

# Northern Ireland Cross-Compliance Verifiable Standards

(Effective from 1st January 2021)

*Sustainability at the heart of a living, working, active landscape valued by everyone.*

You can get a copy of this document in other formats, such as:

- Paper Copy
- Large Print
- Braille
- Other languages

To get a copy of this document in another format contact:

Area-based Schemes Delivery Support Branch  
Orchard House  
40 Foyle Street  
Derry/L'Derry  
BT48 6AT

Tel: 0300 200 7848

Email: [ABS.deliverysupport@daera-ni.gov.uk](mailto:ABS.deliverysupport@daera-ni.gov.uk)

Introduction.....	4
Background .....	4
Cross-Compliance Requirements .....	4
General Information .....	5
Which Cross-Compliance Requirements Apply to You?.....	7
Key Cross-Compliance Dates in 2021 .....	8
<b>Section 1 .....</b>	<b>10</b>
<b>Statutory Management Requirements .....</b>	<b>10</b>
SMR 1. Protection of Water against Nitrates Pollution.....	11
SMR 2. Conservation of Wild Birds .....	16
SMR 3. Conservation of Natural Habitats and of Wild Flora and Fauna .....	18
SMR 4. Food and Feed Law.....	20
SMR 5. Restrictions on the Use of Substances Having Hormonal or Thyrostatic Action and Beta-agonists in Farm Animals.....	27
SMR 6. Pig Identification and Registration.....	29
SMR 7. Cattle Identification and Registration .....	32
SMR 8. Sheep and Goat Identification and Registration.....	35
SMR 9. Prevention, Control and Eradication of Transmissible Spongiform Encephalopathies (TSE) .....	39
SMR 10. Restrictions on the Use of Plant Protection Products .....	42
SMR 11. Minimum Standards for the Protection of Calves .....	45
SMR 12. Minimum Standards for the Protection of Pigs.....	48
SMR 13. Protection of Animals Kept for Farming Purposes.....	54
<b>Section 2 .....</b>	<b>58</b>
<b>Good Agricultural and Environmental Condition (GAEC) Standards .....</b>	<b>58</b>
GAEC 1: Establishment of Buffer Strips along Water Courses.....	59
GAEC 2: Irrigation Authorisations .....	61
GAEC 3: Protection of Groundwater against Pollution .....	63
GAEC 4: Minimum Soil Cover .....	67
GAEC 5: Minimum Land Management Reflecting Site Specific Conditions to Limit Erosion .....	72
GAEC 6: Maintenance of Soil Organic Matter Level Through Appropriate Practices Including Ban on Burning Arable Stubble, Except for Plant Health Reasons .....	80
GAEC 7: Retention of Landscape Features .....	84
Annex 1 .....	93
Annex 2 .....	96
Annex 3 .....	98

## Introduction

1. This booklet provides details of the Northern Ireland Cross-Compliance requirements. It is effective from 1st January 2021 and replaces any previous Cross-Compliance guidance issued by the Department of Agriculture, Environment and Rural Affairs (DAERA). A summary document setting out the Northern Ireland Cross-Compliance verifiable standards can be found at the web address <https://www.daera-ni.gov.uk/articles/cross-compliance> or by contacting the Department on 0300 200 7842.

## Background

2. The Cross-Compliance conditions are designed to promote sustainable agricultural practices in Northern Ireland and reflect a number of environmental and other objectives. They are good farm management practices and encourage responsible stewardship of the land.
3. The majority of Cross-Compliance requirements reinforce existing legislation or form part of existing codes of good practice and farmers should therefore already be meeting most, if not all, of these.
4. All farmers claiming under the following Schemes must meet the Northern Ireland Cross-Compliance conditions.

Schemes coming into effect from 2015 onwards:

- Basic Payment Scheme;
- Young Farmers Scheme;
- Environmental Farming Scheme;
- Forestry Expansion Scheme;
- Forest Protection Scheme;
- Woodland Investment Grant;
- Protein Crops Scheme;
- Small Woodland Grant Scheme

Schemes that will continue in 2015 and beyond:

- Farm Woodland Premium Scheme (agreements signed after 1/1/07);

## Cross-Compliance Requirements

5. There are two aspects to Cross-Compliance. The first of these is compliance with specific articles contained within 13 European regulatory requirements covering the environment, climate change, public health, animal health and plant health and animal welfare. These are known as the **Statutory Management Requirements (SMRs)**. The Withdrawal Agreement setting the terms for the withdrawal of the UK from the EU disapplies the EU direct payments regulation (Regulation No. 1307/2013) and associated regulations in the UK from the 2020 scheme year. However, the Withdrawal Agreement requires the UK to operate

direct payment schemes in 2021 which are equivalent to the EU schemes. Therefore the EU direct payment regulations are reapplied in UK law by the Direct Payments to Farmers (Legislative Continuity) Act 2020 and as amended by secondary legislation made under the Direct Payments to Farmers (Legislative Continuity) Act 2020 and the Agriculture Act 2020. Consequently the arrangements for direct payments in the 2021 scheme year replicate those for the 2020 scheme year, other than the changes arising from the EU Exit, and the 2021 scheme year payments will come from national funds and not EU funds. Any references in the Cross-Compliance Verifiable Standards are to be taken as references to those provisions, as retained in UK law.

6. The second aspect of Cross-Compliance is a requirement that all those in receipt of payments in respect of the schemes listed in paragraph 4 maintain all their land in **Good Agricultural and Environmental Condition (GAEC)**. The Northern Ireland GAEC Measures have been developed to address the following issues:
  - **Protection and management of water** - protect water against pollution and run-off and manage the use of water;
  - **Protection of soil and carbon stock** - minimum soil cover, prevention of erosion and maintenance of soil organic matter levels;
  - **Minimum level of maintenance** - retention of landscape features and avoiding the deterioration of habitats.
7. This booklet sets out the requirements you must meet under each of the SMRs (Section 1) together with advice on how to meet them and information on what an inspector will check if you are chosen for inspection. Each requirement is already legally binding. The booklet also sets out the Northern Ireland GAEC requirements (Section 2) that you have to comply with together with advice on how to meet them and information on what an inspector will check if you are chosen for inspection. You must comply with the SMR and GAEC requirements as a condition of receipt of funding under the schemes listed in paragraph 4. A breach of these requirements may also lead to a partial or complete withholding of payments in respect of these schemes.
8. **You should note that you are still bound by all other environmental and animal health and welfare laws.** You may still be prosecuted in the criminal courts for breaching the Cross-Compliance standards, if the breach is a criminal offence.

## General Information

9. Cross-Compliance applies to all land within an agricultural holding for the full 12 calendar months. This includes permanently held land (either owned or under an agricultural tenancy), common land, shared grazing and land taken in conacre. Cross-Compliance also applies to the agricultural activity undertaken by the beneficiaries of the schemes listed in paragraph 4. Any action required to comply with an agri-environment agreement shall not constitute a breach of the Cross-Compliance requirements.
10. This booklet sets out the Cross-Compliance rules for Northern Ireland. The rules vary

across England, Scotland, Wales and the Republic of Ireland. You should obtain copies of all relevant guidance that applies to your holding.

## Which Cross-Compliance Requirements Apply to You?

11. The following table sets out who each of the Cross-Compliance standards applies to:

<b>All Claimants</b>	
SMR 1	Protection of Water against Nitrates Pollution
GAEC 4	Minimum Soil Cover
GAEC 5	Minimum Land Management Reflecting Site Specific Conditions to Limit Erosion
GAEC 6	Maintenance of Soil Organic Matter Level Through Appropriate Practices Including Ban on Burning Arable Stubble, Except for Plant Health Reasons
GAEC 7	Retention of Landscape Features
SMR 2	Conservation of Wild Birds
<b>Claimants with a Special Area of Conservation (SAC) on their Land</b>	
SMR 3	Conservation of Natural Habitats and of Wild Flora and Fauna
<b>Claimants who Use Chemical Fertiliser and Organic Manure</b>	
GAEC 1	Establishment of Buffer Strips along Water Courses
<b>Claimants who Abstract or Impound Water for Irrigation</b>	
GAEC 2	Irrigation Authorisations
<b>Claimants who Handle, Store or Dispose of Listed Substances</b>	
GAEC 3	Protection of Groundwater against Pollution
<b>Claimants who are Food or Feed Producers, Rearing Animals for Food or Producing Products of Animal Origin</b>	
SMR 4	Food and Feed Law
<b>Claimants who Keep Farmed Animals</b>	
SMR 5	Restrictions on the Use of Substances Having Hormonal or Thyrostatic Action and Beta-agonists in Farm Animals
SMR 6	Pig Identification and Registration
SMR 7	Cattle Identification and Registration
SMR 8	Sheep and Goat Identification and Registration
SMR 9	Prevention, Control and Eradication of Transmissible Spongiform Encephalopathies (TSE)
SMR 11	Minimum Standards for the Protection of Calves
SMR 12	Minimum Standards for the Protection of Pigs
SMR 13	Protection of Animals Kept for Farming Purposes
<b>Claimants who Use Plant Protection Products</b>	
SMR 10	Restrictions on the Use of Plant Protection Products

## Key Cross-Compliance Dates in 2021

12. The following table identifies key dates relating to Cross-Compliance in 2021. It identifies things that you should (and should not) do throughout the year. **This list of dates is not exhaustive and you should therefore familiarise yourself with all the information contained within this document.**

<b>January</b>	
January 1	You must start following the Cross-Compliance rules from this date. This date is also officially the start of the Basic Payment Scheme.
January 15	You can recommence ploughing without restriction from this date (see GAEC 4).
January 31	Final date for on-line submission of records relating to the movement of organic manure in previous calendar year (see SMR 1).
<b>February</b>	
February 1	Chemical fertilizer may be applied providing environmental conditions are suitable (see SMR 1).
February 1	Organic manures, including slurry, poultry litter, sewage, sludge and abattoir waste may be applied providing environmental conditions are suitable with wider waterway/lake buffers <b>to the end of February</b> (see SMR 1).
February 1	Farmyard manure may be applied providing environmental conditions are suitable (see SMR 1).
<b>March</b>	
March 1	Start of the closed period for hedge, tree or scrub cutting (including trimming and laying). Cutting includes coppicing (see GAEC 7).
March 1	Final date for on-line submission of Nitrates derogation application (see SMR 1).
March 1	Final date for on-line submission of fertilization account for the previous calendar year (if you have an approved nitrates derogation) (see SMR 1).
March 1	Fertilization plan for the current calendar year to be ready and available for inspection (see SMR 1).
<b>April</b>	
April 15	You must not burn heather, gorse, whin or fern from this date (see GAEC 5).
<b>June</b>	
June 15	For <b>derogated farms</b> only:- at least 50% of slurry produced on the holding must be applied by 15th June and slurry must be applied using Low Emission Slurry Spreading Equipment (LESSE) after 15th June.
June 30	All nitrates records for previous calendar year to be ready and made available for inspection (see SMR 1).



<b>August</b>	
August 31	You can burn heather, gorse, whin or fern from this date (see GAEC 5).
<b>September</b>	
September 1	<p>End of the hedge, tree and scrub cutting closed period. You can cut hedgerows and trees from this date (see GAEC 7).</p> <p>After harvesting any crops: - appropriate measures must be put in place to limit soil erosion until 15th January next year. (SMR1)</p> <p>For <b>derogated farms</b> only: - spreading of all types of organic manure (including farmyard manure and dirty water) is prohibited, if soil is disturbed as part of grass cultivation. (SMR1)</p>
September 15 (midnight)	Closed period for application of chemical fertilizer begins (see SMR 1).
September 30 – October 15	Buffer zones for slurry are increased to 15m from a waterway and 30m from a lake (see SMR 1 and GAEC 1)
<b>October</b>	
October 15 (midnight)	Closed period for application of organic manures, including slurry, poultry litter, sewage, sludge and abattoir waste begins (see SMR 1).
October 31 (midnight)	Closed period for application of farmyard manure begins (see SMR1).
<b>December</b>	
December 1 - December 5	You need to carry out your annual inventory of sheep (see SMR 8).

# **Section 1**

# **Statutory Management Requirements**

## SMR 1. Protection of Water against Nitrates Pollution

**The aim of these requirements is to reduce the pollution of waters caused by nitrates and phosphates from agricultural sources and to prevent such pollution occurring in the future.**

### 1.1 Main Requirements

A number of water quality problems affect the groundwater, rivers and lakes of Northern Ireland and extend into the surrounding marine waters. The largest and most widespread of these is nutrient enrichment arising from too much nitrogen and phosphorus entering the water environment.

On 11 April 2019, the Nutrient Action Programme Regulations (Northern Ireland) 2019 were made and later amended in 2019. The Regulations replace the Nitrates Action Programme Regulations (Northern Ireland) 2014 as amended and the Phosphorus (Use in Agriculture) Regulations 2014.

Compliance with the Nutrient Action Programme Regulations is one of the Cross-Compliance Statutory Management Requirements and are detailed in the Nutrients Action Programme 2019 -2022. Therefore, farmers claiming Basic Payment Scheme and other direct payments are required to comply with the Nutrient Action Programme Regulations. The measures relating to the Phosphorus Regulations are now included in the new Nutrients Action Programme (NAP) 2019 -2022. This means that the Cross-Compliance Verifiable Standards will now also apply to the land application of chemical phosphorus.

Northern Ireland was successful in renewing a derogation for the period 2019-2022. This permits the land application of up to 250kg Nitrogen/hectare/year from grazing livestock manure under certain conditions. To operate under the derogation, grassland cattle farmers must meet specific criteria and submit an annual application to NIEA. All conditions must be met. Where conditions are not met, an offence is committed and the controller shall not be eligible for an authorisation the following year.

The derogation applies in tandem with the Nutrient Action Programme Regulations.

### 1.2 Verifiable Standards

Compliance with NAP measures including:

- Nitrogen (N) fertiliser, chemical and organic (including dirty water), must not be allowed to directly or indirectly enter a waterway or water contained in underground strata.
- N fertilisers, chemical and organic (with the exception of dirty water), must not be applied to land during the closed spreading periods. Closed season for chemical fertilizer starts on 15<sup>th</sup> September, organic fertilizer closed season starts on 15<sup>th</sup> October while farm yard manure is subject to a closed spreading period from 31<sup>st</sup> October. All closed season spreading reopens on 1<sup>st</sup> February the following year.

- Buffers to watercourses are required as detailed in GAEC1.  
From midnight 30th September – 15th October and during February: the buffer zones for spreading slurry are increased:
  - from 10m to 15m of any waterway.
  - from 20m to 30m for lakes.
  - 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.

The maximum slurry application rate is reduced from 50m<sup>3</sup> (4500gal/ac) to 30m<sup>3</sup> (2700 gal/ac).

**Remember to follow the appropriate risk assessments as detailed in the NAP Guidance for all sloping lands to ensure no entry of fertiliser into waterways.**

- Low Emission Slurry Spreading Equipment (LESSE) includes bandspreading, dribble bar, trailing hose, trailing shoe, soil incorporation or soil injection methods. LESSE must be used for spreading anaerobic digestate and for all spreading by contractors on your holding.
- All N fertilisers, chemical and organic, must be applied in accordance with the land application restrictions as specified in the NAP.
- All fertilisers, chemical and organic and including dirty water, must not be applied:
  - on waterlogged soils, flooded land or land liable to flood;
  - on frozen ground or snow covered ground;
  - if heavy rain is falling or forecast in the next 48 hours;
  - on steep slopes (with an average incline of 20% or more on grassland or 15% or more on all other land) where other significant risks of water pollution exist. The risk factors to be considered include the proximity to waterways/lakes, type and amount of fertiliser to be applied, soil conditions, weather forecast and time to incorporation if applied to arable land. The risk assessment for steeply land is detailed in the NAP Guidance document;
  - on other land (with an incline of less than 20% for grassland or less than 15% for all other land) where significant risks of water pollution exist. The risk factors to be considered include the proximity to waterways/lakes, amount to be applied, soil conditions, weather forecast and time to incorporation if applied to arable land. The risk assessment for land, other than steeply sloping, is detailed in the NAP Guidance document.

Prevent entry of fertilisers to waters and ensure application is accurate, uniform and not in a location or manner likely to cause entry to waters.

- All types of chemical fertiliser must not be applied within 2m of any waterway.
- N and P fertiliser applications must not exceed crop requirement.
- Nitrogen from livestock manure on non-derogated farms must not exceed 170kg N/ha/ yr and Nitrogen from grazing livestock manure on derogated farms must not exceed 250kg N/ha/yr. The updated excretion rates for cattle and poultry must be used. New maximum phosphate fertiliser application rates (kg P<sup>2</sup>O<sup>5</sup> per ha) for extensively managed grassland (receiving under 60kg chemical N/ha/year or under 120kg manure N/ha/year loading) apply.
- All livestock manure and silage effluent must be collected, stored and managed in accordance with the livestock manure storage requirements as specified in the Nutrient Action Programme Regulations. Total livestock storage on farm shall be sufficient for at least 22 weeks and 26 weeks for pigs and poultry.
- Silage bales must be stored at least 10m from any waterways. Farm yard manure must be 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. Poultry litter/AD fibre must be covered within 24hrs of field storage and must not be placed in the same place year on year. They must not be placed within 40m of a waterway, 100m from a lake, 50m from lakes/boreholes/springs/wells/limestone features and 250m from a borehole used for drinking water. They shall not be retained for longer than 120 days.
- All farms must carry out crop and soil management to minimise soil erosion and nutrient run-off.
- Livestock feeding sites must be at least 20m from waterways where there is a significant risk of water pollution.
- Adequate farm records must be kept and made available for inspection upon request, covering a minimum period of five years and covering a range of information including cropping, livestock numbers and the use of nitrogen fertilisers and organic manures. A fertiliser plan is required if applying chemical phosphate fertiliser, phosphorus rich manure or anaerobic digestate (AD). **If you are importing AD you must have an analysis of the digestate, a fertiliser plan and soil analysis.**
- All new above ground slurry stores must be 50m from waterways and be covered.
- You must comply with the terms of a notice served under the Nutrient Action Programme Regulations.

