	
Arable land only – time to incorporation	High	More than 48 hours (see Note 3)	More than 5 days	Not applicable
	Medium	12 to 48 hours	3 to 5 days	Not applicable
	Low	Less than 12 hours	Less than 3 days	Not applicable

Note 1: If regulation 8(5)(f) applies, for risk level "high" substitute "medium"

Note 2: During the month of February and the period of 30 September to 15 October each year the distances and quantity in regulation 8(9) apply: spreading must not be done within 15 metres of a wateway or 5m if regulation 8(5)(f) applies, 30m of a lake and the application rate must not exceed 30m3 or 30 tonnes per hectare.

Note 3: Wher organic manure is applied to an established crop, incorporation is not required, for risk level "high" substitute "medium".

Table 4

Risk Assessment Determination

Risk level	*Number of factors applicable*	*Is the land application of fertiliser permitted?*
High	One or more factors	No
Medium	Three or more factors	No
	One or two factors	Yes
Low	One or more factors	Yes

SCHEDULE 5

Regulations 12 and 13

Soil test for Phosphorus

1. Reference to the results of a soil test is a reference to the results of an analysis of a soil sample carried out by a soil testing laboratory competent to analyse soils for phosphorus. Each analysis, provided by the competent laboratory, will require a UKAS accreditation or (National equivalent) statement.

2. The taking of soil samples and the analysis for phosphorus shall be carried out in accordance with the procedures below.

Soil sampling procedure

3. Area to sample: The size of the area from which one sample can be taken varies but shall not be more than four hectares. Generally one sample shall be collected from each field. Within one field, areas which are not uniform for crop growth and areas which have been cropped or fertilised differently shall be sampled separately.

4. Time of sampling: Sampling every fourth year must be completed as a basis for phosphorus fertiliser recommendations. A field shall not be sampled for phosphorus until at least three months after the last application of any fertiliser (organic or chemical) containing this nutrient.

5. Depth of sampling: Grassland shall be sampled to a depth of 75 millimetres and arable land to a depth of 150 millimetres.

6. Method of sampling: A soil sample shall be made up by bulking at least 25 sub-samples taken from the area to be sampled. The sub-sampling points shall be selected systematically to give an even distribution over the whole sampling area. This distribution shall be achieved by following the pattern of a letter "W" and taking sub-samples at regularly spaced intervals. Taking sub-samples from headland, dung and urine patches, areas where stock gather or other unusual features shall be avoided. Each sub-sample shall be taken using a soil auger which takes an even core of soil throughout the sampling depth. The soil sample shall be stored in a clean, labelled plastic bag.

Soil analysis for phosphorus

7. The soil test for phosphorus shall be carried out after the soil sample has been air-dried and ground.

8. Air-drying and grinding soil: The entire soil sample shall be dried to constant weight in an oven with a current of air at a temperature not exceeding 30 °C. Then the whole of the air-dried sample, excluding stones and fibrous material from roots, shall be ground to pass a two millimetre sieve.

9. Soil analysis for Olsen extractable phosphorus: The measure of phosphorus which is available for crop growth shall be given by the amount extracted from soil at 20 ± 1 °C with a sodium bicarbonate solution of pH 8.5. Details of the analytical procedure are given in The Analysis of Agricultural Materials, Third Edition, pp183-185, Ministry of Agriculture, Fisheries and Food reference Book 427, 1986. Olsen extractable phosphorus results are expressed as milligrammes phosphorus per litre (mg P/l) of soil, rounded to the nearest whole number.

10. Classification of soil analysis results into indices: The Olsen extractable phosphorus concentration in soil is classified into an index according to the following scale.

Soil phosphorus index	*Olsen extractable phosphorus (P) (mg P/l)*
0	0 – 9
1	10 – 15
2-	16 – 20
2+	21 – 25
3	26 – 45
4	46 – 70

SCHEDULE 6

Regulations 18 and 19

Conditions applying in relation to a Derogation

1. The following are the conditions for the purposes of regulation 19(1) in relation to the application to land on a grassland holding in any year of livestock manure in excess of the amount specified in regulation 9.

Application of manure and other fertilisers

2. The amount of livestock manure from grazing livestock applied to land each year on a grassland holding, including by the animals themselves, shall not exceed the amount of manure containing 250kg nitrogen per hectare, subject to the conditions laid down in paragraphs 3 to 7.

3. The total nitrogen inputs shall neither exceed the foreseeable nutrient demand of the crop nor the maximum fertilisation rate applicable to the grassland holding, established in these Regulations, and shall take into account the supply from the soil.

4. A nutrient management account which is not false or misleading, including information related to the management of nitrogen and phosphorus inputs and the management of dirty water shall be prepared and kept for each grassland holding and submitted to the Department for each calendar year by such date as may be specified by the Department of the following calendar year.

5. Periodic sampling and analyses of the soil with respect to nitrogen and phosphorus must be performed by each grassland holding, at least every four years for each homogeneous area of grassland, with regard to crop rotation and soil characteristics. A copy of the soil test analysis must be provided to the Department along with a nutrient management account.

