

FARM SUSTAINABILITY STANDARDS

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Protection of
Waters from Pollution

UNDERPINNING REQUIREMENTS

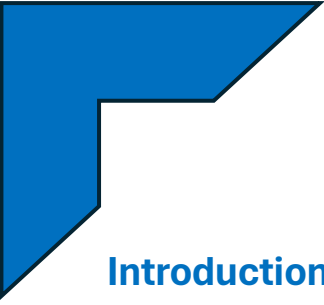
Sustainable Agriculture Programme



Department of
**Agriculture, Environment
and Rural Affairs**
www.daera-ni.gov.uk

An Roinn
**Talmhaíochta, Comhshaoil
agus Gnóthaí Tuaithe**

Depairtment o'
**Fairmin, Environment
an' Kintra Matthers**

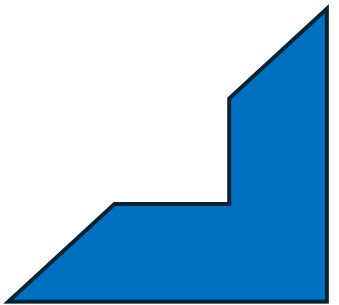


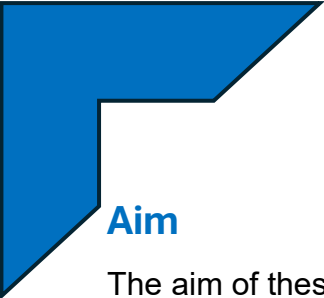
Introduction

Water is of fundamental importance for life and our natural environment. Our water bodies provide us with drinking water and are critical for businesses, generating and sustaining the economy through activities such as agriculture, fishing, industry, services, transport & tourism. Our health and our enjoyment of the environment, as well as our economy, depend on the way we maintain our rivers, lakes, transitional (estuarine) waters, coastal waters and groundwater. The protection of our aquatic environment underpins our well-being and our livelihoods.

Several water quality problems affect Northern Ireland. The largest and most widespread of these is nutrient enrichment arising from too much nitrogen and phosphorus entering the water environment.

Groundwater is an important resource for drinking water and provides the base flow for many surface waters such as rivers and lakes. By following these requirements, farmers should be able to avoid polluting groundwater (and surface waters) with hazardous substances and non-hazardous pollutants, including plant protection products (PPPs).





Aim

The aim of these requirements is to reduce the pollution of waters caused by nutrients, hazardous substances and non-hazardous pollutants, including plant protection products (PPPs), from agricultural sources and to prevent such pollution occurring in the future.

Farmers Must

1.1. Farmers must ensure that fertiliser (including dirty water), is not allowed to, directly or indirectly, enter a waterway, or enter or present a risk of entry to water contained in underground strata.

Fertilisers include slurry, farmyard manure, poultry litter, anaerobic digestate, dirty water, silage effluent, chemical fertiliser, milk and milk washings, and any other fertilisers referenced in the Nutrient Action Programme (NAP) guidance.

2.1. Farmers must ensure that all livestock manure and silage effluent is collected, stored and managed in accordance with the livestock manure storage requirements as specified in the NAP Regulations.

2.2. Farmers must ensure that total livestock storage on farm is sufficient for at least 22 weeks and 26 weeks for pigs and poultry.

2.3. Farmers must ensure that all new (from 31 December 2019) above ground slurry tanks are 50m from waterways.

2.4. Farmers must ensure that all new (from 31 December 2019) above ground slurry tanks are covered.

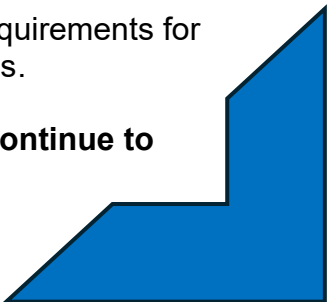
2.5. Farmers must ensure that all new below ground slurry and silage effluent tanks are at least 10m from waterways.

2.6. Farmers must ensure that all new tanks are notified to Northern Ireland Environment Agency (NIEA) 28 days before use.

3.1. Farmers must ensure that 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.

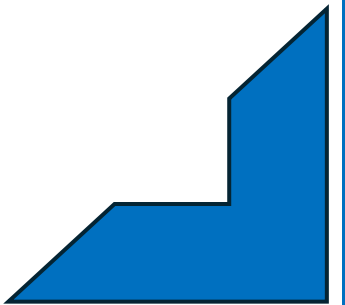
3.2. Farmers must ensure that farm holdings do not exceed crop requirements for Nitrogen (N) and Phosphorous (P) as required by the NAP Regulations.