A derogated farm must:-

1. Complete an **online** application by midnight of 1st March 2021.
2. Maintain 80% or more of their agricultural area **available for manure application** in grassland.
3. Maintain a holding with grazing livestock i.e. Cattle, Sheep, Deer, Goats and Horses.
4. Ensure that the nitrogen loading does not exceed 250kg nitrogen per hectare on your land which includes both all applied organic manures and from the grazing animals themselves.
5. Prepare by 1<sup>st</sup> March 2021 and retain a Fertilisation Plan in accordance with Regulation 16 of the Nutrient Action Programme Regulations (Northern Ireland) 2019.
6. Prepare and retain a Fertilisation Account which **must be submitted to the Department online** by 1<sup>st</sup> March of the following calendar year.
7. Ensure the total nitrogen inputs shall neither exceed the nutrient demand of the crop nor the maximum fertilisation rate applicable to the grassland holding.
8. Carry out a soil test at least every four years for each homogenous area of grassland with regard to crop rotation and soil characteristics. At least one soil analysis per four hectares shall be carried out.
9. Ensure livestock manure is not spread in the autumn (September, October & November) before grass cultivation (ploughing & reseeding).
10. Ensure that the phosphorus balance does not exceed a surplus of 10kg phosphorus per hectare per year.
11. Apply at least 50% of slurry produced on the holding on or before 15<sup>th</sup> June of each year. Low emission slurry spreading equipment shall be used for any slurry applications after 15<sup>th</sup> June each year.
12. Ensure temporary grassland is ploughed in spring (March, April & May).
13. Ensure ploughed grass is followed immediately by a high nitrogen demand crop.
14. Ensure crop rotation shall 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 are that are undersown with grass.

Where it is established that, in any year, the conditions as summarised above and detailed in Schedule 8 of The Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019 are not fulfilled the controller shall **NOT** be eligible for an authorisation the following year.

### 1.3 Field Checks

Inspections in respect of this measure will include checking of:

- Compliance with the Action Programme Measures.
- Farm practices and facilities.
- Farm records kept in accordance with the Action Programme Measures.

These field checks will be reviewed and implemented in accordance with any amendments to the Action Programme.

**Further information on the protection of water against nitrate pollution can be obtained from 0300 200 7842 or on the DAERA website: <https://www.daera-ni.gov.uk/articles/nitrates-directive>**

## SMR 2. Conservation of Wild Birds

The aim of these rules is to protect wild birds, their eggs, nests and associated habitats. These rules apply to all claimants. The rules apply to all lands.

However, if you have land designated as a Special Protection Area (SPA), then extra rules apply.

*Please ensure you have read all the guidance.*

### 2.1 Main Requirements

There continues to be a significant decline in Europe's biodiversity.

Birds, and the habitats they rely upon, are increasingly under threat and the Birds Directive (2009/147/EC) aims to preserve, maintain or restore habitat for all species of birds that are resident or visitor to the European Territory.

***All claimants must be aware there is a legal obligation not to carry out any activities even outside a SPA which are likely to result in the disturbance of birds or the deterioration of habitats affecting birds.***

Like European Community Member States, Northern Ireland is required to identify internationally important areas for breeding, over-wintering and migrating birds and designate them as Special Protection Areas (SPAs). Article 4(4) and Article 3(2) (b) of Directive 2009/147/EC on the conservation of wild birds provides that the requirements of SMR 2 apply both within and outside the designated SPAs.

Claimants shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside SPAs, claimants shall also strive to avoid pollution or deterioration of habitats

### 2.2 Verifiable Standards

#### **Verifiable Standards- All Lands**

All claimants must not carry out any activities which are likely to result in the disturbance of birds or the deterioration of habitats affecting birds.

*You will not be in breach of these requirements if you are operating under a consent issued by DAERA/NIEA, or can rely on one of the legal defences or exceptions.*

You will be deemed not to be breaking the rules for a SPA as outlined above if you have a reasonable excuse<sup>1</sup>.

#### **Verifiable Standards - Lands within a Special Protection Area (SPA)**

- If you have a SPA on your holding, you should have been formally notified by NIEA and will already be aware of the environmental obligations which exist on



this land, however where there is any doubt farm businesses should contact DAERA/NIEA for clarification. (Farm businesses can also use the NIEA web viewer to view the location of SPAs and check if this SMR applies on their farm. The web link is; <https://apps.d.aera-ni.gov.uk/nedmapviewer/>. Further instructions are provided in the box below.)

- You must not carry out or cause or permit to be carried out operations or activities specified in the Area of Special Scientific Interest notification, that are likely to damage the interests of the site and for which DAERA/NIEA have not issued a consent.
- You must comply with the terms of any management notice served by DAERA/NIEA or the terms of any restoration order served by a court.
- You must avoid deterioration of habitats or any disturbances affecting the birds. This requirement can apply to actions that take place other than on the SPA itself, but which have the same consequences.

You will be deemed not to be breaking the rules for a SPA as outlined above if you have a reasonable excuse<sup>1</sup>.

**Mapviewer Instructions;** <https://apps.d.aera-ni.gov.uk/nedmapviewer/>

- **Read the instructions of the welcome information/splash page which will pop up as the site opens**
- **Click on the layer list symbol**
- **Click on the arrow head symbol beside the protected areas box, this will expand the selection list available**
- **Then Click over the boxes to select Nature 2000 Special Protection Areas**

## 2.3 Field Checks

In carrying out field checks, inspectors will look for compliance with the Main Requirements and relevant Verifiable Standards as detailed above.

Inspections in respect of this measure will include;

- Checking all lands for any activities which are likely to result in the disturbance of birds or the deterioration of habitats affecting birds.
- Checking of SPAs for works which DAERA/NIEA has not issued a consent.
- Checking of compliance with any consents or management notices issued by DAERA/NIEA.
- Checking of SPAs for any activities which are likely to result in the disturbance of birds or the deterioration of habitats affecting birds.

**Further information on the conservation of wild birds can be obtained from NIEA on (028) 9056 9546 or on the DAERA website: <https://www.daera-ni.gov.uk/articles/special-protection-areas>**

<sup>1</sup> A "reasonable excuse" may include: you have planning permission, you have consent from a public body or statutory authority that has complied with its duty to consult NIEA before giving its consent, or it is an emergency operation (provided that NIEA is told as soon as possible after the emergency).

## SMR 3. Conservation of Natural Habitats and of Wild Flora and Fauna

**The aim of these rules is to conserve land designated as a Special Area of Conservation (SAC).**

### 3.1 Main requirements.

There continues to be a significant decline in Europe's biodiversity.

European habitats and species are increasingly under threat and the Habitats Directive (1992/43/EEC) aims to preserve, protect and improve the quality of the environment, including the conservation of natural habitats and the habitats of species as well as the species for which the areas have been designated.

Special Areas of Conservation (SACs) are those sites which have been given greater protection under the Habitats Directive. SMR3 relates to Articles 6(1) and (2) of Directive 1992/43/EEC to avoid the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive

You must be aware of your responsibilities as an owner/occupier/claimant of land within an SAC to ensure that the special features are not damaged during the course of land management operations.

If you have a SAC on your holding, you should have been formally notified by NIEA and will already be aware of the environmental obligations which exist on this land. However, where there is any doubt farm businesses should contact DAERA/NIEA for clarification. Farm businesses can also use the NIEA web viewer to view the location of Special Areas of Conservation and check if this SMR applies on their farm. The web link is <https://apps.diera-ni.gov.uk/nedmapviewer/>. Further instructions are provided in the box below.

### 3.2 Verifiable Standards

- You must not carry out or cause or permit to be carried out operations or activities specified in the Area of Special Scientific Interest (ASSI) notification that are likely to damage the interests of the site and for which DAERA/NIEA have not issued a consent.
- You must comply with terms of management notices served by NIEA or the terms of any restoration order served by a court.
- You must not destroy or damage the natural habitats and the habitats of species as well as disturbance of the species for which the areas has been designated. This requirement can apply to actions that take place other than on the SAC itself, but which have the same consequences.

You will be deemed not to be breaking the rules for a SAC as outlined above if you have a reasonable excuse<sup>2</sup>.

**Mapviewer Instructions;** <https://apps.diera-ni.gov.uk/nedmapviewer/>

- **Read the instructions of the welcome information/splash page which will pop up as the site opens**
- **Click on the layer list symbol**
- **Click on the arrow head symbol beside the protected areas box, this will expand the selection list available**
- **Then click over the boxes to select Nature 2000 Special Protection Areas**

### 3.3 Field Checks

In carrying out field checks, inspectors will look for compliance with the Main Requirements and relevant Verifiable Standards as detailed above.

Inspections in respect of this measure will include;

- Checking of SACs for works which DAERA/NIEA has not issued a consent.
- Checking of compliance with any consents or management notices issued by DAERA/NIEA.
- Checking of SACs for works which disturb, cause deterioration or destroy the the natural habitats and the habitats of species as well as disturbance of the species for which the area has been designated.

**Further information on the conservation of natural habitats and of wild flora and fauna can be obtained from NIEA on (028) 9056 9546 or on the DAERA website:**  
<https://www.diera-ni.gov.uk/articles/special-areas-conservation>

---

<sup>2</sup>A "reasonable excuse" may include: you have planning permission, you have consent from a public body or statutory authority that has complied with its duty to consult NIEA before giving its consent, or it is an emergency operation (provided that NIEA is told as soon as possible after the emergency).

## SMR 4. Food and Feed Law

**The aim of these requirements is to ensure the safe production of food for human consumption and food or feed that is fed to food producing animals.**

### 4.1 Main Requirements

For Cross-Compliance purposes food and feed production must be carried out in a manner that is compliant with the relevant statutory controls:

- Articles 14, 15, 17(1), 18, 19 and 20 of Regulation (EC) No 178/2002;
- Food Hygiene Regulations (EC) No's 852/2004 and 853/2004 (as amended);
- Feed Hygiene Regulation (EC) No 183/2005 (as amended);
- Article 14 of Regulation (EC) No 470/2009 and the Annex of Regulation (EC) No 37/2010
- Regulation (EC) No 396/2005 Article 18.

These Regulations place primary responsibility on farmers, as food business operators, for ensuring feed and food safety at the beginning of the chain.

*Food law* means “the laws, regulations, and administrative provisions governing food in general, and food safety in particular, whether at Community (European) or national level; it covers any stage of production, processing and distribution of food, and also of feed produced for, or fed to, food producing animals”.

Milk and egg producers have further specific hygiene standards in addition to the general requirements.

### 4.2 Verifiable Standards

#### **Food safety, withdrawal and recall**

- You must not place food on the market if it is unsafe. Food is considered to be unsafe if it is either injurious to human health or unfit for human consumption.
- If you have reason to believe that you have supplied food that does not meet food safety requirements (it is either unsafe or injurious to health) and it has left your immediate control, then you must immediately initiate procedures to withdraw it from the market and inform the appropriate authorities. The appropriate authorities are Agri-food Inspection Branch within DAERA and the Food Standards Agency in Northern Ireland.
- Where food may already have reached consumers, they must be informed of the reason for withdrawal. The food must be recalled from the market if there is no other way of achieving a sufficiently high level of health protection.

- Additionally, if you believe that food which you have supplied or which is in your possession which you intend to sell, could be injurious to health, you must immediately inform the appropriate authorities.

You must also inform the appropriate authorities of actions you have taken to prevent risks to the final consumer.

### **Feed safety, withdrawal and recall**

- You must not place unsafe feed on the market or feed it to food-producing animals. Feed is deemed to be unsafe if it has an adverse effect on animal or human health or if it makes the food derived from food-producing animals unsafe for human consumption.
- If you have reason to believe that you have supplied feed that does not meet feed safety requirements, you must immediately initiate procedures to withdraw it from the market and immediately inform the appropriate authorities. The feed must be destroyed unless the appropriate authority is satisfied otherwise. The appropriate authorities are Agri-food Inspection Branch within DAERA and the Food Standards Agency in Northern Ireland.
- If your feed product is already with the user of the feed, then they must be informed of the reason for its withdrawal. The feed must be recalled from the market if there is no other way of achieving a sufficiently high level of health protection.

### **Traceability**

- You must put in place systems and procedures related to the traceability of inputs to your farm. Inputs are food, feed, food-producing animals and any other substance intended/expected to be incorporated into feed. These systems must identify:
  - the name and address of your supplier;
  - the nature and quantity of the products that were supplied to you;
  - the date of delivery of these inputs to your farm.
- You must also put in place systems and procedures related to the traceability of your products when they leave the farm. These systems must identify:
  - the name and address of your customer;
  - the nature and quantity of the products that were supplied to that customer;
  - the date on which the products left the farm.
- It is for you to decide upon the system you use for storing information. It could be computerised or comprise written records or receipts filed in order. However, it is stressed that the information must be complete, organised and understandable and must be in a format which is readily available, so that it can be produced when requested.

### **Hygiene of foodstuffs and feed hygiene**

- You must store and handle waste and hazardous substances separately and securely in a way that prevents contamination of food products or feed. Hazardous

substances are any that have the potential to cause an adverse effect on health (human or animal).

- You must store feed correctly and away from chemicals or any other products prohibited for use as animal feed.
- Feed storage areas and containers must be kept clean and dry and cleaned regularly to avoid unnecessary cross-contamination.
- Appropriate pest-control measures must be implemented where necessary.
- Seed must be stored properly and in such a way that is not accessible to animals.
- You must store medicated feed and non-medicated feed which is intended for different categories or species of animals in such a way as to reduce the risk of it being fed to the wrong animals.
- You must also ensure that you handle non-medicated feed separately from medicated feed to prevent cross-contamination.
- The on-farm distribution system must ensure that the right feed is sent to the right destination. During distribution and feeding, feed must be handled in such a way as to ensure that contamination does not occur from contaminated storage areas and equipment.
- On-farm feed transport vehicles and feeding equipment must be cleaned periodically, in particular when used to deliver and distribute medicated feed.
- You must take adequate measures, as appropriate, to prevent the introduction and spread of contagious diseases transmissible to humans through food. This includes:
  - the application of precautionary measures when introducing new animals,
  - reporting suspected outbreaks of such diseases to the appropriate authority and
  - observing the testing frequency required in the legislation for Tuberculosis/ Brucellosis or other diseases.
- If you use feed additives, veterinary medicinal products or biocides on your farm this must be done correctly. To fulfil this requirement, you must ensure that their dosage, application and use are as stated on the label or as prescribed. This includes ensuring that food you produce does not contain residues of pesticides or veterinary medicinal products that are higher than the permitted maximum residue limit (MRL) for the product or medicine used. Pesticide residues in food you produce must not exceed the MRL at the time it is placed on the market as food. Unauthorised pesticides must not be used on the food you produce and residues of these substances must not be present in the food. For veterinary medicinal products, residues within food-producing animals must not exceed the MRL at the time the animal is placed on the market or presented for slaughter. Unauthorised

veterinary medicinal products must not be used in food-producing animals and residues of these substances must not be present in the animals. Products used must have UK authorisation (i.e. have a VM number on the label) or an EU authorisation and have an “EU” prefixed number on the label.

- If you are rearing animals, whether for food or for their products, you must only source and use feed from establishments that are registered and/or approved. This applies to manufactured feed and any substance or product intended to be used for oral feeding to animals. Examples of such products are compound feeds, pre-mixtures, additives and feed materials such as cereals and fodder. This also applies to co-products from the food and drink industry, for example, soya-bean meal, brewers’ grains, wheat feed and bakery products.
- In addition to the information required for traceability, records of the following must be kept for the appropriate time if they are relevant to your business:
  - veterinary medicinal products, or other treatments administered to your animals, the dates of the treatment and the withdrawal period;
  - the results of any analyses carried out on samples taken from food producing animals or plants, or other samples taken for diagnostic purposes, that have importance for human and animal health;
  - any relevant reports on checks carried out on animals or products of animal origin;
  - use of plant protection products and biocides;
  - any use of genetically modified seeds (in feed production).
- You must take account of the results of any relevant analysis carried out on samples taken from primary products or other samples relevant to feed safety.
- You must take appropriate remedial action when informed of problems identified during official controls. Official controls include routine dairy, egg and primary producer food and feed hygiene inspections.

## **Dairy Hygiene Requirements**

The following additional hygiene requirements apply where you are a producer of raw milk (from any species):

- You must ensure that raw milk comes from animals that:
  - are in a good general state of health;
  - present no sign of disease that might result in the contamination of milk and, in particular, are not suffering from any infection of the genital tract with discharge, enteritis with diarrhoea and fever, or a recognisable inflammation of the udder;
  - do not have any udder wound likely to affect the milk;
  - are not within the prescribed withdrawal period following the administration of authorised products or substances;
  - have not been administered with any unauthorised substances or products.
- You must ensure that raw milk comes from animals belonging to herds/holdings which have disease-free status for Tuberculosis and Brucellosis.

- Where your herd/holding is not free from Tuberculosis or Brucellosis, you may sell milk from your non-reactor animals if:
  - you are selling to a wholesaler who will heat treat the milk before marketing it for human consumption; or
  - the raw milk is from sheep/goats and is intended to be made into cheese that has a maturation period of at least two months.
- Raw milk from any animal not complying with these requirements must not be placed on the market for human consumption.
- The isolation of animals that are infected, or suspected of being infected, with Tuberculosis and Brucellosis must be effective in order to avoid any adverse effect on other animals' milk.
- You must ensure that milking equipment and the premises where milk is stored, handled or cooled is located and constructed in a manner which limits the risk of contamination of milk.
- You must ensure that premises used for the storage of milk
  - are protected against vermin - including birds and birds' nests;
  - are adequately separated from premises where animals are housed; and
  - have suitable refrigeration equipment in order to meet the post-milking cooling requirements.
- Surfaces of equipment that come into contact with milk (for example, utensils, containers and tanks) must be easy to clean and, where necessary, disinfected. They must also be maintained in a sound condition. This requires the use of smooth, washable and non-toxic materials. After each use, these surfaces must be cleaned and, where necessary, disinfected.
- Milking must be carried out hygienically, ensuring in particular that:
  - before milking starts, the teats, udder and adjacent parts are clean;
  - you satisfactorily identify animals undergoing any medicinal treatment which is likely to transfer residues to milk;
  - milk from such animals, or any animals that are still within the withdrawal period, is not used for human consumption.
- Immediately after milking, you must ensure that milk is held in a clean place designed and equipped to avoid contamination.
- The milk must be cooled immediately to not more than 8°C if it is collected daily or not more than 6°C if it is not collected daily. You do not need to meet these temperature requirements for cooling if the milk is processed within two hours of milking, or a higher temperature is necessary for technological reasons related to the manufacture of certain dairy products. In such cases, the appropriate authority must have previously authorised the use of a higher temperature.