6. At least one analysis per four hectares shall be carried out.

7. Livestock manure shall not be spread in the autumn before grass cultivation.

8. For each grassland holding, the controller shall ensure that the phosphorus balance, calculated in accordance with paragraph 1 of Schedule 2 and Tables 2 and 7 of that Schedule, does not exceed a surplus of 10kg phosphorus per hectare per year.

9. At least 50% of slurry produced on the holding shall be applied on or before 15th June of each year.

Condition regarding land management

10. Temporary grassland shall be ploughed in spring.

11. Ploughed grass on all soil types shall be followed immediately by a crop with high nitrogen demand.

Definitions

12. In this schedule—

(a) "autumn" means the months of September, October and November;

(b) "fertilisation account" means the nutrient balance on the real use and uptake of nutrients;

(c) "spring" means the months of March, April and May.

SCHEDULE 7

Regulation 22(1)

Requirement for slurry storage systems

1. The requirements which have to be satisfied in relation to a slurry storage system are as follows.

2. The base of the slurry storage tank, the base and walls of any effluent tank, channels and reception pit and the walls of any pipes shall be impermeable.

3. The base and walls of the slurry storage tank, any effluent tank, channels and reception pit and the walls of any pipes shall be protected against corrosion in accordance with paragraph 7.2 of the Code of Practice on Building and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-50:1993+A2:2010([28]).

4. The base and walls of the slurry storage tank and any reception pit shall be capable of withstanding characteristic loads calculated on the assumptions and in the manner indicated by paragraph 5 of that Code of Practice.

5.—(1) Any facilities used for the temporary storage of slurry before it is transferred to a slurry storage tank shall have adequate capacity to store the maximum quantity of slurry which (disregarding any slurry which will be transferred directly into a slurry storage tank) is likely to be produced on the premises in any two day period or such smaller capacity as the Department may agree in writing is adequate to avoid any significant risk of pollution of a waterway.

(2) Where slurry flows into a channel before discharging into a reception pit and the flow of slurry out of the channel is controlled by means of a sluice, the capacity of the reception pit shall be adequate to store the maximum quantity of slurry which can be released by opening the sluice.

6.—(1) Subject to sub-paragraph (2), the capacity of storage facilities for slurry of a holding shall be sufficient and adequate to provide for the storage of all the slurry which is likely to require storage on the holding for such period as may be necessary to ensure compliance with these Regulations.

(2) The matters to which regard is to be had under sub-paragraph (1) are—

(a) the likely quantities of rainfall (including any fall of snow, hail or sleet) which may fall or drain into the slurry storage tank during the likely maximum storage period;

(b) the need to make provision for not less than 750 millimetres of freeboard in the case of a tank with walls made of earth and 300 millimetres of freeboard in all other cases; and

(c) soil quality in the vicinity of the slurry storage tank.

7.—(1) Subject to paragraphs (2) and (3), no part of the slurry storage tank or any effluent tank, channel or reception pit shall be situated within 10 metres of any waterway into which slurry could enter if it were to escape, unless paragraph (3) is satisfied.

(2) Where the construction of an above ground slurry tank is commenced after 31 December 2019, paragraph (1) shall apply as if for 10 metres there were substituted 50 metres.

(3) This paragraph is satisfied if the Department agrees in writing that adequate precautions to avoid a significant risk of pollution are taken.

8. The slurry storage tank and any effluent tank, channels, pipes and reception pit shall be designed and constructed so that with proper maintenance they are likely to satisfy the requirements of paragraphs 2 to 4 for a period of at least 20 years.

9. Where the walls of the slurry tank are not impermeable, the base of the tank shall extend beyond its walls and shall be provided with channels designed and constructed so as to collect any slurry which may escape from the tank and adequate provision shall be made for the drainage of the slurry from the channels to an effluent tank through a channel or pipe.

10.—(1) Subject to sub-paragraph (2), where the slurry storage tank, any effluent tank or reception pit is fitted with a drainage pipe, there shall be two valves in series on the pipe and each valve shall be capable of stopping the flow of slurry through the pipe and shall be kept shut and locked in that position when not in use.

(2) Sub-paragraph (1) does not apply in relation to a slurry storage tank which drains through the pipe into another slurry storage tank of equal or greater capacity or where the tops of the tanks are at the same level.

([28]) Publication date: 15th April 1993. ISBN 978-0-580-71245-6.

11. In the case of a slurry storage tank with walls which are made of earth, the tank shall not be filled to a level which allows less than 750 millimetres of freeboard, and in all other cases the tank shall not be filled to a level which allows less than 300 millimetres of freeboard.

12. Any slurry storage tank (except lagoons) constructed, substantially enlarged or substantially reconstructed after 31st December 2019, which is not contained within or underneath a roofed building, shall be covered in a manner which minimises emissions of odour and ammonia.