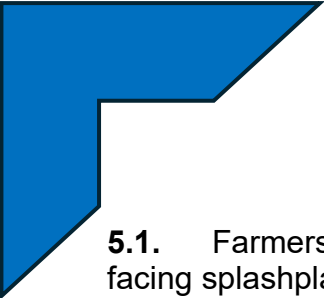
If you are not operating under an approved Nitrates Derogation continue to section 5.1.





Additional requirements for derogated farms (section 4):

- 4.1.** Farmers must ensure that the nitrogen loading does not exceed 250kg nitrogen per hectare on their holding which includes both all applied grazing livestock manures and from the grazing animals themselves.
 - 4.2.** Prepare a fertilisation plan by 1 March each year and retain on farm. The plan should be kept updated.
 - 4.3.** A Fertilisation Account must be submitted to DAERA online by 1 March of the following calendar year.
 - 4.4.** Ensure the total nitrogen inputs do not exceed the nutrient demand of the crop nor the maximum fertilisation rate applicable to the grassland holding.
 - 4.5.** Carry out a soil test at least every 4 years for each homogenous area of grassland with regard to crop rotation and soil characteristics. At least 1 soil analysis per 4 hectares must be carried out.
 - 4.6.** Ensure livestock manure is not spread in the autumn (months of September, October & November) before grass cultivation (ploughing & reseeding).
 - 4.7.** Ensure that the phosphorus balance does not exceed a surplus of 10kg phosphorus per hectare per year.
 - 4.8.** Apply at least 50% of slurry produced on the holding on or before 15 June of each year. Low Emission Slurry Spreading Equipment (LESSE) shall be used for any slurry applications after 15th June each year.
 - 4.9.** Ensure temporary grassland is ploughed in spring (months of March, April & May).
 - 4.10.** Ensure ploughed grass is followed immediately by a high nitrogen demand crop.
 - 4.11.** Ensure crop rotation does not include leguminous or other atmospheric nitrogen fixing plants. However, crop rotations may include clover in grassland with less than 50% clover and other leguminous plants that are undersown with grass.
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5.1. Farmers must ensure that spreading is by an approved method - downward facing splashplate or by LESSE. There must be no spreading by sludgicator or upward facing splashplate. Dirty water can also be spread with irrigation methods.

5.2. Farmers must ensure that any type of chemical fertiliser is not applied within 2m of any waterway.

5.3. Farmers must ensure that organic manure is not applied within:

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

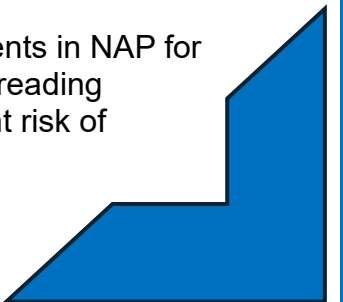
5.4. From 30 September to 15 October and for the month of February the buffers are increased to:

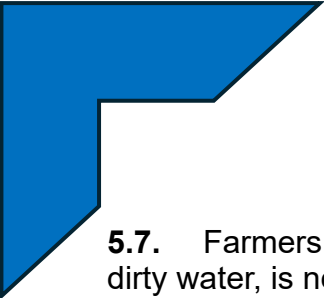
- a. 15m from a waterway and 30m from a lake.
- b. from 3m to 5m for grassland fields less than a hectare in size or 50m in width where the land has a slope of less than 10% towards the waterway and the organic manure is spread by LESSE bandspreader, dribble bar, trailing hose, trailing shoe or soil injection.

5.5. Where a risk assessment permits application of a fertiliser, farmers must ensure that fertiliser is not applied on grassland with an average incline of greater than 15% and any other land with an average incline of greater than 12% within specific distances from waterways:

- a. For organic manures within—
 - i. 30m of lakes; or
 - ii. 15m of any waterway, other than lakes, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate; and
- b. For chemical fertiliser within —
 - i. 10m of lakes; or
 - ii. 5m of any waterway, other than lakes, including open areas of water, open field drains or any drain which has been backfilled to the surface with permeable material such as stone/aggregate.

5.6. Farmers must ensure that where land is sloping, risk assessments in NAP for steeply sloping and other sloping lands must be considered before spreading fertiliser and spreading must not take place where there is a significant risk of fertiliser entering a waterway.





5.7. Farmers must ensure that any fertilisers, chemical and organic and including dirty water, is not applied:

- a. on waterlogged soils, flooded land or land liable to flood;
- b. on frozen ground or snow-covered ground;
- c. if heavy rain is falling or forecast in the next 48 hours;

5.8. Farmers must ensure that fertiliser including dirty water is not applied on any land in a location or manner which would make it likely that the nitrogen fertiliser will directly enter a waterway or water contained in any underground strata.