## **Egg Hygiene Requirements (additional requirements for this sector)**

The following additional hygiene requirements apply if you are an egg producer. These apply to all eggs in shell that are produced by farmed birds:

- While they are on your premises, you must keep eggs clean and dry, free from extraneous odour, effectively protected from shocks and out of direct sunshine.

### **4.3 Field Checks**

During inspections, inspectors will include checks for:

#### **General**

- Evidence of unsafe food or feed being produced or stored on the production holding. Also, evidence of food or feed being placed on the market for sale that is deemed to be injurious to health. Adequate notification, recall, withdrawal and disposal provisions should be in place commensurate to type and scale of business.
- Systems and procedures to provide traceability of inputs and outputs of products arriving and leaving the farm. Record keeping should include a record of:
  - names/addresses of suppliers/customers;
  - nature and quantity of products received/supplied;
  - dates of relevant transactions;
  - veterinary medicine purchases and use;
  - analytical results (for example, individual milk cow testing for high SCC/antibiotics);
  - use of plant production products and biocides;
  - any use of genetically modified seeds as feed.
- Storage and handling of waste and hazardous substances (any substances which have the potential to cause an adverse effect on health).
- Correct storage of food and feedstuffs. Different food or feed to be separately stored and the storage facilities to be appropriate to the product stored.
- Adequate measures to prevent the spread of contagious disease transmissible to humans through food. Examples are Tuberculosis and Brucellosis testing of cattle.

#### **Dairy Hygiene**

- Basic animal health. Dairy cows in good general state of health presenting no sign of disease that may render the milk unsafe, including udder wounds. Withdrawal periods for veterinary medicine products observed before allowing affected milk to be offered for sale.
- Milk being withheld from animals that are not free from Tuberculosis or Brucellosis,

and that such animals are isolated from the rest of the herd.

- Buildings and equipment (specific to raw milk production) being located, constructed and maintained in a manner which lowers the risk of contamination of product. Primarily, this includes the area(s) where raw milk is handled, cooled and stored.
- Effective vermin control. Birds and vermin are excluded from the raw milk production premises.
- Good milking practice. Before milking starts, the teats, udder and adjacent parts are clean. Any animals undergoing medical treatment are suitably and adequately identified.
- Milk storage temperatures. Milk being cooled immediately to
  - not more than 8°C, if collected daily; or,
  - not more than 6°C, if not collected daily.

### **Egg Hygiene**

- Eggs being kept clean and dry, free from extraneous odour, effectively protected from shocks and out of direct sunshine (this hygiene requirement relates to all eggs in shell that are produced by farmed birds).

**Further information on food and feed hygiene for farmers and growers can be obtained from DAERA Agri-food Inspection Branch on (028) 9052 5001 or on the DAERA website: <https://www.daera-ni.gov.uk/articles/primary-production-hygiene-food-and-feed>**

## SMR 5. Restrictions on the Use of Substances Having Hormonal or Thyrostatic Action and Beta-agonists in Farm Animals

The aim of these requirements is to prohibit the illegal use in stock farming of substances that have a hormonal or thyrostatic action and beta-agonists, and to prevent the residues that these substances leave in meat and other foodstuffs from entering the human or animal food chain.

### 5.1 Main Requirements

Directive 96/22/EC prohibits the illegal use of substances having a hormonal or thyrostatic action and of beta-agonists in farm animals destined for the food chain. Surveillance for illegal use of these substances is required under Regulation (EU) 2017/625. In Northern Ireland these Directives are implemented via the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 2016. These Regulations prohibit most uses of such substances in all species of farmed animals. However, legal administration of some of these substances is permitted under veterinary prescription for a very limited number of uses.

### 5.2 Verifiable Standards

#### You must not:

- Give food producing animals restricted substances<sup>3</sup>, unless given in line with any permitted exceptions.
- Have substances on your farm:
  - which contain oestradiol 17 $\beta$ , or its ester like derivatives;
  - which contain beta-agonists to induce tocolysis in cows when calving;
  - with a hormonal or thyrostatic action – unless they have been prescribed by your veterinary surgeon.
- Have food producing animals on your farm to which have been administered any restricted substances, unless given in line with any permitted exceptions.
- Place on the market or send animals for slaughter to which have been administered any restricted substance, unless given in line with any permitted exceptions.
- Sell meat, or any other animal product, derived from an animal to which any restricted substance has been administered, unless given in line with any permitted exceptions.

#### You must:

- Observe the relevant withdrawal period if your food producing animals have been given any of the restricted substances in line with the permitted exceptions.
- Make veterinary medicinal records relating to restricted substances available to the competent authority on request.

<sup>3</sup> "Restricted substances" means, thyrostatic substances, stillbenes, stillbene derivatives, their salts and esters, oestradiol 17 $\beta$  and its ester like derivatives and substances having oestrogenic, androgenic or gestagenic action and beta-agonists.

### 5.3 Field Checks

- Checks for the presence of residues of banned substances and unauthorised substances in animals on farms and at abattoirs.
- Checks that where authorised veterinary medicines have been used, any residues present in the animals, presented for slaughter for human consumption, do not exceed EU maximum residue limits.
- Check medicine records as part of on-farm visit.
- Targeted sampling is also carried out during the year and animals are selected on the basis of specific criteria laid down in Commission Decision 98/179/EC.
- Sampling of animals or carcasses where an authorised officer suspects that they may contain a residue of either an illegal substance or a veterinary medicine in excess of the relevant maximum is also undertaken.

**For further information on the use of substances having Hormonal or Thyrostatic Action and Beta-agonists in farm animals please contact your Private Veterinary Practitioner. Information on the proper keeping of records relating to Veterinary Medicines is on the DAERA website: <https://www.daera-ni.gov.uk/articles/animal-medicines-and-residues>**

## SMR 6. Pig Identification and Registration

**The aim of these requirements is to reduce the risk of pig disease spreading through controlling movements and improving traceability.**

### 6.1 Main Requirements

Council Directive 2008/71/EC provides a system of identification and registration of pigs to ensure the traceability of animals for disease eradication or control purposes. It is essential that all pig movements can be traced so that notifiable pig diseases, such as Swine Fever, Foot and Mouth Disease and Aujeszky's disease, can be controlled. These requirements also serve to protect keepers against fraud and theft.

All pig holdings in Northern Ireland must be registered with DAERA. DAERA will allocate the herd keeper a holding code and serial-numbered movement documents for the sole use of that holding. If any of the details provided when registering the holding change, DAERA must be notified within 7 days.

All pigs on the holding must be identified before leaving the holding or when they reach 6 months of age, whichever is earlier.

All pigs moving off a holding must be accompanied by the original movement document, which must be retained by the keeper at the destination holding (buyer) for 3 years from the date of movement. The keeper at the departure holding (seller) must send a copy to DAERA within 7 days of the movement and retain a copy for 3 years; and the transporter must retain a copy for 6 months if he/she is not the buyer or seller.

Pigs moving onto a holding for breeding or production from a third country/ non-EU States must be re-identified within 30 days of arriving in NI and before leaving the holding of destination in NI.

### 6.2 Verifiable Standards

#### Registration and Identification

##### **You must:**

- Register with DAERA before you move pigs (including pet pigs) onto your holding. Notify DAERA in advance if you are going to start to keep pigs on new premises.
- Notify DAERA within 7 days of any changes to your registration details, for example, your address, the address of any premises used to keep pigs or if you no longer keep pigs on any premises.
- By the time your pigs reach 6 months of age, or before they leave your holding if sooner, correctly identify them as shown below:
  - for pigs that are destined for slaughter under the age of 6 months – with a holding

code on an ear-tag, ear tattoo or slapmark finished pigs going direct to slaughter may be identified with a slapmark bearing a 4-digit curer mark. **However, from 1 April 2021, pigs will require a slapmark bearing the holding code rather than curer mark);**

- for pigs over 6 months of age (breeding pigs) and any pigs intended for breeding moved off your holding before 6 months of age – with an eartag bearing a holding code and an individual identification number of up to 4 digits;
  - pigs must be identified with an ear-tag bearing a holding code and individual identification number of up to 4 digits if they are moving to a show or market. This also applies to pigs destined for European Community Member States.
- Replace any lost or illegible (unreadable) means of identification within 28 days of discovery and before the pigs leave your holding, whichever is earlier.

#### **You must not:**

- Alter, remove, or duplicate any identification mark on a pig.

#### **On-farm records**

##### **You must:**

- Once per year record in your holding register the total number of pigs on your holding.
- Record the following information in your holding register within 48 hours of the event:
  - for births - the number of pigs should be recorded within 48 hours of first identifying the pigs, you do not have to record individual identification numbers. If the pigs are first identified at the point of moving off your holding, the birth and movement off can be recorded as a single event;
  - for deaths – only the deaths of pigs which have previously been identified have to be recorded, the individual identification numbers do not have to be recorded;
  - for movements on and off – the date of movement, the number of pigs moved, and the movement document serial number;
  - for identification marks replaced with a different mark – the date of replacement, the number of pigs, and the old and new identification marks.
- Ensure that these on-farm records are up to date, are kept for at least 3 years, and are shown to an inspector on demand.
- Ensure that movement documents, signed by the keeper, accompany pigs during movements. These should specify:
  - name, address and holding code of the holding of departure;
  - name and address of the holding of destination;
  - date of the movement;
  - number of pigs that the document covers; and
  - identification mark of each pig being moved (including the individual identification number).
- Where pigs are moved off your holding, send a copy of the movement

document to DAERA within 7 days of the movement, except if the movement is to a market, slaughterhouse or show.

- Retain a copy of movement documents for movements onto and off your holding for at least 3 years and show them to an inspector on demand.

### 6.3 Field Checks

Inspections in respect of this measure will include checks that:

- Records in the holding register meet the requirements set out above.
- Movements recorded in keeper's records have been notified to DAERA.
- Movement documents have been used and retained appropriately; and
- Pigs are identified appropriately.

Further information on pig identification and registration can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare>

## SMR 7. Cattle Identification and Registration

**The aim of these requirements is to maintain a system for the identification and registration of cattle to facilitate their traceability, in particular in the event of a disease outbreak.**

### 7.1 Main Requirements

EC Regulations require a system for the identification and registration of bovine animals to ensure the traceability of animals in the event of a disease outbreak or a risk to human health. There are 11 Cross-Compliance verifiable standards in respect of cattle identification and registration, and checks will be carried out to ensure that these standards are met. Upholding these standards not only meets EU legislation requirements but also maintains and strengthens confidence in the Northern Ireland beef and dairy industry. These requirements also serve to protect keepers against fraud and theft.

Information and guidance on the system is available on the DAERA website at <https://www.daera-ni.gov.uk/articles/identification-registration-and-movement-cattle>.

Under the verifiable standards, any person keeping cattle must register with DAERA and obtain a herd number. All cattle must be tagged using DAERA-approved ear-tags. Calves must be double-tagged within 20 days of birth, whilst animals imported from outside the EU, (including animals from GB or Crown Dependencies) must be double tagged using DAERA approved ear tags within 20 days of the import checks. Any lost or illegible (unreadable) tags must be replaced as soon as possible, and no later than 28 days after discovery.

Keepers must notify DAERA of all births within 27 days, deaths within 7 days, movements (including cattle lost or stolen) within 7 days, and animals imported from outside the EU within 7 days.

Keepers must also maintain an up-to-date herd register of cattle on their holding in a format approved by DAERA (paper, electronic or online), completed according to the relevant guidance and timescales and containing the following information:

- Ear-tag number;
- Replacement tags/Re-tags;
- Colour, Breed, Sex and Date of Birth;
- Dam's Identification Number;
- Name and address of the premises from which the animal is moved;
- Date of movement on and off holding or date of death; and
- Name and address of the premises, to which the animal is moved, or manner and place of disposal of carcase.



## 7.2 Verifiable Standards

### Tagging

#### You must:

- Double-tag with DAERA-approved ear-tags within the following timescales:
  - all calves born on your holding – within 20 days of birth or before the animal leaves your holding, whichever is earlier;
  - all cattle imported from non EU Member States/ third countries, including those from GB or Crown Dependencies, must be doubled tagged with DAERA approved ear tags within 20 days of release from import checks or before the animal leaves your holding, whichever is earlier.
- Replace lost or illegible (unreadable) ear-tags as soon as possible, within 28 days after discovering the loss or before the animal leaves your holding, whichever is earlier (where both tags have been lost and two new tags are applied, you must prove the identity of the animal).

#### You must not:

- Remove or replace ear-tags without permission from DAERA;
- Alter or deface an ear-tag.

### Notification of births, movements and deaths

#### You must:

- Notify all cattle births on your holding to DAERA no later than 27 days after the birth.
- Notify DAERA of any movements of cattle onto and off your holding (including cattle lost or stolen) within 7 days of the movement.
- Notify DAERA of any cattle deaths on your holding within 7 days.
- Notify DAERA of all cattle imported from outside the EU within 7 days of tagging the animal.

### Herd register

#### You must:

- Keep an up-to-date herd register for your holding in a format approved by DAERA (paper, electronic or online), including, where appropriate, the following details for each animal:
  - ear-tag number;
  - if appropriate, any re-tag number and the date of re-tagging, or the date a replacement tag is applied;

- colour, breed, and sex;
  - date of birth;
  - if the calf was born on your holding, the dam's ear-tag number;
  - date of movements on and off your holding;
  - details of where the animal has moved to or from; and
  - date of death.
- Complete the herd register according to the relevant guidance and timescales.
  - Keep the on-farm herd register for 10 years from the date of the last entry and make it available on request.

### 7.3 Field Checks

Inspections in respect of this measure will include the checking of:

- Ear-tag numbers of all cattle.
- Tagging of all animals with the DAERA-approved tags listed on the DAERA website at <https://www.daera-ni.gov.uk/articles/ear-tag-information>;
- Tagging of all animals within 20 days of birth and prompt replacement of lost or illegible (unreadable) tags;
- Records kept by keepers, which should correspond with information stored on APHIS;
- Actual animals kept on the holding, which should correspond with information stored on APHIS; and
- Records kept by keepers, which should meet cattle identification requirements, and all movements, birth, and deaths reported within the timescales noted above.

**Further information on cattle identification and registration can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website at: <https://www.daera-ni.gov.uk/articles/identification-registration-and-movement-cattle>.**

## SMR 8. Sheep and Goat Identification and Registration

The aim of these requirements is to maintain a system for the identification and registration of sheep and goats to facilitate their traceability, in particular in the event of a disease outbreak.

### 8.1 Main Requirements

The rules are laid down in European Law (Council Regulation 21/2004) and national law (The Sheep and Goats (Records, Identification and Movement) Order (Northern Ireland) 2009). The rules came into force across the European Union on 31st December 2009.

Under the verifiable standards any person keeping sheep and goats must tag their animals and maintain appropriate records.

#### Tagging of Sheep and Goats

- All sheep and goats must be identified within 9 months of birth or before they leave your holding, whichever is earlier. Please note that sheep and goats that are intensively kept (in other words, those that are kept for milking or that are normally housed overnight) must be identified within 6 months of birth.
- All sheep and goats born or first identified after 31st December 2009 must be identified with two tags bearing the same number. For sheep, one of the identifiers must carry an electronic device (EID).
- The action to take for animals born before 31st December 2009 is as follows:
  - If at least one green tag is in place – no further action is needed unless the animal leaves your holding. An animal can stay on your holding for life with just one green tag;
  - All animals being moved off your holding must be upgraded before they move, to EID for sheep, or to two matching tags for goats.
- You must replace any lost or illegible (unreadable) tag within 28 days of discovery.
- When applying tags; upgrading older sheep to EID, or goats to double tags; and replacing lost tags, you must follow the detailed rules set out in Sections 3, 4 and 5 of the Guidance for Keepers on the Identification and Movement of Sheep and Goats booklet at [Guidance for keepers on the identification and movement of sheep and goats | Department of Agriculture, Environment and Rural Affairs](#)

#### Record keeping

- You must maintain a flock or herd register and keep it fully up to date. You must retain your flock or herd register until at least 3 years have passed since every animal referred to in it has either died or left your holding.
- You must record births, deaths, replacement tag details, movements and the outcome of your annual inventory, in accordance with the guidance and within the timescales set

out in your flock or herd register.

- You must ensure that your farm records are available for inspection on demand.

## **8.2 Verifiable Standards**

### **Tagging**

#### **You must:**

- Identify all sheep and goats with the correct means of identification within 9 months of birth or within 6 months of birth, if intensively kept (kept for milking or normally housed overnight) or before they leave the holding of birth, whichever is earlier.
- Double-tag sheep and goats with two identifiers with the same unique individual identification number, including one electronic device, for trade with the EU.
- Replace any lost or illegible (unreadable) means of identification within 28 days of noticing their loss or illegibility or before the animal leaves the holding, whichever is earlier.
- Animals imported from third countries/ non-EU Member States (including Great Britain and Crown Dependencies) must be double tagged with two DAERA approved identifiers. The two means of identification must bear the same unique individual identification number and one must be an electronic device. Animals must be identified within 14 days of being imported. The keeper must record information about the addition of the new means of identification in the holding register together with the full identification code on the new means of identification and the full code on the method of identification applied in the third country.

#### **You must not:**

- Remove or replace ear-tags without permission from DAERA, except when replacing lost or illegible (unreadable) tags;
- Alter or deface any means of identification attached to an animal.

### **Record keeping**

- Keep up-to-date farm records in a format approved by DAERA with the required information, including:
  - an annual inventory of the animals kept, on a date between 1st and 5th December;  
within 7 days of the event:
  - details of the movement of sheep and goats on and off your holding, including:
    - the date of the movement;
    - the number of animals moved;

- the serial number of movement document;
  - information on any replacement means of identification;
  - for animals born after 31st December 2009:
    - date of tagging and year of birth;
    - number of animals tagged;
    - the ear tag numbers applied;
    - for deaths – month and year of death, number of deaths and tag numbers.
- Ensure that your farm records are available for inspection on demand.