SCHEDULE 8

Regulation 27(1)(a)

Requirements for silos

1. The requirements which have to be satisfied in relation to a silo are that—

(a) it complies with paragraphs 2 to 9; or

(b) if it is designed and constructed, before 20th August 2013, in accordance with the standard on cylindrical forage tower silos published by the British Standards Institution and numbered BS 5061: 1974([29]).

2. The base of the silo shall, where the silo has retaining walls made other than of earth, extend beyond those walls and shall in all cases be provided with channels so constructed as to collect any silage effluent which may escape from the silo and adequate provision shall be made for the drainage of that effluent from the channels to an effluent tank through a channel or pipe.

3.—(1) Subject to sub-paragraph (2), the capacity of the effluent tank—

(a) in the case of a silo with a capacity of less than 1500 cubic metres, shall be not less than 3 cubic metres for each 150 cubic metres or part thereof of silo capacity;

(b) in the case of a silo with a capacity of 1500 cubic metres or more, shall be not less than 30 cubic metres plus one cubic metre for each 150 cubic metres or part thereof of silo capacity in excess of 1500 cubic metres.

(2) The effluent collection system associated with silos may, with the agreement of the Department, incorporate a system of pumps and sumps, together with detailed sizing, pumping and management requirements, designed to reduce the capacity of the effluent tank.

4. The base of the silo, the base and walls of its effluent tank and channels and the walls of any pipes shall be impermeable.

5. The base and any walls of the silo, its effluent tank and channels and the walls of any pipes shall, so far as reasonably practicable, be resistant to attack by silage effluent and, where the walls are made of earth, they shall be lined with an impermeable membrane.

6. No part of the silo, its effluent tank or channels or any associated pipes shall be situated within 10 metres of any waterway into which silage effluent could enter if it were to escape.

7. If the silo has retaining walls—

(a) the retaining walls shall be capable of withstanding minimum wall loadings calculated on the assumptions and in the manner indicated by paragraph 15.6.1 to 15.6.3 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-22:2003+A1:2013([30]);

(b) the silo shall at no time be loaded to a depth exceeding the maximum depth consistent with the design assumption made in respect of the loadings of the retaining walls; and

(c) notices shall be displayed on the retaining walls in accordance with paragraph 18 of the Code of Practice referred to in sub-paragraph (a).

8. Subject to paragraph 9, the silo, its effluent tank and channels and any pipes shall be designed and constructed so that with proper maintenance they are likely to satisfy the requirements of paragraphs 2 to 5 and, if applicable, 7(a) for a period of at least 20 years.

9. Where any part of an effluent tank is installed below ground level, it shall be designed and constructed in accordance with the Code of Practice referred to in paragraph 7(a) so that with proper maintenance it is likely to satisfy the requirements of paragraphs 4 and 5 for a period of at least 20 years.

([29]) Publication date: 11th April 1974. ISBN 0-580-08070-6.
([30]) Publication date: 10th June 2003. ISBN 978-0-580-78768-3.

Annex D

List of Consultees

Agrisearch
Agricultural Consultants Association (ACA) (NI)
Anaerobic Digestion & Bioresources Association (ADBA)
Ballygarvey Eggs
Blakiston Houston Estate
C for C Mid Ulster SBRI Project
Council for Nature Conservation and the Countryside (CNCC)
Dairy Council
Dale Farm
Department of Agriculture, Environment and Rural Affairs: -

- Natural Environment Division
- Drinking Water Inspectorate
- Climate Change Unit
- Marine and Fisheries Division
- Marine Plan Team and Marine Conservation and Reporting Section

Department of Agriculture, Food and the Marine (DAFM)
Department of Environment, Climate and Communications (DECC)
Department of Housing, Local Government and Heritage (DHLGH)
Department for Communities: -

- The Historic Environment Division as the government authority on heritage

Devenish Nutrition
Environmental Protection Agency (EPA)
Fane Valley Stores Ltd
Farmers for Action
Feed Industry
Friends of the Earth (FOE)
Lakeland Dairies
Livestock and Meat Commission for Northern Ireland (LMC)
Loughs Agency
Lough Neagh Partnership (LNP)
Lucerne AD project
Moypark
National Beef Association
National Sheep Association
National Trust
Nature Friendly Farming Network
Natural World Products Recycling Ltd
Northern Ireland Agricultural Producers Association (NIAPA)
Northern Ireland Environment Link (NIEL)
Northern Ireland Grain Trade Association (NIGTA)
Northern Ireland Meat Exporters Association
Northern Ireland Pork and Bacon Forum
Northern Ireland Water (NIW)
Office of Environmental Protection (OEP)
Organic NI
Origin Enterprises
Pig Industry
Poultry Industry Federation
Queens University
Ready Eggs
RSPB
Skea Eggs
The Rivers Trust
Ulster Farmers Union (UFU)
UAF
Ulster University
Ulster Wildlife (UW)
YARA
Young Farmers Clubs of Ulster

For further information:

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