5.9. Farmers must ensure that N fertilisers, chemical and organic (with the exception of dirty water), is not applied to land during the closed spreading periods. Closed season for chemical fertiliser starts on 15 September, organic fertiliser closed season starts on 15 October while farmyard manure is subject to a closed spreading period from 31 October. All closed season spreading reopens on 1 February the following year subject to suitable soil and weather conditions as detailed above.

5.10. Farmers must ensure that spreading of fertiliser including dirty water is applied in an accurate and uniform manner.

5.11. Farmers must ensure that LESSE is used for spreading anaerobic digestate.

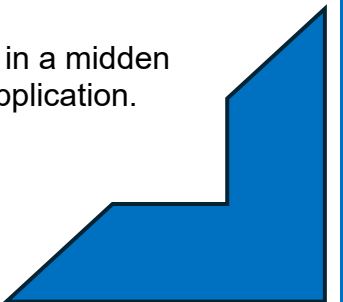
5.12. Farmers must ensure that LESSE is used for spreading on farms with 200 or more cattle livestock units (LU) and farms with a total annual livestock manure nitrogen production of 20,000 kg or more from pigs.

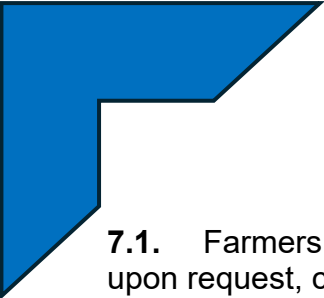
6.1. Farmers must ensure silage bales cannot be stored within 10m of any waterway.

6.2. Farmers must ensure that all farmyard manures are stored at least 20m away from any waterways; 50m from lakes/boreholes/springs/wells/limestone features; and 250m from a borehole used for drinking water in the field that is to be spread and must not be retained longer than 120 days and must not be placed in the same place year on year.

6.3. Poultry litter / anaerobic digestate (AD) fibre heaps must not be placed within 40m of a waterway, 100m from a lake, 50m from boreholes/springs/wells/limestone features and 250m from a borehole used for drinking water in the field that is to be spread and must not be retained for longer than 120 days and must be covered with an impermeable membrane within 24 hours of field storage and must not be placed in the same place year on year.

6.4. Farmyard manure/poultry litter/anaerobic digestate fibre stored in a midden must have adequate collection facilities prior to field storage or land application.





7.1. Farmers must keep all farm records and make them available for inspection upon request, covering a minimum period of 5 years and covering a range of information including cropping, livestock numbers and the use of nitrogen fertilisers and organic manures.

7.2. Farmers must submit organic manure exports to DAERA online by the 31 January for non-derogated farms and by 1 March for derogated farms of the following year.

7.3. Farmers must notify the Department of Agriculture, Environment and Rural Affairs (DAERA), Northern Ireland Environment Agency (NIEA) if poultry heaps/ anaerobic digestate fibre have been stored in a field (see contact info below).

7.4. Farmers must retain import records of all organic manures including digestate on farm for 5 years.

7.5. Farmers must obtain a soil test (within 4 years) prior to spreading chemical phosphate fertiliser to grassland or spreading phosphorus rich manure or anaerobic digestate.

7.6. Farmers must produce a fertilisation plan if applying chemical phosphate fertiliser to grassland, phosphorus rich manure or anaerobic digestate. An analysis of the digestate, a fertiliser plan and soil analysis must be kept if importing anaerobic digestate.

8.1. Farmers must ensure that there is no groundwater pollution or risk of groundwater pollution due to the siting, operation and/or maintenance of a sheep dipper.

8.2. Farmers must ensure that there is no discharge of any hazardous substance or non-hazardous pollutant in circumstances that may present a risk of an input of that hazardous substance or non-hazardous pollutant into groundwater.

8.3. Farmers must store all hazardous substances or non-hazardous pollutants in areas that are constructed in a way as to prevent unwanted releases into the water environment.

9.1. Farmers must use approved plant protection products (PPPs) in accordance with any requirement or condition specified on the product label. Farmers who want to reduce an aquatic buffer zone specified in the product label, and where it is permitted to do so, must carry out and record a Local Environment Risk Assessment for Pesticides (LERAP) and the record must be kept for 3 years.

Further information on reducing spray drift and completing a LERAP is available at <https://www.hse.gov.uk/pesticides/using-pesticides/spray-drift>





10.1. Farmers must take all reasonable precautions to ensure that storage, handling and disposal of PPPs, their remnants (old or unwanted products and packaging) do not endanger the environment or human health in accordance with the Code of Practice for using PPPs.

Further advice on pesticide storage is also available:

- Agriculture Information Sheet Number 16 ([AIS16\(rev1\)](#)), prepared by the Health and Safety Executive in Britain (HSEGB).