### 8.3 Field Checks

The inspector will check a sample of your sheep/goats to ensure that they are tagged correctly and that their tag numbers are recorded in your on-farm records. They will check your holding register, your movement documents and, where appropriate, your lists of tag numbers given to you by a Central Point of Recording (CPR) for movements off your holding. CPRs include approved markets, meat plants and export assembly centres.

During on-farm inspections inspectors will check that:

- Sheep/goats are tagged in accordance with the legislation, including the replacement of lost tags.
- Movement documents for movements on and off the holding have been completed and retained in date order.
- CPR tag lists for movements of sheep to a CPR have been retained in date order with the keeper's movement document and holding register; and movement documents for animals leaving a CPR have been retained in date order with the holding register.  
 Note: You must ensure that the information on documents given to you by a CPR is accurate, including your name and address and flock number, the date of movement, the transport details, the number of animals in the batch, and the total number of tag numbers provided. You should also read the tags in a sample of sheep you have bought to ensure that they are on the document.
- For farm-to-farm moves, all individual tag numbers are recorded accurately on the movement document.
- Records in the flock or herd register are in accordance with the legislation.  
 The following events must be recorded:-
  - Births;
  - Movements on/off;
  - Replacement tags (including the cross-referencing of old and new tags where appropriate);
  - Deaths; and
  - Annual inventory.
- The number of sheep/goats on your holding is consistent with your annual inventory.

Further information on sheep and goat identification and registration can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare>.

## SMR 9. Prevention, Control and Eradication of Transmissible Spongiform Encephalopathies (TSE)

**The aim of these requirements is to minimize the risk posed to human and animal health by certain transmissible spongiform encephalopathies (TSEs).**

### 9.1 Main Requirements

Farmers must comply with the provisions of Articles 7, 11, 12, 13, and 15 of Regulation (EC) No 999/2001 of the European Parliament and of the Council laying down rules for the prevention, control and eradication of transmissible spongiform encephalopathies as implemented by the TSE Regulations (Northern Ireland) 2010.

### 9.2 Verifiable Standards

#### **You must:**

- Immediately notify the Divisional Veterinary Officer of any animal or carcass in your possession or under your charge known or suspected of being infected by a TSE.
- On notification of a TSE suspect or confirmed case, fully comply with movement restrictions, including any order to slaughter and destroy the animal(s), or any other notices served by an inspector imposing measures concerning that animal or other animals under the TSE Regulations (Northern Ireland) 2018; in particular your attention is drawn to restrictions placed on cattle born before 1st August 1996 in your possession (if applicable).
- Not feed to ruminants, any animal protein or any feeding stuff, which contains animal protein, except the following (subject to required sourcing and processing):
  - milk, milk-based products and colostrum;
  - eggs and egg products;
  - gelatine from non-ruminants;
  - hydrolysed proteins derived from non-ruminants or from ruminant hides and skins;
  - liquid milk replacers for unweaned ruminants containing fishmeal, if registered with DAERA.
- Not feed ruminant and non-ruminant farmed animals the following prohibited derived products, either directly or in feedingstuffs:
  - processed animal protein<sup>4</sup> (with specific exemptions);
  - gelatine from ruminants e.g. beef gelatine (including in surplus food).
- Not use the following restricted proteins (i.e. proteins which can be fed only to non-ruminants), for on-farm production of feed for non-ruminants unless they are authorised by DAERA to do so (applies whether ruminants are present or not):
  - fishmeal;

---

<sup>4</sup>**Processed animal protein** means animal protein derived entirely from Category 3 material, which has been treated in accordance with the Animal By-Products Regulations (including blood meal and fishmeal) so as to render it suitable for direct use as feed material or for any other use in feedingstuffs, including pet food, or for use in organic fertilisers or soil improvers; however, it does not include blood products, milk, milk-based products, milk-derived products, colostrum, colostrum products, centrifuge or separator sludge, gelatine, hydrolysed proteins and dicalcium phosphate, eggs and egg-products, including eggshells, tricalcium phosphate and collagen.

- blood products from non-ruminants;
  - pig and poultry processed animal proteins only where fed to farmed fish;
  - dicalcium phosphate and tricalcium phosphate of animal origin, (mineral derived versions are permitted for all livestock and are most commonly used - feed labels not specifying 'animal origin' can be taken to be mineral).
- Not use feed products containing restricted proteins on premises where ruminants are present unless they have registered with DAERA as doing so. The registration referred to in this point requires farmers to have adequate on-farm measures, including storage, and feeding arrangements to ensure that feed containing restricted proteins are not fed to ruminants and are kept adequately separated from ruminant feed to prevent contamination.<sup>5</sup>
  - Not export from the UK any bovine animal born or reared in the UK or imported into the UK before 1<sup>st</sup> August 1996.
  - Not place on the market any product consisting of or incorporating any material derived from a bovine animal born or reared in the UK or imported into the UK before 1st August 1996 except for milk.
  - Comply with restrictions placed on the progeny of BSE suspect or BSE positive animals.
  - Not place on the market the semen, ova or embryos of TSE suspect or infected cattle, sheep and goats without complying with documentation requirements and restrictions applying to sale or export of such products.

### 9.3 Field Checks

Farm inspection visits will include checks on:

- Any non-notification to DAERA of a suspect TSE animal or carcass.
- Compliance with any movement restrictions in respect of a suspect or confirmed TSE animal or any other notices imposing measures concerning that animal or other animals under the TSE Regulations (Northern Ireland) 2018 and in particular any restriction notice issued regarding cattle born before 1st August 1996.
- Compliance with the ban on feeding to ruminants of any animal protein or products containing animal protein.
- Compliance with the ban on feeding of prohibited animal proteins to any farmed animals.
- Compliance with authorisation requirement for use of restricted proteins for production of feed for non-ruminants.

---

<sup>5</sup>The authorisation and registration requirement referred to is followed by DAERA (AFIB) inspection which will confirm permission to use restricted proteins.



- Compliance with registration requirement for use of feed products containing restricted proteins on farms where ruminant animals are present.
- On-farm measures and feeding arrangements to ensure that feed containing restricted proteins for non-ruminant use are not fed to ruminants or contaminate ruminant feed.
- Documentation issued by DAERA to confirm any authorisation/registration required for the production /use of restricted proteins for non-ruminant feed.
- Compliance with the ban on export from the UK of any bovine animal born or reared in the UK or imported into the UK before 1st August 1996 (does not apply to export to Great Britain).
- Compliance with the ban on placement on the market of any product derived from a bovine animal born or reared in or imported into the UK before 1st August 1996 (except for milk).
- Compliance with the ban on placement on the market or export of progeny which were born to BSE positive animals during the 2 year period preceding or any time after clinical onset of the disease in the BSE positive animal.
- Compliance with documentation requirements and restrictions applying to any placement on the market of semen, ova or embryos of TSE suspect or infected cattle, sheep and goats.

**Further information on the prevention, control and eradication of Transmissible Spongiform Encephalopathies can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/articles/introduction-disease-control-and-prevention>**

## SMR 10. Restrictions on the Use of Plant Protection Products

The aim of these requirements is to ensure that plant protection products are used correctly and to minimise their risk to humans, animals and the environment.

### 10.1 Main Requirements

Plant protection products must be used in accordance with the principles of good plant protection practice. The Code of Practice for Using Plant Protection Products is available on the DAERA website at: <https://www.daera-ni.gov.uk/articles/code-practice-using-plant-protection-products>

Farmers must only use plant protection products (pesticides) that have been approved under the Plant Protection Products Regulations (Northern Ireland) 2011 as amended, or the Control of Pesticides Regulations (Northern Ireland) 1987 as amended.

The Chemicals Regulation Division of the Health and Safety Executive (HSE) authorises plant protection products for use in Northern Ireland, Scotland, England and Wales. Details of authorised products are published online by the HSE on their website at <https://secure.pesticides.gov.uk/pestreg/>

Guidance is also available on the HSE's website at <http://www.hse.gov.uk/pesticides/>

Plant protection products must be used in accordance with any requirement or condition specified in the approval or in any extension of use. It is an offence not to follow the statutory conditions of use of a pesticide: these are set out in detail in the relevant notice of approval.

Record keeping requirements for plant protection products fall within the Cross-Compliance rules for Food and Feed Law (SMR4), available on the DAERA website at <https://www.daera-ni.gov.uk/articles/primary-production-hygiene-food-and-feed>

### 10.2 Verifiable Standards

- You must only use approved plant protection products.
- Plant protection products must be used in accordance with the conditions attached to the approval and they must also be used in accordance with the information specified on the product label.
- You must follow the principles of good plant protection practice<sup>6</sup> as set out in the Code of Practice for Using Plant Protection Products.

---

<sup>6</sup>The meaning of 'good plant protection practice' as used here is taken from the definition as set out under Article 3 of Regulation (EC) 1107/2009, i.e. a practice whereby the treatments with plant protection products applied to given plants or plant products, in conformity with the conditions of their authorised uses, are selected, dosed and timed to ensure acceptable efficacy with the minimum quantity necessary, taking account of local conditions and of the possibilities for cultural and biological control.

### 10.3 Field Checks

During on-farm inspections inspectors will check the following if applicable:

- The use of plant protection products must be carefully and properly planned, including completion of an appropriate risk assessment, e.g. LERAP.
- Application must be confined to the target area e.g. crop / land.
- An emergency action plan must be prepared and equipment available.
- Storage of pesticides.
  - All pesticides must be stored in their original containers;
  - The pesticide store must be suitably sited, soundly constructed of fire resistant materials, have a suitable entrance and exit, be capable of containing spillage and leakage to the extent of 110% of the store's normal liquid contents storage capacity, be dry and protected from frost, have adequate lighting (natural or otherwise), be ventilated (natural or fan assisted), be marked (yellow and black hazard warning triangle symbol) and be secured against theft and vandalism.
- Pesticide application equipment (visual examination).
  - There must be evidence of basic calibration (the operator either having calibrated the machine or at least being aware of the need to maintain a specified forward speed and specified working pressure) to achieve the target application rate. The recommended pressure should not be exceeded as this may result in drift. The operator must also be aware of the importance of only working in suitable wind / weather conditions;
  - The correct Personal Protective Equipment (PPE) must be available and in use at the appropriate times.
- Storage of Personal Protective Equipment (PPE).
  - Facilities for cleaning and storing equipment and PPE after use must be arranged to avoid contamination of the environment and there must be suitable provision for the safe disposal of surplus pesticide and empty containers;
  - Appropriate measures must be taken to prevent spillage and leakage, e.g. during mixing and filling of equipment.
- Fields where pesticides have been applied.
- Local Environment Risk Assessment for pesticides (LERAP) records (if required).
- Pesticide application records (as required in SMR 4 Food and Feed Law).

Inspectors will also discuss with the applicant their on-farm procedures for the safe storage, use and disposal of pesticides.

***Note – Although the requirement for a professional user of plant protection products to hold a certificate of competence is not one of the SMR 10 requirements it should, however, be noted that training and possession of a certificate of competence is still a legal requirement under The Plant Protection Products (Sustainable Use) Regulations 2012.***

Further information on plant protection products can be obtained from the Health and Safety Executive for Northern Ireland on 0800 0320121 or on the Health and Safety Executive for Northern Ireland website at <http://www.hseni.gov.uk> and on the DAERA website at <https://www.daera-ni.gov.uk/topics/plant-and-tree-health/pesticides-use-and-regulations>

Comprehensive advice on all aspects of using pesticides is contained in the DAERA Code of Practice for Plant Protection Products. The Code explains how to use plant protection products safely and so meet the legal conditions which cover their use. A summary A3 wall chart has also been produced to accompany the Code and provides users with a quick reference guide.

Both documents can be downloaded from DAERA's website:

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

## SMR 11. Minimum Standards for the Protection of Calves

The aim of these requirements is to protect the welfare of calves by setting minimum standards for their care and husbandry.

### 11.1 Main Requirements

The following requirements apply to keepers of calves. These are in addition to those listed in SMR 13 (Protection of Animals Kept for Farming Purposes).

For the purposes of Cross-Compliance, the relevant national legislation will be applied. Further information on your legal obligations and advice on animal husbandry can be found in the DAERA Codes of Practice for the Welfare of Beef Cattle and the Welfare of Dairy Cattle (details of which can be found in Annex 3). Owners and keepers are required by law to have access to the relevant welfare code.

Owners and keepers are required to comply fully with the relevant domestic legislation for the welfare of calves kept for farming purposes. Owners and keepers must take all reasonable steps to ensure the welfare of calves they own or keep and must ensure that calves are not caused any unnecessary pain, suffering, injury or disease.

'Calf' means any bovine animal up to six months old.

### 11.2 Verifiable Standards

#### Inspection:

- You must inspect all housed calves at least twice a day.
- If you keep calves outside, you must inspect them at least once a day to check that they are in a good state of well-being.

#### Freedom of Movement

- Each of your calves must be able to stand up, turn around, lie down, rest and groom itself without difficulty.
- You must not tether your calves. The only exception to this requirement is that you may tether group-housed calves, for up to one hour, when you are feeding them milk or milk substitute.
- Tethers must not cause pain or injury to your calves. You must regularly inspect the tethers and adjust them if necessary to make sure they are a comfortable fit. Each tether must avoid the risk of strangulation, pain or injury and allow your calf to lie down, rest, stand up and groom itself without difficulty.
- You must not muzzle your calves.

## **Accommodation, Environment and Equipment**

- You must not keep a calf in an individual stall or pen after the age of eight weeks unless a veterinary practitioner certifies that its health or behaviour means it needs to be isolated to receive treatment. If necessary, you must isolate sick or injured calves in suitable accommodation with dry comfortable bedding.
- The width of any individual stall or pen for your calf must be at least equal to the height of the calf at the withers, measured in the standing position. The length must be at least equal to the body length of your calf - measured from the tip of the nose to the rear of the pin bone - multiplied by 1.1.
- Individual stalls or pens for your calves (except for those isolating sick animals) must have perforated walls which allow your calves to have direct visual and physical contact with each other. Some, but not all, open-fronted pens do not meet this description.
- If you keep calves in groups, the unobstructed space you must allow for each calf must be:
  - at least 1.5 square metres for each calf with a liveweight of less than 150 kilograms (kg);
  - at least two square metres for each calf with a liveweight of 150kg or more but less than 200kg; and
  - at least three square metres for each calf with a liveweight of 200kg or more.
- If you keep your calves in a building, the floors must be:
  - smooth but not slippery so as to prevent injury to the calves;
  - designed so they do not cause injury or suffering to calves standing or lying on them;
  - suitable for the size and weight of the calves; and
  - rigid, even and stable.
- You must keep all housed calves (including those you keep in hutches or temporary structures) on, or at all times give them access to, a lying area. This area must be clean, comfortable, well-drained and well-maintained with appropriate dry bedding. It must not affect the calves in any negative way.
- If you keep your calves in an artificially lit building, you must provide artificial lighting for a period which is at least equal to the period of natural light normally available between 9.00am and 5.00pm.
- You must properly clean and disinfect housing, stalls, pens, equipment and utensils used for your calves to prevent cross-infection and the build-up of disease-carrying organisms. You must remove dung, urine and left-over food as often as necessary to reduce smells (as far as possible) and to avoid attracting flies or rodents.

## **Feed, Water and Other Substances**

- You must feed all weaned calves at least twice a day.

- If you keep your calves housed in a group and they do not have continuous access to feed, or are not fed by an automatic-feeding system, you must make sure each calf has access to food at the same time as the others in the feeding group.
- As well as the general requirements for providing drinking water in SMR 13, you must give your calves fresh drinking water at all times in hot weather conditions or when they are ill.
- You must give all calves food which contains enough iron to make sure they have a blood haemoglobin level of at least 4.5mmol/litre.
- You must provide fibrous food daily to calves over 2 weeks of age; at least 100 grams must be provided at 2 weeks of age, rising in line with growth to at least 250 grams at 20 weeks old.
- You must make sure that each calf receives bovine colostrum as soon as possible after it is born. This must be within the first six hours of life.

### **11.3 Field Checks**

In addition to the checks on standards listed in SMR 13 (Protection of Animals Kept for Farming Purposes) farm inspection visits will include checks to ensure that you have complied with the verifiable standards in respect of inspection, freedom of movement, accommodation, environment and equipment and feed, water and other substances.

**Further information on the minimum standards for the protection of calves can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare>**

## SMR 12. Minimum Standards for the Protection of Pigs

The aim of these requirements is to protect the welfare of pigs by setting minimum standards for their care and husbandry.

### 12.1 Main Requirements

The following requirements apply to keepers of pigs. They are in addition to those listed in SMR 13 (Protection of Animals Kept for Farming Purposes).

For the purposes of Cross-Compliance, the relevant national legislation will be applied. Further information on your legal obligations and advice on animal husbandry can be found in the DAERA Code of Practice for the Welfare of Pigs (details of which can be found in Annex 3). Owners and keepers are required by law to have access to the relevant welfare code.

Owners and keepers are required to comply fully with the relevant domestic legislation for the welfare of pigs. Owners and keepers must take all reasonable steps to ensure the welfare of animals they own or keep and must ensure that pigs are not caused any unnecessary pain, suffering, injury or disease.

'Pig' - an animal of the porcine species of any age, kept for breeding or fattening.

'Boar' - a male pig after puberty, intended for breeding.

'Gilt' - a female pig intended for breeding, after puberty and before farrowing.

'Sow' - a female pig after the first farrowing.

'Piglet' - a pig from birth to weaning.

'Weaner' - a pig from weaning to the age of ten weeks.

'Rearing pig' - a pig from ten weeks until slaughter or service.

### 12.2 Verifiable Standards

#### Freedom of Movement

- Your pigs must be free to turn round without difficulty at all times, including while tethered, where this is allowed. To meet this requirement, the minimum sizes for stalls are set out in the accommodation section below.
- You can only tether pigs for veterinary purposes. You must not tether them at any other time.
- Tethers must not cause pain or injury to your pigs. You must regularly inspect the tethers and adjust them if necessary to make sure they are a comfortable fit. Each tether must avoid the risk of strangulation, pain or injury and allow your pig to lie down, rest, stand up and groom itself without difficulty.

#### Accommodation, Environment and Equipment

- You must make sure the accommodation for your pigs allows each pig to:
  - stand up, lie down and rest without difficulty;



- have a clean, comfortable and adequately drained place in which it can rest (including making sure that any bedding is clean, dry and not harmful to the pigs);
  - see other pigs (unless the pig is isolated for farrowing or for veterinary reasons);
  - maintain a comfortable temperature. This means that you cannot keep them in the high temperature/high humidity environment that is known as the 'sweat box system'; and
  - have enough space to allow all the pigs to lie down at the same time.
- For piglets, you must, if it is necessary to meet the requirements above, provide them with a source of heat and a dry and comfortable lying area away from the sow where all of them can rest at the same time.
- Stalls or pens used for holding individual pigs must allow them to turn around at all times. They must have the following measurements:
    - the inside area must be at least the square of the length of the pig;
    - no side inside the stall must be less than 75% of the length of the pig. The length of a pig is measured from the tip of its snout to the base of its tail while it is standing with its back straight.

***The paragraph above does not apply under the following circumstances:***

- > *to a female pig for the period between seven days before the predicted day of her farrowing and the day on which her piglets are weaned (including any piglets fostered by her);*
  - > *keeping a pig in a stall or pen for veterinary purposes;*
  - > *keeping a pig in a stall or pen for the purposes of servicing, artificial insemination or collecting semen;*
  - > *keeping a pig in a stall or pen while it is fed;*
  - > *keeping a pig in a stall or pen for the purposes of marking, washing or weighing it;*
  - > *keeping a pig in a stall or pen while its accommodation is being cleaned;*
  - > *keeping a pig in a stall or pen while it is waiting to be loaded for transportation.*
- The period during which you keep the pig in this way must not be longer than needed for that purpose. The requirements for a minimum size of stall or pen also do not apply if these refer to a stall or pen that the pig can enter or leave when it wants. In this case, the stall must be entered from another stall or pen where the pig is normally kept and which does comply with the minimum standards.
  - If you keep your pigs in a building, the floors must be:
    - smooth but not slippery so you prevent injuries to the pigs;
    - designed, built and maintained so they do not injure the pigs standing or lying on them or cause them suffering;
    - suitable for the size and weight of the pigs; and
    - rigid, even and stable (where no litter is provided).

- If you use concrete slatted floors when keeping pigs in groups, the following measurements apply:

	<b>Maximum width of the openings (millimetres)</b>	<b>Minimum width of slats (millimetres)</b>
Piglets	11	50
Weaners	14	50
Rearing pigs	18	80
Gilts after service and sows	20	80

- As well as the general requirements in SMR 13, if you keep pigs in an artificially lit building, you must provide lighting of at least 40 lux for at least eight hours each day.
- You must not expose your pigs to constant or sudden noise. You must make sure that noise levels above 85 decibels are avoided in the part of any building where you keep your pigs.
- To enable proper investigation and manipulation activities, you must give all pigs permanent access to a sufficient quantity of material such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such which does not affect their health in a negative way.
- If you keep weaners and rearing pigs together, you must take measures to prevent fighting which goes beyond normal behaviour. You must isolate, or keep separate from the group, pigs which show persistent aggression towards others or are victims of that aggression.

### **Feed, Water and Other Substances**

- If you keep your pigs housed in a group and they do not have continuous access to feed, or are not fed by an automatic-feeding system, you must give each pig access to the food at the same time as the others in the feeding group. Specific requirements for sows and gilts are set out on page 51.

### **Mutilations and Interventions**

- You must not carry out any procedures on your pigs that result in damage to or loss of a sensitive part of the body or which change bone structure, except for reasons of treatment or diagnosis.
- The procedures which are allowed may only be carried out under hygienic conditions by:
  - a veterinary practitioner; or
  - a person who is legally allowed, has been trained in line with the appropriate laws and is experienced in carrying out the procedures.
- The procedures allowed are:
  - castration of male pigs - as long as the method used does not involve tearing tissue.

- If this is carried out after the pig is seven days old it must only be performed by a veterinary practitioner;
- boars' tusks may be reduced in length where necessary to prevent injuries to other animals or for safety reasons;
  - nose ringing - but rings must not be put in animals kept continuously in indoor husbandry systems;
  - ear-tagging or ear notching when carried out for identification purposes.
- The following two procedures must not be used routinely, but only used if there is evidence that injuries to sows' teats or to other pigs' ears or tails have taken place:
    - evenly reducing the corner teeth of piglets by grinding or clipping. This must take place no later than seven days of age and must leave an intact smooth surface;
    - docking a part of the tail. If docking is carried out after the pig is seven days old, it must only be performed under anaesthetic by a veterinary practitioner and the pigs should receive prolonged pain relief for as long as necessary.
  - Tooth reduction or tail docking must not be carried out unless you have already taken other measures to improve environmental conditions or management systems to prevent tail biting and other vices.

### **Specific Requirements for Boars**

- You must place and build boar pens to allow the boars to turn round and to hear, see and smell other pigs. The pens must also contain clean resting areas and the lying area must be dry and comfortable.
- The minimum unobstructed floor area for an adult boar must be six square metres. However, when boar pens are also used for natural service, the floor area must be at least 10 square metres and must be free of any obstacles.

### **Specific Requirements for Sows and Gilts**

- If necessary, you must treat pregnant gilts and sows against internal and external parasites.
- If they are placed in farrowing crates, you must thoroughly clean pregnant sows and gilts.
- In the week before the expected farrowing time, you must give sows and gilts enough suitable nesting material unless it is not technically practical because of the slurry system you use.
- During farrowing, an unobstructed area behind the sow or gilt must be available for the ease of natural or assisted farrowing.
- If you keep sows loose in farrowing pens, there must be some method of protecting the piglets, such as farrowing rails.
- In the week before the expected farrowing time and during farrowing, you may keep sows and gilts out of sight of other pigs.

- You must keep sows and gilts in groups except during the period between seven days before the predicted day of farrowing and the day on which the weaning of piglets (including any piglets fostered) is complete. The pen where you keep the group must have sides greater than 2.8 metres (m) in length, except when there are fewer than six in the group. In this case, the sides of the pen must be no less than 2.4m in length. On holdings of fewer than 10 sows, you may keep sows and gilts individually as long as their accommodation keeps to the general requirements for pig accommodation.
- The total unobstructed floor area available to each female pig after service, when you keep them in groups, must be at least 1.64 square metres for each gilt and 2.25 square metres for each sow. When you keep these animals in groups of fewer than six, you must increase the unobstructed floor area by 10%. When you keep these animals in groups of 40 or more, you can reduce the unobstructed floor area by 10%. A part of this - equal to at least 0.95 square metres for each gilt and at least 1.3 square metres for each sow - must be continuous solid floor. Up to 15% of this area may be for drainage openings.
- As well as the requirements of the paragraph entitled Feed, Water and Other Substances on page 50, you must feed sows and gilts using a system which means each pig can get enough food even when other pigs are competing for food.
- You must give all dry pregnant sows and gilts enough bulky or high-fibre food as well as high-energy food to satisfy their hunger and need to chew.

### **Specific Requirements for Piglets**

- A part of the total floor where you keep the piglets must be large enough to allow the animals to rest together at the same time, and must be solid or covered with a mat, or be littered with straw or any other suitable material.
- If you use a farrowing crate, you must give the piglets enough space to be able to suckle without difficulty.
- You must not wean piglets from the sow at an age of less than 28 days unless the welfare or health of the dam or piglets would otherwise be affected negatively. You may wean them up to seven days earlier if you move them into specialised housing which you empty and thoroughly clean and disinfect before you introduce a new group and which is separate from housing where you keep sows.

## Specific Requirements for Weaners and Rearing Pigs

- The unobstructed floor area available to each weaner or rearing pig reared in a group must be at least:

Minimum unobstructed floor area (square metres)	Average weight of pigs in the group (kilograms)
0.15	10 or less
0.20	Greater than 10 but less than or equal to 20
0.30	Greater than 20 but less than or equal to 30
0.40	Greater than 30 but less than or equal to 50
0.55	Greater than 50 but less than or equal to 85
0.65	Greater than 85 but less than or equal to 110
1.00	Greater than 110

- You must place pigs in groups as soon as possible after weaning. You must keep them in stable groups with as little mixing as possible.
- If you have to mix pigs that are unfamiliar with one another, you should do this at as young an age as possible, preferably before or up to one week after weaning. When you mix pigs, you must give them enough opportunities to escape and hide from other pigs they are not familiar with.
- If signs of severe fighting appear, the causes must be immediately investigated and appropriate measures taken.
- Tranquillising medication, used on pigs in order to help with mixing, must not be used unless there are exceptional conditions and only after you have consulted a veterinary practitioner.

### 12.3 Field Checks

In addition to the checks on standards listed in SMR 13 (Protection of Animals Kept for Farming Purposes) farm inspection visits will include checks to ensure that you have complied with the verifiable standards in respect of freedom of movement, accommodation, environment and equipment, feed, water and other substances, mutilations and interventions as well as the specific requirements relating to boars, dry sows and gilts, piglets and weaners and rearing pigs.

Further information on the minimum standards for the protection of pigs can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare>

## SMR 13. Protection of Animals Kept for Farming Purposes

**The aim of these requirements is to protect the welfare of farmed animals by setting minimum standards for their care and husbandry.**

### 13.1 Main Requirements

SMR 13 applies to all farmed animals. SMRs 11 and 12 list extra requirements if you keep calves and pigs. For the purposes of Cross-Compliance, the relevant national legislation will be applied. Further information on your legal obligations and advice on animal husbandry can be found in the DAERA Codes of Practice for the Welfare of Farmed Animals (details of which can be found in Annex 3). Owners and keepers are required by law to -

1. Be acquainted with the provisions of the statutory welfare code(s) relating to the animals to which he/she attends.
2. Have access to the relevant welfare code(s).
3. Have received instruction and guidance on those codes.

Owners and keepers are required to comply fully with the relevant domestic legislation for the welfare of animals kept for farming purposes. Owners and keepers must take all reasonable steps to ensure the welfare of animals they own or keep and must ensure that animals kept for farming purposes are not caused any unnecessary pain, suffering, injury or disease.

### 13.2 Verifiable Standards

#### Staffing

- You must make sure that your animals are cared for by sufficient staff who have the appropriate ability, knowledge and professional skills.

#### Inspection

- You must inspect your animals thoroughly at least once a day to check that they are well if kept in husbandry system where their welfare depends on frequent human attention. In systems other than this, you must inspect them at intervals which will avoid them suffering. You will find the specific requirements relating to calves in SMR 11.
- You must have enough lighting so that you can carry out a thorough inspection at any time. This lighting may be fixed or portable.
- Where any animals (other than poultry) are kept in a building they shall be kept on, or have access at all times to, a lying area which is well drained or well-maintained with dry bedding. Poultry (other than laying hens in establishments of more than 350 birds) kept in a building, shall be kept on or have access at all times to well-maintained litter or a well-drained area for resting.

- If any of your animals appear ill or injured, you must care for them immediately. If they do not respond to this care, you must get veterinary advice as soon as possible. If necessary, you must isolate sick or injured animals in suitable accommodation with dry comfortable bedding.

### **Keeping Records**

- You must keep a record of:
  - any medicinal treatment given to your animals; and
  - the number of deaths found when the animals are inspected.
- You must keep these records for at least three years under animal welfare laws (from the date on which the treatment was given, or the date of the relevant inspection for deaths). You must make the records available to any authorised person at an inspection or when otherwise asked for.
- Veterinary medicine records that you currently keep for other purposes are acceptable for this requirement, providing they meet the minimal requirements set out by the Veterinary Medicines Directorate (VMD).

### **Freedom of Movement**

- You must not restrict your animals' freedom of movement if this causes them unnecessary suffering or injury. You should take account of the species of animal, established experience and scientific knowledge. Where appropriate you should also note the requirements for calves (SMR 11) and pigs (SMR 12).
- If your animals are continuously or regularly tethered or confined, you must give them enough space to avoid unnecessary stress. You must also allow them to exhibit their normal behaviour in line with established experience and scientific knowledge. Where appropriate you should also note the requirements relating to tethering - for calves (SMR 11) and pigs (SMR 12).

### **Accommodation, Environment and Equipment**

- Materials used in building accommodation must not be harmful to your animals. This would include, for example, lead paint or excessively rusting metal. This particularly refers to the pens, cages, stalls and equipment which your animals may come into contact with.
- You must use materials that can be thoroughly cleaned and disinfected.
- You must build and maintain accommodation so that there are no sharp edges or anything that sticks out and could injure your animals.
- You must keep air circulation, dust levels, temperature, relative air humidity and gas concentrations within limits which will not harm your animals.
- When you keep animals in buildings, you must not keep them in permanent darkness.

- You must provide enough artificial lighting if there is not enough natural light in a building to meet the animals' biological needs and normal behaviour. In this case, you must also give them an appropriate period of rest from artificial lighting.
- Where appropriate you should also note the requirements for calves (SMR 11) and pigs (SMR 12).
- You must, if necessary, give animals protection from adverse weather conditions, predators and risks to their health when not kept in buildings. At all times, they must have access to a well-drained lying area.
- If you have any automated or mechanical equipment that is essential for the health and wellbeing of your animals, you must inspect it at least once a day to check that there are no faults with it and that no parts of the equipment have become seriously worn. If you discover any faults or you find parts of the equipment that have become seriously worn, you must correct these immediately. If this is impossible, you must take appropriate steps to protect the health and wellbeing of your animals until you can get the fault rectified. These steps may include using other methods of feeding and watering and methods of providing and maintaining a satisfactory environment.
- If the health and wellbeing of your animals depends on an artificial ventilation system, you must have an appropriate back-up system which, if the main system fails, guarantees enough air renewal.
- If the health and wellbeing of your animals depends on an artificial ventilation system, an alarm system must be provided, independent of the principal electricity supply, to give warning of any failure of the system.
- You must thoroughly inspect the ventilation back-up system at least once every seven days and test each alarm system at least once every seven days to check that they work. If you find any faults (whether at inspection or at any other time), you must put them right immediately. If you have an audible alarm, you must respect the requirement relating to exposure of pigs to noise (SMR 12).

### **Feed, Water and Other Substances**

- You must feed your animals a wholesome diet which is appropriate to their age and species. They must receive enough food to keep them healthy, meet their nutritional needs and promote a positive state of wellbeing.
- You must give all animals access to feed at intervals appropriate to their biological needs (and, in any case, at least once a day). This applies unless your vet has told you otherwise. Where appropriate you should also note the requirements for calves (SMR 11).
- You must give all animals either access to a suitable water supply and enough fresh drinking water each day or they must be able to get enough fluid in any other way.
- You must not give your animals food or liquid in a manner, or containing any substance, which may cause them unnecessary suffering or injury.



- You must design, build, place and maintain feeding and watering equipment so that you minimise any contamination of food and water and the harmful effects of competition between animals.
- You must not administer a substance which is harmful to your animals' health and welfare apart from those given on the advice of a veterinary practitioner for treatment or preventative reasons.

### **Mutilations and Interventions**

- The general rule regarding mutilations and interventions is that you should not carry out such actions on your animals.
- However, some procedures may be justified because of the overall welfare benefit obtained through performing them. Where such an acceptable mutilation is carried out on livestock species, it must be done so with an anaesthetic in accordance with United Kingdom law and by an appropriately trained person. Where United Kingdom law requires a veterinary practitioner to carry out a mutilation, it must not be done by anyone else. The Welfare of Animals (Permitted Procedures by Lay Persons) Regulations (NI) 2012 lists the procedures which may be carried out on farm species in Northern Ireland and the conditions attached to these procedures.

### **Breeding Procedures**

- You must not carry out natural or artificial breeding or breeding procedures which cause, or are likely to cause, suffering or injury to any of your animals (such as inappropriate mating with an immature or unsuitably sized female). This does not prevent you from using natural or artificial breeding procedures that are likely to cause minimal or momentary suffering or injury, or that might require interventions which would not cause lasting injury. You can continue using procedures that are currently allowed under existing law.
- You must not keep animals for farming purposes unless it can reasonably be expected, on the basis of the normal genetic and physical characteristics of their breed, that you can keep them without any negative effects on their health or welfare.

### **Electrical Immobilisation**

- You must not apply an electrical current to any animal for the purpose of immobilisation.

## **13.3 Field Checks**

Farm inspection visits will include checks to ensure that you have complied with the verifiable standards in respect of staffing, inspection, record keeping, freedom of movement, accommodation, environment and equipment, feed, water and other substances, mutilations and interventions and breeding procedures.

**Further information on the minimum standards for the protection of animals kept for farming purposes can be obtained from DAERA Veterinary Service on 0300 200 7840 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare>**

## **Section 2**

# **Good Agricultural and Environmental Condition (GAEC) Standards**

## GAEC 1: Establishment of Buffer Strips along Water Courses

The aim of this requirement is to protect water courses from pollution from chemical fertiliser and organic manure

### 1.1 Background

The aim of this GAEC is to protect water against pollution and run-off by restricting the application and storage of chemical and organic fertilisers along water courses and near wells, boreholes and springs. The Verifiable Standards of this GAEC are consistent with the requirements in the Nutrient Action Programme and the Protection of Water against Nitrate Pollution Statutory Management Requirement (SMR1).

### 1.2 Verifiable Standards

- You must not apply chemical fertiliser within 2 metres of a waterway.
- You must not apply organic manure within
  - 20 metres of lakes; or
  - 10 metres 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 3 metres, provided the land has an average incline of less than 10% towards the waterway, and the organic manures are spread by band spreaders, trailing shoe, trailing hose or soil injection; or where the adjoining area is less than one hectare in size, or not more than 50 metres in width, or 50 metres of a borehole, spring or well, or 250 metres of a borehole used for a public water supply, or 15 metres of exposed cavernous or karstified limestone features (such as swallow holes and collapse features).
  - from 30th September to 15th October and for month of February the buffers are increased to
  - 15m from a waterway and 30m from a lake.
  - 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
- You must not apply fertilizers on grassland with an average incline of greater than 15% and any other land with an average incline of greater than 12% -

For organic manures within—

- 30m of lakes; or
- 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

For chemical fertiliser within—

- 10m of lakes; or
- 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.