11.1. Farmers must ensure that all pesticide application equipment (PAE), (excluding handheld, knapsack and pedestrian equipment) is tested by the designated provider in accordance with the legal timeframes and certificates of the most recent satisfactory tests retained.

That means:

- new pesticide application equipment, such as boom sprayers and weed wipers, must be tested under the National Spray Testing Scheme (NSTS) before 5 years old.
- After 5 years, testing should occur regularly, either every 3 or 6 years, depending on the equipment type.
- There are no changes to crop assurance scheme PAE testing requirements.

Guidelines on the re-testing cycle is available from the National Spray Testing Scheme (NSTS) website at <https://www.nsts.org.uk/>

If you are using a contractor, you should request a copy of all relevant PAE testing certificates from the contractor and retain them as part of your PPP records.

11.2. Farmers must ensure that where knapsacks, handheld and pedestrian equipment is being used on the farm that it has been inspected by a competent person, at least annually, repairs made as required, and a record kept.

You are deemed a competent person if you have undergone the relevant training and assessment and hold a valid specified certificate of competence in the use of the knapsacks, handheld or pedestrian equipment being inspected.

11.3. Farmers must ensure that calibrations and technical checks of the pesticide application equipment are carried out by the sprayer operator before use and a record kept.

If you are using a contractor, you should request copies of their technical check records.

11.4. Farmers must ensure that all PAE users operating on the farm have undergone training and hold a specified certificate showing they have sufficient knowledge of the use of PPPs and the PAE they use.

The current list of designated awarding bodies and recognised specified certificates is available at https://www.hse.gov.uk/pesticides/assets/docs/Recognised_certificates.pdf.

If you are using a contractor, we would advise you to request a copy of all relevant Certificates of Competence and retain them as part of your PPP records.





11.5. Farmers must provide suitable facilities and the necessary personal protection equipment (PPE) for mixing PPP's, filling the equipment, cleaning the equipment, disposing of unused tank mixtures and sprayer washings and storing PAE after use, to avoid contamination of the water environment as a result of spillage or leakage and to ensure that such operations do not endanger human health.

11.6. Farm businesses must comply with all/any notices issued to them in respect of PPP legislation.

Farmers Must Not

Farmers must not reduce the aquatic buffer zone if the label states that the product is "NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP SCHEME" See section 9.1.

Inspections and Checks

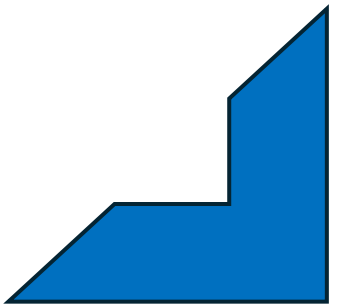
Inspections will involve 3 elements:

- Land Inspection
- Inspection of farm facilities and equipment (such as silos, slurry stores, yards, middens, chemical stores and pesticide application equipment)
- Records inspection

In addition, DAERA must follow up on any other suspected breaches that they witness or that are reported to them by other people.

A report form will be completed during the visit. Photographs will be taken as a record of the inspection and in some cases, samples may be taken. Any areas of concern or non-compliance will be highlighted, and any remedial action will be discussed with you (if present).

Where there has been non-compliance, DAERA will write to you to confirm the findings of the inspection and to detail any areas of improvement that may be required. If you have been asked to carry out remedial works and these works have not been completed within the given timescale, there may be additional or repeat non-compliances.





Additional information

Additional information can be obtained by clicking on the below links.

<https://www.daera-ni.gov.uk/topics/regulation-agricultural-activities>

<https://www.daera-ni.gov.uk/publications/code-good-agricultural-practice-cogap>

<https://www.daera-ni.gov.uk/articles/operator-responsibilities-regarding-pesticides>

<https://www.daera-ni.gov.uk/articles/code-practice-using-plant-protection-products>

<https://www.daera-ni.gov.uk/publications/care-pesticide-use-near-waterways>

HSE – Guidance on reducing spray drift and Local Environment Risk Assessment for Pesticides (LERAPs) - <https://www.hse.gov.uk/pesticides/using-pesticides/spray-drift>

HSE- Guidance on storing pesticides for farmers and other professional users
(AIS16(rev1))

National Sprayer Testing Scheme Advice and Guidance -
<https://www.nsts.org.uk/Documents-Links>

Voluntary Initiative Best Practice Guidance:
<https://voluntaryinitiative.org.uk/resources/publications/>

List of designated awarding bodies and recognised specified certificates
https://www.hse.gov.uk/pesticides/assets/docs/Recognised_certificates.pdf

Contact Details

For Nutrient Action Programme Regulations, field heap notifications or Groundwater Regulations, email: agricultural.regulation@daera-ni.gov.uk

For Plant Protection Product queries, email: pesticides@daera-ni.gov.uk