Where land is sloping, risk assessments in NAP for steeply sloping and other sloping lands should be considered before spreading fertilizer to ensure no fertiliser enters waterways.

### 1.3 Guidance

Some day-to-day farming activities, if not done carefully, can damage the quality of water in ponds, lakes, rivers, streams or ditches on or near your land. Careful management can help prevent sediment, nutrients, bacteria, pesticides and other pollutants from reaching the water, which can reduce water quality and be harmful to aquatic life. One fairly simple way of protecting water from potentially harmful farming activities is creating strips along riverbanks, streams, and ditches, known as buffer strips which, as their title would suggest, would provide a buffer between agricultural operations and the adjacent waterway.

Buffer strips are areas of vegetation (usually grass) next to watercourses which provide a physical barrier that:

- Slows surface water runoff and so encourages silt to be deposited, which helps reduce the amount of sediment and soil bound pollutants entering waterways.
- Helps the soil to absorb surface water runoff and dissolved pollutants before these can reach waterways.

Dense vegetation such as thick grass makes buffer strips more effective at controlling sediment and water runoff.

### 1.4 Field Checks

When performing GAEC inspection checks in respect of this measure inspectors will look for compliance with the relevant Verifiable Standards as detailed above to include visual verification that:

- Chemical fertiliser has not been applied within two metres of a waterway; and
- Organic manure has not been applied within the defined distances of waterways, lakes, wells, boreholes, springs, swallow holes and springs.

**Further information on GAEC1 can be obtained from 0300 200 7842 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/water/agriculture>**

## GAEC 2: Irrigation Authorisations

The aim of these requirements is to manage the use of water for irrigation.

### 2.1 Background

The Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 help protect the water environment including protected species and dependent ecosystems and deliver efficient and sustainable water usage in Northern Ireland.

Anyone abstracting more than 10m<sup>3</sup> (2,200 gallons) of water from the natural environment in any 24 hour period is required to obtain an authorisation or licence from NIEA and is required to carry out any abstraction in accordance with that authorisation or licence.

### 2.2 Verifiable Standards

- If you are abstracting or impounding more than 10m<sup>3</sup> but less than 20m<sup>3</sup> of water in any 24 hour period you must have an authorisation and adhere to the requirements of the authorisation.
- If you are abstracting or impounding 20m<sup>3</sup> or more of water in any 24 hour period you must hold an abstraction licence and adhere to the requirements of the licence.

### 2.3 Guidance

Our surface water, coastal water and groundwater systems are valuable assets. Water in rivers, lakes and wetlands are key features of the landscape, which supports diverse and internationally important habitats of plant and animal life. In order to protect plants, animals and to manage the use of this resource, the control of abstractions and impoundments is necessary while at the same time taking into consideration the needs of industry and agriculture. The introduction of the Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 seeks to support the management of aquatic ecosystems.

The effects of abstracting (taking water from a water source) will vary depending on:

- volume being abstracted;
- sensitivity of the ecosystem;
- seasonality;
- volumes returned;
- distance between abstraction and discharge points.

From an environmental perspective over-abstraction of a water body may lead to:

- reduced water flow;
- reduction of water resources;
- stress or mortality of fish and/or invertebrates;
- increased risk of pollution through reduced dilution;
- damage to our landscapes.

The effect of an impoundment (a pool of water formed by a dam or pit, to supply water for livestock or wildlife, and to control gully erosion) on a water body will vary depending on:

- size;
- design;
- operation and control;
- the sensitivity of the location.

Care should be taken to avoid poorly designed or managed impoundments as they can:

- impede the movement of migratory fish;
- be unsafe if accessible by the public;
- cause build-up of sediment leading to changes to the river bed habitat;
- lead to changes in the natural morphology (shape) of the river.

Agricultural water management projects, such as spray irrigation, which involve impoundment, abstraction and/or diversion of water from surface, or underground sources of volumes greater than 200 cubic metres per day, may be required to submit an environmental statement under the Water Resources (Environmental Impact Assessment) Regulations (Northern Ireland) 2005.

A ready reckoner to estimate water usage is available on the NIEA website at the following location:

<https://www.daera-ni.gov.uk/sites/default/files/publications/doe/water-guidance-water-usage-agriculture-ready-reckoner-2013.pdf>

## 2.4 Field Checks

Inspections in respect of this measure will include checking:

- Authorisations or Licences issued under the Water Abstraction & Impoundment (Licensing) Regulations (Northern Ireland) 2006;
- Records providing information on abstracted volumes, locations of abstractions, dates of abstraction and the area of land irrigated.

Further information on GAEC 2 can be obtained from the Abstraction and Impoundment Licensing Team on 0300 200 7842. Email: [AIL.Team@daera-ni.gov.uk](mailto:AIL.Team@daera-ni.gov.uk) or on the DAERA website: <https://www.daera-ni.gov.uk/topics/water>

## GAEC 3: Protection of Groundwater against Pollution

**The aim of these requirements is to protect groundwater against pollution by controlling the discharge or disposal of hazardous substances or non-hazardous pollutants. These requirements apply to you if you handle, store or dispose of listed substances, for example sheep dip, pesticides, ammonia and biocides.**

### 3.1 Background

For the purposes of this GAEC hazardous substances and non-hazardous pollutants are considered to be the dangerous substances as listed in the Annex to the Directive 80/68/EEC in its version in force on the last day of its validity, as far as it relates to agricultural activity.

A full list of the substances is shown in [Annex 2](#) of this document.

Groundwater is an important resource for drinking water and provides the base flow for many surface waters such as rivers and lakes. By following the advice and information contained within this section, farmers should be able to avoid polluting groundwater with hazardous substances and non-hazardous pollutants.

Under the Groundwater Regulations (Northern Ireland) 2009, an authorisation is required from NIEA before disposing of various substances to land. The substances governed by the Regulations are called hazardous substances and non-hazardous pollutants.

#### Hazardous substances

Hazardous substances must be prevented from reaching the groundwater. Examples include but are not limited to:

- Organophosphorus compounds (such as sheep-dip and certain pesticides).
- Organohalogen compounds (such as most pesticides).
- Biocides and plant protection products (such as pesticides, fungicides & herbicides).
- Metals and their compounds (such as batteries).
- Organotin compounds (such as anti-fouling paint).
- Mineral oils and hydrocarbons (such as diesel, petrol and heating oil).

#### Non-hazardous Pollutants

The amount of non-hazardous pollutants reaching groundwater must be limited. A non-hazardous pollutant is any pollutant other than a hazardous substance.

Consequently no one must cause or knowingly permit the discharge (such as disposal) of any hazardous substance or non-hazardous pollutant in circumstances that might lead to an indirect input into groundwater unless it is carried out in accordance with a Groundwater Authorisation.

One consequence of this is that anyone wishing to dispose of spent sheep dip to land must obtain a Groundwater Authorisation from NIEA and comply with the conditions of that Authorisation.

Similarly anyone disposing of biocide or plant protection product washings must obtain a Groundwater Authorisation from NIEA and comply with the conditions of that Authorisation UNLESS they are:

- Re-applying such waste back on the target crop; OR
- Re-using such waste to make more solution to apply to the target crop; OR
- Treating such waste under the terms of a registered exemption from waste management licensing in which case no Groundwater Authorisation is necessary.

#### Authorisation conditions

Authorisation conditions will include the following restrictions:

- Disposal must only take place on the authorised land area.
- No hazardous substances (such as sheep dip, biocides or plant protection product waste/washings) must be disposed of on land within 10 metres of a surface waterway (see [Annex 1](#) for definition), or within 50 metres of any spring, well or borehole, irrespective of its current use.
- Land that is liable to flooding or is frozen hard or snow covered;
- Land that is free draining, steeply sloping, water logged or has cracked soil.

### **3.2 Verifiable Standards**

- If you are disposing of hazardous substances or non-hazardous pollutants to land you must obtain and meet the conditions of a Groundwater Authorisation.
- You must produce on request satisfactory records, as detailed in the Groundwater Authorisation.
- There must be no evidence of the pollution of groundwater by hazardous substances or non-hazardous pollutants.
- You must ensure the proper siting; operation and maintenance of a sheep dipper (as outlined in the Code of Good Agricultural Practice for the Prevention of Pollution of Water, Air and Soil).
- You must comply with any Notice served by NIEA under the Groundwater Regulations (Northern Ireland) 2009.



### 3.3 Guidance

The discharging of hazardous substances and non-hazardous pollutants to land is subject to authorisation from NIEA. For the majority of farms, in practical terms, this means an authorisation for the disposal of:

- Waste sheep dip, including cosmetic dips and shampoo.
- Waste pesticides, including tank washings not sprayed back over the target crop.

Groundwater authorisation conditions include:

- The identification of the area(s) of land to be used for disposal.
- The method of disposal used.
- Essential precautions to be taken and/or conditions under which disposal is to take place (e.g. the buffer distance from waterways).
- The maximum quantity of hazardous substances and non-hazardous pollutants to be disposed of during specified periods of time.
- Precautions to be implemented to prevent any pollution of groundwater.
- If necessary, measures for monitoring the groundwater.
- A requirement to maintain records of chemicals used, how much and when.

A public register of authorisations is held by the NIEA.

#### **Choosing a site**

Before completing the application form, the area of land to be used for disposal must be assessed to ensure that the land is suitable for the disposal of hazardous substances and non-hazardous pollutants and there is no risk of entry of the chemicals into groundwater. Particular care must be taken in selecting disposal sites.

#### **Suitable sites should be:**

- Under grass or stubble.
- Flat or gently sloping (a slope of less than 1:5 or 20% or 11°).
- At least 10m from rivers, streams or open drains.
- At least 50m from any spring, well or borehole.
- At least 500m from a drinking water supply.
- Moderate or free draining soil at least 0.6m (2 ft) deep.
- On loamy, clay or peaty soils with a pH of 5.0 - 7.5.

### **Don't choose sites which are:**

- Under set-aside.
- Lying fallow.
- Within 10m of a public path.
- Steeply sloping.
- Close to rivers, streams, open drains, springs or boreholes.
- Well drained or have sandy, gravelly, free draining soil.
- Within areas designated for nature conservation (e.g. ASSIs).
- On shallow soils overlaying limestone or gravel.

### **How do you apply for an authorisation?**

The application form must be accompanied by a 1:10,000 scale map of the property showing the boundary of the area(s) marked in red, on which disposal is proposed.

On completion of your application form, return it to NIEA with a copy of your map.

It may be necessary for NIEA to undertake site visits in response to some applications to verify the information contained within them.

NIEA may require a more detailed hydrogeological assessment to be submitted in support of the application.

### **3.4 Field Checks**

Inspections in respect of this measure will include checking of:

- The need for a Groundwater Authorisation for disposal of hazardous substances (such as sheep dip, biocides or plant protection product waste / washings). No authorisation is required for the disposal of biocide or plant protection product washings back on to the target crop nor for re-using such waste to make more solution to apply to the target crop nor for the treatment of such waste under the terms of a registered exemption from waste management licensing.
- Written records detailing any disposals carried out in the last four years in accordance with conditions of the Groundwater Authorisation.
- Evidence of pollution of Groundwater by hazardous substances or non-hazardous pollutants.
- Any dippers to assess if they pose a threat to groundwater, for example, through cracks or unsealed drain holes.

**Further information on GAEC 3 can be obtained from NIEA on 0300 200 7842 or on the DAERA website: <https://www.daera-ni.gov.uk/topics/water/agriculture>**

## GAEC 4: Minimum Soil Cover

The aim of this requirement is to protect soil as a resource by ensuring minimum soil cover to prevent soil erosion.

### 4.1 Background

Maintaining minimum soil cover reduces the risk of soil erosion and loss of nutrients from arable land in winter. The verifiable standard below is the same as that under the Northern Ireland Nitrates Action Programme Regulations.

### 4.2 Verifiable Standards

- After harvesting a crop you must establish minimum soil cover by ensuring that from harvest until 15th January in the following year one of the following conditions is met on that land at any time:
  - the stubble of the harvested crop remains in the land; or
  - the land is sown with a crop which will take up nitrogen or where soil or weather conditions prevent a subsequent crop from being sown, appropriate measures are put in place to limit soil erosion. Appropriate measures could include chisel ploughing (where soil conditions are favourable) or, where soils are waterlogged, leaving residues undisturbed.

***You will not be in breach of this requirement if you have prepared the land as a seedbed but are unable to sow the crop within 10 days (because to do so would result in a breach of the GAEC standard on waterlogged soil) or because extreme weather conditions make this impractical. In either case, the land must be sown as soon as practicable.***

***If your land is to be used for a ploughing match between harvest and 15th January you may apply to the Department for permission not to comply with this standard on the area on which the ploughing match will take place. In assessing your application the Department will need to be assured that the land on which the proposed ploughing match will take place is not at risk of soil erosion or nitrate leaching. In cases where permission is granted this standard will not apply.***

#### **Exceptions to the standards above**

Exceptions will be granted where one or more of the following applies:

- The soil is waterlogged only within five metres of a gateway or other access point and access is required to an area of land that is not waterlogged;
- The area is an established track to land that is not waterlogged;
- Mechanical operations are required to improve the drainage of the land;
- Poaching of soil is a necessary consequence of works that are required to ensure the welfare of humans or animals;
- It is necessary for the protection of animal welfare during periods of extreme weather conditions;

- DAERA has granted a temporary exemption from this rule because of extreme weather conditions, in which case you will need to comply with any conditions that are attached including reinstatement requirements.
- The area has been ploughed as part of practice for a ploughing match.



*A green cover crop which takes up nitrogen or leaving the stubble in the land will help prevent soil erosion and loss of nutrients.*

### 4.3 Guidance

The following guidance is provided to help you comply with the GAEC requirement to maintain minimum soil cover:

#### **Why are stubble cover and green cover important?**

Sowing green cover as a crop which takes up Nitrogen or leaving the stubble in the land will ensure minimum soil cover and prevent soil erosion and loss of nutrients. The standard requires that either the stubbles or a green cover that takes up Nitrogen is in the land from harvest until 15th January inclusive.

Sowing an autumn growing crop, such as winter cereals, as early as possible will ensure a well-developed root system which is better able to absorb soil nutrients and lower the potential for nutrient losses by leaching.

#### **What counts as a crop that will take up soil nitrogen?**

Except for legumes such as clovers, peas and beans, any crop likely to produce some growth in autumn after sowing would count as a crop that will take up soil Nitrogen. Common examples include:

- Grass reseeds;
- Winter cereals; and,
- Catch crops or cover crops.

## **Potato and maize harvesting**

Whilst the revised standard requires a green cover crop to be sown following potatoes, there are circumstances where minimum soil cover may not be required after potatoes. These include where the land has been prepared as a seedbed but you are unable to sow the crop within 10 days (because to do so would result in a breach of the GAEC standard on waterlogged soil) or because extreme weather conditions make this impractical. In either case the land must be sown as soon as practicable but that may not occur, depending on soil and weather conditions, until the following spring.

Potato beds which have been de-stoned can be ploughed to redistribute the stones across the field but a green cover crop must be sown where the ploughing takes place before 15th January. The sowing of the green cover would be subject to soil and weather conditions being suitable.

### **Why is it important to minimise soil erosion?**

Whilst soil erosion is not currently a major issue in Northern Ireland because of our mostly grass-based agricultural enterprises, land cultivated for arable crop production may be vulnerable. Soil erosion rates are highly variable and sensitive to factors such as soil type and condition, crop type, slope, cultivation technique and rainfall intensity. In the EU Assessment of erosion risk (Pan European Soil Erosion Risk Assessment - the PESERA Map) the majority of Northern Ireland is estimated to be in the lowest loss category for soil erosion of 0-0.5 t/ha/year. This reflects the dominance of grassland and the stabilising effect that this has on soils. A report from the Department of the Environment, Food and Rural Affairs (DEFRA) has indicated that erosion rates on arable soils can range from less than 1 t/ha/year up to 20 t/ha/year, depending on the crop type, with maize and potatoes exhibiting two of the highest average erosion rates.

### **What are appropriate measures to limit soil erosion?**

Where it is not possible to sow green cover the standard allows you to put in place appropriate measures to limit soil erosion which could include non-inversion cultivation methods such as deep grubbing or chisel ploughing after harvest where that harvest has been late in the season. However, deep grubbing or chisel ploughing should only be carried out where soil conditions are favourable and limited to areas affected by compaction. The non-inversion action of deep grubbing or chisel ploughing in late autumn helps to reduce runoff and nutrient loss from soils compared to traditional ploughing. Leaving residues undisturbed may also be an option where soils are waterlogged and conditions are not suitable for establishing a cover crop.



*Chisel ploughing*



*Sediment fencing*

Other options would include installing sediment traps in vulnerable locations or leaving a buffer zone of rough grass between a slope and a vulnerable watercourse. This will trap any sediment and nutrient laden water before it reaches the watercourse. Depending on its width, this buffer may also meet the requirement under GAEC 1 for the establishment of a buffer strip along a watercourse in order to protect it from pollution from chemical fertiliser and organic manure.

### **Why is it important to minimise the loss of nutrients?**

Eutrophication is when the environment becomes enriched with nutrients, usually phosphorus. This can be a problem in lakes and rivers as it can cause algal blooms. There is a risk to Northern Ireland's waters from eutrophication through the overland transport of phosphorus to waterways through soil erosion. The phosphorus is attached to soil particles and suspended sediments and may be released into waterways as soluble reactive P (SRP) which increases eutrophication in our lakes and rivers.

### **Permission not to comply with the Minimum Soil Cover Requirement for Ploughing Matches**

DAERA will assess and may grant permission to a ploughing organisation in association with the Area-based Scheme claimant (including the Basic Payment Scheme) for leaving a specified area of land ploughed and without a green cover crop where the ploughing match is held between harvest and 15th January inclusive. In making its decision DAERA will use assessment criteria including soil type, field slope and the risk of erosion and nitrate leaching. An exception to the standard will be granted where the area has been ploughed as part of practice for a ploughing match. The permission application form (PAD1) is available by emailing a request to [ploughingderogation@daera-ni.gov.uk](mailto:ploughingderogation@daera-ni.gov.uk); or from your local DAERA Direct Office.

## **4.4 Field checks**

When performing GAEC inspection checks on these standards, inspectors will look for the following acceptable and not acceptable features or activities:

**Acceptable**

- Evidence of permission not to comply with the Minimum Soil Cover Requirement.

**Not acceptable**

- Evidence of ploughed surface; disced surface, finely tilled seedbed during the winter.
- Evidence of a legume sown as a green cover crop

Further information on GAEC 4 can be obtained from DAERA Countryside Management Unit on 0300 200 7842 or on the DAERA website: <https://www.daera-ni.gov.uk/articles/cross-compliance>

## GAEC 5: Minimum Land Management Reflecting Site Specific Conditions to Limit Erosion

The aim of this requirement is to protect soil as a resource by preventing soil erosion.

### 5.1 Background Soil Erosion

Soil erosion, the loss of soil particles by the action of wind and water, has not been a major problem in Northern Ireland. However, soil erosion can:

- Cause damage to crops.
- Block waterways with silt and contaminate them with soil nutrients.
- Cause public nuisance through soil deposition on roads.
- Lead to a gradual loss of top soil.
- Damage aquatic life and diminish water quality through the release of nutrients into waterways which increases eutrophication in our lakes and rivers.

Soil erosion by water may occur on sloping arable land and recently reseeded grassland. Hedges and the small field size in Northern Ireland help reduce erosion by intercepting water and suspended soil particles. Soil erosion may occur when rainfall intensity exceeds the soil's capacity to soak it up and the surface run-off is large enough and fast enough to carry soil particles.

Trampling by livestock increases the risk of soil erosion, which can increase the sediment load of a river, resulting in diminished water quality.

#### Soil Organic Matter

Maintaining soil organic matter in the topsoil influences its physical, chemical and biological properties, particularly its ease of cultivation, water retention capacity and nutrient availability to plants. If the organic matter level falls, it can restrict the soil's ability to support plant growth. Cultivation increases the rate of decomposition of organic matter. Therefore, organic matter levels are most likely to fall under continuous arable cropping where there is little return of plant residues or animal manures.

In the mostly grass-based agricultural systems of Northern Ireland, the soil organic matter level ranges from 8-20% depending on previous cropping. Adding animal manures over several years, incorporating crop residues or sowing out in grass will increase organic matter levels in low organic matter soils.

#### Soil Structure

Soils can be physically damaged, perhaps irreversibly, by livestock trampling, compaction, topsoil removal and erosion. The use of heavy machinery when the soil is too wet can damage the soil structure, resulting in poor root and crop growth.



Sustainable soil management can be achieved by following the appropriate GAEC requirements outlined below.

### Supplementary Feeding Sites

Supplementary feeding sites are essential to many upland hill farms especially during the winter period to provide feed to livestock. Good supplementary feeding site management will result in minimal damage to the underlying and surrounding plant cover and to the environment. The grass/vegetation will recover within the same growing season, thus providing more feed for livestock.

Inappropriate management of supplementary feeding sites, for example, round feeders placed on wildlife areas (semi-natural habitats), on heather moorland, in woods or on archaeological features will result in damage. Excessive trampling and poaching associated with permanent supplementary feeding sites may result in soil erosion and damage to the soil structure.

### Overgrazing

Overgrazing is grazing land with livestock in such numbers as to significantly damage the growth, quality or species composition of the vegetation. Overgrazed sites have little or no plant cover and there may be evidence of run-off or standing water. Overgrazing can result in soil erosion, increase the risk of flooding and cause damage to semi-natural habitats and archaeological features. Overgrazing is often associated with evidence of poor animal condition.

Farmers will be required to manage their livestock according to the land type and climate conditions which are specific to the farm.

## 5.2 Verifiable Standards

- You must protect soils from erosion and maintain soil structure by preventing land from being excessively trampled, poached or rutted including on bank sides and along water courses.



*Poaching must not result in soil erosion*



*Vehicles can cause severe damage to soil structure*

- You must not carry out any cultivation if water is standing on the surface, or if the soil is waterlogged. Cultivations include any mechanical field operation, for example, harvesting, manure spreading, ploughing or discing.

**Exceptions to the two standards above**

Exceptions will be granted where one or more of the following applies:

- ▶ *The soil is waterlogged only within five metres of a gateway or other access point and access is required to an area of land that is not waterlogged.*
  - ▶ *The area is an established track to land that is not waterlogged.*
  - ▶ *Mechanical operations are required to improve the drainage of the land.*
  - ▶ *Poaching of soil is a necessary consequence of works that are required to ensure the welfare of humans or animals.*
  - ▶ *It is essential to harvest a crop of fresh vegetables and/or fruit to meet contractual deadlines, or where the quality of the produce would deteriorate if not lifted.*
  - ▶ *It is necessary for the protection of animal welfare during periods of extreme weather conditions.*
  - ▶ *DAERA has granted a temporary exemption from this rule because of extreme weather conditions, in which case you will need to comply with any conditions that are attached including reinstatement requirements.*
- Supplementary feeding sites and sacrifice areas should be rotated and managed to prevent excessive trampling, poaching or vehicle rutting to minimise soil erosion and must not cause runoff to waterways. Sacrifice areas must be ploughed and sown in the following spring. Natural regeneration (recovery of the sward) and surface seeding will be permitted provided there is at least 90% grass/crop coverage by the end of spring.
  - You must avoid overgrazing grassland, semi-natural habitat, or archaeological sites with

livestock in such numbers which would damage the growth, quality or species composition of vegetation on that land to any significant degree.



*Overgrazing resulting in exposed peat soils at risk of erosion*

#### **Exception to the two standards above:**

- ▶ *The standards do not apply on land where these requirements conflict with the management required by Areas of Special Scientific Interest, SPAs, Special Areas of Conservation and/or Agri-environment scheme agreement.*
  - ▶ *The standards do not apply to areas within five metres around gateways/laneways provided this land is not a semi-natural habitat, archaeological site within 10 metres from waterways, or 50 metres from boreholes or wells, or 250 metres from boreholes used for a public water supply.*
  - ▶ *Exceptions will be granted where it is necessary for the protection of animal welfare during periods of extreme weather conditions.*
- You must not burn heather, gorse, whin or fern between 15th April and 31st August to prevent erosion.

### **5.3 Guidance**

The following guidance is provided to help you adopt farming practices which minimise the risks of soil erosion and protect soil structure to help ensure sustainable grass/crop production.

## **Avoid excessive trampling/poaching by livestock**

Signs of excessive trampling/poaching or vehicle rutting may include one or more of the following:

- No visible remains of grass/vegetation, bare soil.
- Deep bare soil trenches / ruts caused by vehicle tracks.
- Bare soil often mixed with frequent amounts of livestock manure.
- Waterlogged soils, livestock 'wading in muck'.

Livestock should be managed appropriately according to the ground and climate conditions to ensure soil erosion does not occur. Remove livestock from any area which starts to show signs of severe trampling or poaching. Some areas of riverbanks may be prone to soil erosion by livestock. If this is likely to lead to severe trampling or poaching, the area should be fenced off.

## **Waterlogged soils - no cultivations permitted**

Waterlogged soils are soils where water appears on the surface of the land when direct pressure is applied. Cultivations are not permitted on waterlogged soils. Where exceptions are granted, soil compaction can be reduced if low ground pressure tyres and/or dual wheels are used on tractors/machinery.

The following provides guidance on how to manage supplementary feeding sites without damaging soil, water, habitats and archaeological sites.

## **Good supplementary feeding site management**

Supplementary feeding sites can cause 'run-off' which may result in pollution of neighbouring waterways, therefore avoid siting feeding sites within the limits provided (waterway is defined in [Annex 1](#)).

Check for signs of excessive trampling / poaching or vehicle rutting and take action to avoid this.

Sites should be regularly rotated and sited on hard core areas (including lanes) where possible. Sites on hard areas will not require rotation. Hard core areas must not be created on semi-natural habitats, or archaeological sites, or within 10 metres from waterways, or 50 metres from boreholes or wells or 250 metres from boreholes used for a public water supply.

Trampling associated with feeding areas can damage archaeological sites (definition provided in [Annex 1](#)). Do not locate feeding sites within 10 metres of an archaeological site. Information on archaeological sites which may be located on your farm can be obtained from NIEA Historic Monuments Unit on (028) 9081 9226 or at



*Acceptable supplementary feeding site*



*Unacceptable supplementary feeding site*



*Feeding of livestock in broadleaved woodland is not permitted*

### **Sacrifice areas**

If not managed properly sacrifice areas can cause soil erosion, nutrient runoff and destroy soil structure and the original vegetation cover. In particular they cause long-term environmental damage to semi-natural habitats. Nutrient run-off may cause pollution of a neighbouring waterway, borehole or well.

Sacrifice areas will only be permitted on improved grassland/arable land where the land is flat and must be located ten metres from waterways, or 50 metres from boreholes or wells or 250 metres from boreholes used for a public water supply. Sacrifice areas must not be situated on or adjacent to archaeological sites. The area must be ploughed and sown in

the following spring. Natural regeneration (recovery of the sward) and surface seeding will be permitted provided there is at least 90% grass/crop coverage by the end of spring.

The management of out-wintered livestock must comply with the Northern Ireland Nitrates Action Programme Regulations:

<https://www.daera-ni.gov.uk/sites/default/files/publications/doe/water-policy-nitrates-action-programme-201518-2015.PDF>

**AND**

<https://www.daera-ni.gov.uk/sites/default/files/publications/daera/new-nap-measures-information-for-farmers-11-July-2019.PDF>

## **Winter Fodder Crops**

Brassica fodder crops should not be grown in steeply sloping fields with a high soil erosion risk. Strip grazing from the top of sloping fields can help reduce the risk of soil run-off. Watercourses and ditches alongside crops grazed through the winter are very susceptible to soil erosion through livestock poaching and destabilising of river banks. Leaving an uncultivated grass strip next to such features, and temporarily fencing them off or grazing towards them, will help prevent damage.

## **Overgrazing**

The following advice is to help you recognise the signs of overgrazing and to provide guidance to help prevent overgrazing occurring. Be aware that some schemes under the Rural Development Programme, for example NI Countryside Management Scheme (NICMS) and Areas of Natural Constraint (ANC), have stocking density requirements so you should check your scheme agreement for details and guidance.

### Signs of overgrazing

Signs of overgrazing are a combination of the following: very short sward, grasslands with a sward height of less than 3cm, rough grassland/moorland with a sward height of less than 5cm, a high density of cattle/sheep dung and frequent patches of bare ground.

### How to prevent overgrazing

Graze livestock in numbers appropriate to the ground and climate conditions. Keep stock numbers limited to the carrying capacity of the field. Regular shepherding on open hills may be required to prevent localised overgrazing. Move livestock once any signs of overgrazing become apparent.

## **Archaeological sites**

Identify the archaeological sites (defined in [Annex 1](#)) on your farm and ensure all workers /contractors are aware of such features. Regularly check sites and ensure damage is not occurring, particularly trampling damage by livestock. Information on archaeological sites which may be located on your farm can be obtained from NIEA Historic Monuments Unit on (028) 9054 3110 or <https://www.communities-ni.gov.uk/articles/monuments-and-buildings-record>

## Heather/gorse burning

If burning heather, it must be completed within the permitted period to avoid soil erosion. Gorse burning should be avoided as this stimulates gorse seed germination and contributes to its spread. Further advice on selective controlled burning can be provided by DAERA Countryside Management Delivery Branch. Controlled periodic burning of heather in small areas from September to March benefits grazing and wildlife conservation.

### 5.4 Field Checks

When performing GAEC inspection checks in respect of these standards, inspectors will look for:

- Evidence of excessive trampling, rutting or poaching causing soil erosion on any land.
- Evidence of soil run-off into waterways.
- Evidence of cultivations occurring on waterlogged soils or where water is standing on the surface.
- Evidence of supplementary feeding sites on semi-natural habitats, within 10m of an archaeological site; or 10m from waterways; or 50m from boreholes or wells; or 250m from boreholes used for public water supply.
- Evidence of excessive trampling, poaching, soil erosion or vehicle rutting as a result of supplementary feeding livestock.
- Evidence of overgrazing i.e. where there is no vegetative cover and/or there is evidence of run-off or standing water, or damage to an archaeological site.
- Evidence of burning heather, gorse, whin or fern between 15<sup>th</sup> April and 31<sup>st</sup> August

**Further information on GAEC 5 can be obtained from DAERA Countryside Management Unit on 0300 200 7842 or on the DAERA website:**

<https://www.daera-ni.gov.uk/articles/cross-compliance>

**Further information on the Nitrates Directive can be obtained from NIEA on 0300 200 7842 or on the DAERA website:**

<https://www.daera-ni.gov.uk/articles/nitrates-directive>

## GAEC 6: Maintenance of Soil Organic Matter Level Through Appropriate Practices Including Ban on Burning Arable Stubble, Except for Plant Health Reasons

The aim of this requirement is to protect soil as a resource through maintaining soil carbon stocks.

### 6.1 Background

Soil organic matter occurs naturally in the soil and comes from decomposing animals, plant roots and crop residues. Most organic matter added to the soil decomposes over time as animals and micro-organisms feed on it. This process releases nutrients which crops can then use. Other elements of organic matter take longer to decompose and this material is often referred to as 'humus'. Organic matter binds the soil particles together into stable 'aggregates' that give soil its crumb like structure. These aggregates improve the workability of the soil, root penetration and water and nutrient holding capacity.

Northern Ireland is mainly a grass based region with only around 5% of available farmland used for arable crops. This means that our soil organic matter levels are relatively high.

However, whilst the majority of arable crops are already grown as part of a rotation including grass there are certain regions and crop rotations where soil organic matter levels can decline. Lower soil organic matter levels increase water logging and soil erosion risk; increase the effects of compaction and increase the dependence of crops on artificial fertilisers for growth and development.

### 6.2 Verifiable Standards

- On agricultural land you must not burn any of the following crop residues:
  - cereal straw;
  - cereal stubble;
  - residues of oil-seed rape;
  - field beans harvested dry or peas harvested dry;unless the burning is for the purposes of disease control or the elimination of plant pests where a notice has been served under Article 32 of the Plant Health Order (Northern Ireland) 2006.

#### ***Exception to the standard above:***

- ▶ *A temporary exemption may be granted in cases of extreme weather conditions in which case you will need to comply with any conditions that are attached.*
- You must not plough, cultivate or intensify (including the extraction of peat, sand or gravel) semi-natural habitats unless you comply with the DAERA Environmental Impact Assessment (Agriculture) Regulations (Northern Ireland) 2007.



### 6.3 Guidance

The following advice is provided to help you comply with the GAEC requirements relating to the protection of wildlife areas and archaeological sites:

#### **Semi-Natural Habitats**

Semi-natural habitats definitions are provided in [Annex 1](#). Identify all broadleaved woodland / scrub, moorland, wetlands and species-rich grasslands on the farm and ensure all workers / contractors are aware of such areas. Monitor sites regularly to ensure no damage is occurring.



*Damage to semi-natural habitats is not permitted*

It is a criminal offence to damage any natural feature designated as an ASSI, SPA or SAC. Unauthorised ploughing of a designated site may attract significant penalties over and above any Cross-Compliance sanctions. Information on designated sites which may be located on your farm can be obtained from NIEA Conservation, Designations and Protection Branch on (028) 9056 9516 or (028) 9056 9547 or <https://www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas>

#### **Environmental Impact Assessment (Agriculture) Regulations (NI) 2007 (as amended)**

Anyone wishing to carry out an intensive agricultural activity / project on uncultivated land or a semi-natural area must apply to DAERA, Countryside Management Unit for prior consent. Reseeding, applying fertiliser, spraying, drainage and other cultivations are all considered as intensive agricultural projects.

'Uncultivated land' is land which has not been cultivated in the last 15 years, and includes either physical cultivation such as ploughing and subsurface harrowing or chemical cultivation such as application of fertilisers.

Semi-natural areas/habitat definitions are listed in [Annex 1](#).

The EIA (Agriculture) Regulations 2007 (as amended) also require land owners to comply with any Stop Notice and/or Reinstatement Notice applied under the Regulation and, as such, non-compliance with a Stop Notice and/or Reinstatement Notice may constitute a breach of the verifiable standard.

For further information or to apply for consent, you must make a screening application to DAERA giving details of the work you propose to carry out.

Application forms are available on line at

<https://www.daera-ni.gov.uk/articles/environmental-impact-assessment-eia-0>

or can be requested from:

Integrated Controls Branch  
Academy House  
121A Broughshane Street  
Town Parks  
Ballymena  
BT43 6HY  
Telephone: 0300 200 7842  
Email: [eia@daera-ni.gov.uk](mailto:eia@daera-ni.gov.uk)

### **Infilling land**

Any farmer wishing to infill any of his land with soil, spoil, hard core or any waste material must apply to their Local Council's Planning Department to obtain the necessary consents before starting this activity. Where material is being imported onto the farm for disposal it will also require a waste management authorisation. For further information on waste management contact NIEA's Waste Management Team on (028) 9056 9353.

### **Extraction of Peat / Sand or Gravel**

The extraction of peat, sand or gravel, within certain and specific parameters, may fall within 'permitted development', as defined in The Planning (General Permitted Development) Order (Northern Ireland) 2015. Where planning permission is required and not obtained you may be subject to enforcement action. Specific advice and guidance should be obtained from your Local Council's Planning Department.

DAERA inspectors performing GAEC field checks who find evidence of either infilling or extraction of peat, sand or gravel on semi-natural habitats will also report this to the Local Council Planning Department.

## **6.4 Field Checks**

When performing GAEC inspection checks in respect of this standard, inspectors will look for:

- Evidence of crop residues, cereal straw or cereal stubble being burned or having been burnt.
- A notice served under Article 32 of the Plant Health Order (Northern Ireland) 2006.

- Evidence of reclamation / infilling or mineral extraction on semi natural habitats.
- Evidence of a breach of the DAERA EIA (Agriculture) Regulations 2007 (as amended).

**Further information on GAEC 6 can be obtained from DAERA Countryside Management Unit on 0300 200 7842 or on the DAERA website:**

**<https://www.daera-ni.gov.uk/articles/cross-compliance>**

## GAEC 7: Retention of Landscape Features

**The aims of this requirement are to retain landscape features, ensure a minimum level of maintenance for their protection and prevent encroachment by invasive species.**

### 7.1 Background

The Northern Ireland farmed landscape is characterised by field boundaries. They provide valuable shelter for stock, nesting cover for birds and a variety of habitats and food for wildlife. Field boundaries include all types of hedges, dry stone walls, ditches or sheughs and earth banks.

The primary function of sheughs (or ditches) is to drain land. However, they are also valuable landscape and wildlife features, important for many plants, animals, birds and insects. Sheughs should therefore be managed, not only as drainage channels, but also as valuable wildlife habitats.

Birds nest in the majority of our hedges, and therefore hedge, tree or scrub cutting (including trimming and laying) is not permitted during the bird nesting season between 1st March and 31st August. Cutting includes coppicing. This is to avoid damaging the birds, nests or chicks which is a provision of the Wildlife and Natural Environment (NI) Act 2011.

Archaeological features have a unique historic role in the countryside providing a link to the past. Many important archaeological sites have been lost or damaged over the last 50 years due to agricultural intensification practices, for example, land reclamation and overgrazing.

Invasive plant species are a growing environmental and economic threat. Their introduction or spread threatens the environment, the economy and society, and human health. Once established, invasive species are extremely difficult and costly to control and eradicate, and their ecological effects are often irreversible.

Many non-native (exotic/alien) species, including Rhododendron, Giant hogweed, Japanese knotweed and Himalayan balsam, have been intentionally or unintentionally introduced into Northern Ireland from around the world. The main negative impact caused by them is through direct competition with native plants. Other invasive species are the noxious weeds wild oat, docks, certain thistle species and ragwort, which, although 'native', are more directly injurious to agriculture through contamination of crops and pastures and yield reduction.

### 7.2 Verifiable Standards

- You must prevent encroachment by invasive species (Invasive species are Rhododendron, Giant hogweed, Japanese knotweed, Himalayan balsam, wild oat, dock, thistle and ragwort).

***Exception to the standard above:***

*The measure above does not apply on land where these requirements conflict with*

*the management required by:*

- ▶ Areas of Special Scientific Interest, SPAs or Special Areas of Conservation. Contact NIEA Conservation Designations and Protection on (028) 9056 9516 or (028) 9056 9547 or <https://www.daera-ni.gov.uk/topics/biodiversity> for further information;
  - ▶ Scheduled archaeological sites. Contact DfC Historic Environment Division on (028) 9081 9226 or <https://www.communities-ni.gov.uk/topics/historic-environment> for further information;
  - ▶ Agri-environment scheme agreement. Contact DAERA on 0300 200 7842 for further information.
- You must not remove landscape features (dry stone walls, ditches or sheughs, hedgerows, including trees in hedgerows and earth banks) except by prior written permission from DAERA. This includes infilling or laying drainage pipes in open ditches or sheughs;
  - If you have received written permission from DAERA to remove a landscape feature (dry stone walls, ditches or sheughs, hedgerows, including trees in hedgerows, and earth banks) you must carry out the mitigating action set out in the written permission within the deadline set by DAERA.

***Exceptions to the two standards above:***

- ▶ *Hedgerow trees may be removed if there are health and safety reasons unless a tree preservation order is in place;*
  - ▶ *These measures do not apply to permanently dry ditches or sheughs or to field boundaries within, or marking the boundary of non-agricultural land (for example, a dwelling-house or building site).*
- Hedge, tree or scrub cutting (including trimming and laying) is not permitted between 1<sup>st</sup> March and 31<sup>st</sup> August, except when a derogation has been granted by DAERA. Such a derogation granted to individual applicants will permit hedge cutting from 15th August to facilitate farmers wishing to plant oilseed rape or reseed grasses or other herbaceous forage (clovers, Lucerne, sainfoin and forage vetches) on arable land.

***Exception to the standard above:***

- ▶ *Hedge cutting between 1<sup>st</sup> March and 31<sup>st</sup> August will be permitted where health and safety is an issue, for example, roadside hedges.*

If you own or occupy land next to a public road or footway you are responsible for maintaining hedges and trees to ensure that they do not obstruct the movement of vehicles and pedestrians or block the view of drivers. Traffic signs must not be obstructed nor the safety or convenience of road users affected. If this occurs you can be notified by the PSNI or DfI Roads to trim the hedges in question. Full details of your responsibilities are listed on the [nidirect website \(https://www.nidirect.gov.uk/services/roadside-grass-cutting-weeds-and-overgrown-hedges-or-trees\)](https://www.nidirect.gov.uk/services/roadside-grass-cutting-weeds-and-overgrown-hedges-or-trees).

In most cases roadside hedges should be cut in February. Cutting any hedge from the 1 March to the 31 August can be considered a cross compliance breach and can lead to penalties unless the operation is required for the health and safety of road users. If the hedges are not causing an obstruction to movement or view then they should not be cut in the closed period.

If you need to cut during the closed period in order to comply with the legislation you should ensure you have clear evidence for doing so and that you can comply with the Code of Practice for Safety at Street Works and Road Works.

Download the code of practice (<https://www.infrastructure-ni.gov.uk/publications/safety-street-works-and-road-works-code-practice>)

You must also make a careful check for nesting birds and chicks, mark and avoid any possible nest sites and then proceed with caution.

Do not cut the 'field' side of the hedge – only cut the side which faces the road and only the minimum length required to allow unrestricted movement of vehicles and pedestrians.

Hedge tops should only be cut where a view is obstructed at a junction or corner. Remember to clear hedge trimmings from footpaths and roads as they can cause a hazard to pedestrians and road users.

For further information, contact your local CAFRE Agri-Environment adviser on 0300 200 7842 or [daera.helpline@daera-ni.gov.uk](mailto:daera.helpline@daera-ni.gov.uk)

- You must not damage archaeological sites including not siting supplementary feeding sites/sacrifice areas within 10 metres of a site.

### **7.3 Guidance**

The following advice is provided to help you comply with the Field Boundary GAEC requirements.

#### **Invasive species**

The definition of invasive species under Cross-Compliance includes both invasive plants (Rhododendron, Japanese knotweed, Giant hogweed and Himalayan balsam) and noxious weeds (wild oat, docks, certain thistle species and ragwort).

#### **Invasive plants**

Plants which are both agriculturally and environmentally degrading including Rhododendron, Japanese knotweed, Giant hogweed and Himalayan balsam must be controlled. These non-native plants have the potential to damage semi-natural habitats by out-competing native plants. They can sometimes be damaging to human health. For further information please read the Best Practice Management Guide [www.invasivespeciesireland.com](http://www.invasivespeciesireland.com)



*Giant Hogweed is often found along riverbanks.*



*Giant Hogweed flowers (above).*



*Himalayan Balsam along a river bank*



*Japanese knotweed encroaching into a field*



*Himalayan Balsam Flower*



*Japanese knotweed flowers*

**Noxious weeds**

Land owners have a legal responsibility to control the spread of noxious weeds (wild oat, docks, certain thistle species and ragwort) under the Noxious Weeds (Northern Ireland) Order 1977. Noxious weeds are best controlled before they flower and set seed, and before they spread and then infest agricultural land. Herbicides are an effective tool for controlling noxious weeds to ensure that pasture remains productive

with spot spraying recommended. Cutting to remove flowers before they set seed is also effective at reducing the risk of spread but low populations of ragwort are best eradicated by pulling. Owners and occupiers of land are also reminded that ragwort (also called ragweed or benweed) is poisonous and may cause illness and even death to livestock as the ragwort poison accumulates in the liver. Cattle, horses, pigs and chickens are very susceptible, sheep and goats less so. Dead and dying ragwort remains attractive to stock, even in hay or silage, and so livestock should be removed from fields where ragwort has been cut and stock should not be offered silage or hay that is heavily contaminated with ragwort.

Noxious weeds include all weeds listed under the Noxious Weeds (Northern Ireland) Order 1977 and are listed in [Annex 1](#). A fact sheet giving information on the control of these weeds in grassland can be obtained from DAERA, Plant Health Inspection Branch, Room 1019, Dundonald House, Upper Newtownards Road, Belfast BT4 3SB (Tel: (028) 9052 4691) or from the DAERA Website: <https://www.daera-ni.gov.uk/publications/guidance-leaflet-nw10-herbicides-control-noxious-weeds-grassland>.

*Ragwort (left) and Thistle (right).*



*Ragwort (above)*



## **Landscape feature removal**

- Removal includes any operation which uproots or otherwise destroys a hedgerow or field boundary or other landscape feature, either directly or indirectly. DAERA will assess and may grant derogations for landscape feature removal after using DAERA landscape feature assessment criteria, which include consideration of the area of the field and the quality of the feature;
- Existing gateways can be widened up to 10m without permission;
- Field Boundary Removal/Hedgerow Tree Removal Derogation application forms (LF1) are available by emailing a request to [landscapefeaturederogations@daera-ni.gov.uk](mailto:landscapefeaturederogations@daera-ni.gov.uk); or from your local DAERA Direct Office;
- DAERA will use a combination of ortho photography/satellite imagery and ground checks to confirm the presence of field boundaries;
- Where mitigation is agreed as a condition for the removal of a field boundary, the mitigation must be completed within the timetable required by DAERA and to the required specification. DAERA may apply penalties where mitigation has not been completed as required.

## **Hedgerow tree removal**

- Hedgerow trees with a trunk diameter greater than 100cm may only be removed with prior permission from DAERA;
- Hedgerow trees with trunk diameter less than 100cm may be removed on rotation for timber;
- Field Boundary Removal/Hedgerow Tree Removal Derogation application forms (LF1) are available by emailing [landscapefeaturederogations@daera-ni.gov.uk](mailto:landscapefeaturederogations@daera-ni.gov.uk); or from your local DAERA Direct Office;
- DAERA will use a combination of ortho photography/satellite imagery and ground checks to confirm the presence of hedgerow trees;
- Where mitigation is agreed as a condition for the removal of a hedgerow tree with a trunk diameter greater than 100cm, the mitigation must be completed within the timetable required by DAERA and to the required specification.

## **Hedge cutting**

Where hedges are cut, it is recommended that this is in a 2-3 year rotation and ideally during January and February so that berries and fruit are not removed before they can be used as a food source by farmland birds.

You can apply for a derogation to cut hedges from 15th August provided they meet the following criteria:

- Only hedges located on land classified as arable will be considered. Such land is

shown as AR in the Field Classification column of your SAF2 form. The AR code is given to land which has been in arable crop or temporary grassland in the last six years. Land classified as PG, PGS or PC is not eligible for the derogation;

- You must demonstrate a need for the hedge to be cut before the closed period, for example oil seed rape that you need to sow from 15th August in a field where the hedges are overgrown;
- If approval is granted, you must first check the hedge for nesting birds before cutting. If there is evidence of nesting birds then you must not cut the hedge even though you have been granted a derogation. DAERA advises you to seek the help of a competent organisation or suitably qualified individual to help you determine if birds are nesting in the hedge you intend to cut. Common knowledge of the closed season for hedge cutting means that members of the public may report hedge cutting between 15th and 31st August even though a derogation may be in place; If a derogation is granted only the side of the hedge next to the arable crop is permitted to be cut. For further information contact your local Countryside Management Unit adviser at our local DAERA Direct office;

DAERA will carry out on-farm pre-approval inspections in areas where it has been assessed that there is a high possibility of late nesting priority bird species, for example yellowhammer and linnet.

You must apply to DAERA at least five working days before the proposed hedge cutting date to allow time for your application to be assessed. You can request an application form (HC1 form) by telephoning 0300 200 7842 or in person at a local DAERA Direct office or by emailing a request to [hedgecuttingderogation@daera-ni.gov.uk](mailto:hedgecuttingderogation@daera-ni.gov.uk).

Where fencing of hedges involves cutting the hedges, you must not cut the hedge between 1st March and 31st August, unless there is a health and safety reason, for example roadside hedges, or an animal welfare reason.



*Field Hedge cutting cannot take place between 1<sup>st</sup> March and 31<sup>st</sup> August.*

### **Cleaning out ditches or sheughs**

Ditch or sheugh maintenance is permitted but it is recommended that sheugh cleaning should be carried out during the autumn to late winter. Clear away only vegetation and silt from sheughs; avoid deepening or widening the sheugh and try to leave the vegetation untouched along one side of the sheugh at cleaning. Avoid removing bulrushes, water plantain and water crowfoot which control algae, provide fish spawning beds and encourage insects.

### **Archaeological sites**

Identify the archaeological sites (defined in [Annex 1](#)) on your farm and ensure all workers/contractors are aware of such features. Regularly check sites and ensure damage is not occurring, particularly trampling damage by livestock. Information on archaeological features which may be located on your farm can be obtained from NIEA Historic Monuments Unit on (028) 9054 3110 or <https://www.communities-ni.gov.uk/services/sites-and-monuments-record>

## **7.4 Field checks**

When performing GAEC inspection checks in respect of these standards inspectors will look for:

- Evidence of invasive species. i.e. Rhododendron, Japanese knotweed, Giant hogweed and Himalayan balsam;
- Evidence of noxious weeds infestation;

- Evidence of landscape feature (dry stone walls, sheughs or ditches, hedges, including trees in hedgerows and earth banks) removal without prior DAERA permission. Retention of landscape features on the ground may be checked against maps and aerial photography;
- Evidence of hedge trimming or laying carried out between 1st March and 31st August;
- Evidence of hedge trimming or laying carried out between 15th August and 31st August without prior permission from DAERA in a derogation;
- Damage to archaeological sites.

**Further information on GAEC 7 can be obtained from DAERA Countryside Management Unit on 0300 200 7842 or on the DAERA website:**

<https://www.daera-ni.gov.uk/articles/cross-compliance>

## Annex 1

### Good Agricultural and Environmental Condition (GAEC) Definitions

#### Archaeological site

Historic or archaeological site which has been identified by the Department for Communities in the Northern Ireland Sites and Monuments Record at <https://www.communities-ni.gov.uk/services/sites-and-monuments-record>

#### Area of Special Scientific Interest

An area of land that is of special interest by reason of its, fauna, or geological, physiographical or other features that has been declared an area of Special Scientific Interest by the Department of Agriculture, Environment and Rural Affairs pursuant to Article 28 of the Environment (Northern Ireland) Order 2002 or previously in accordance with Article 24 of the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985. At <https://www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas>

#### Borehole

A hole which has been drilled in land in order to provide a water supply whether or not currently used for this purpose.

#### Dry stone wall

A linear in-field or boundary feature built without the use of cement or mortar (apart from the capping layer). A dry stone wall does not have to be stock proof and may have gaps up to 3 metres within it. To be a dry stone wall the feature must be at least 3 metres long.

#### Earth bank

A man-made linear feature of limited occurrence, usually made up of a core of stones covered with sods. River banks, earth silo banks or mounds of earth resulting from excavation are not classified as earth banks.

#### Groundwater

The meaning assigned to it by regulation 2(1) of the Groundwater (Northern Ireland) Regulations 2009.

#### Hedgerow

An in-field or boundary linear feature with hedge-like shape and characteristics. A hedgerow is composed predominantly of woody species such as hawthorn, blackthorn, whins and trees but may also include briars and bramble. Scrub encroachment and weeds such as nettles and thistles do not constitute a hedgerow. A hedgerow does not have to be stock proof and gaps of no more than 5m at canopy level are considered to be part of the hedgerow. To be a hedgerow the feature must be at least 5m long with bushes (excluding tree crowns) which at the top of the canopy are touching or almost touching or, in the case of newly planted

hedges, will reach this standard when fully grown.

### **Intensify**

To increase the productivity of land for agriculture.

### **Invasive species**

Rhododendron, Giant Hogweed, Japanese Knotweed, Himalayan Balsam, wild oat (*Avena fatua* L, and *Avena lodoviciana Durieu*) dock (*Rumex obtusifolius* L and *Rumex crispus* L.) thistle (*Cirsium vulgare (Savi) Ten* and *Cirsium arvense (L.) Scop.*) and ragwort (*Senecio jacobaea* L.).

### **Landscape feature**

Dry stone walls, sheughs or ditches, hedgerows, including trees in hedgerows, and earth banks.

### **Mechanical operations**

Field operations, for example, harvesting, manure spreading, ploughing or discing.

### **Overgrazing**

Grazing land with livestock in such numbers as to damage the growth, quality of species composition of vegetation on that land to a significant degree.

### **Ploughing**

Making furrows in land mechanically by breaking and turning over the soil.

### **Poaching**

The prolonged trampling of waterlogged soil by animals or humans or the use of machinery or vehicles on waterlogged soil.

### **Sacrifice area**

A supplementary feeding site which is grazed bare by livestock.

### **Scrub**

Areas which contain shrubs, stunted trees or brambles. Scrub may be open or dense and contain hawthorn, blackthorn, gorse (whin), bramble, honeysuckle, dog rose, bushy willows (sally) or stunted hazel with few or no mature trees present.

### **Semi-natural habitat**

Includes an area which is not subject to an intensive farming regime, such as calcareous grassland; acid grassland; bracken; dwarf shrub heath; fen, marsh and swamp; bog; montane habitats; inland rock; neutral grassland; broadleaved, mixed and yew woodland;

standing water and canals; species-rich upland or lowland hay meadow; and coastal and floodplain grazing marsh.

### **Sheugh or ditch**

An open channel with water in it for at least part of the year and no more than 2 metres wide at the base. Naturally flowing streams and rivers of any width are excluded as are watercourses of any width maintained by the Rivers Agency.

### **Special Area of Conservation**

An area of land designated as a Special Area of Conservation by the Department of Agriculture, Environment and Rural Affairs pursuant to Article 4 of Council Directive 92/43/EEC on the conservation of Natural Habitats and of Wild Fauna and Flora. At <https://www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas> .

### **Special Protection Area (SPA)**

An area of land classified as a Special Area Of Protection by the Department of Agriculture, Environment and Rural Affairs pursuant to Article 4 of Directive 2009/147/EC on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended. At <https://www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas>.

### **Supplementary feeding site**

Any land under the control of a farmer (other than a farm building or farmyard) where concentrates, fodder or mineral licks are fed to livestock.

### **Tree preservation order**

Has the same meaning as in Article 65 of the Planning Order (Northern Ireland) 1991.

### **Water Order**

The Water (Northern Ireland) Order 1999.

### **Waterlogged**

A situation when the water table rises into the root zone of the plant and the soil is saturated with water. The soil is boggy under foot.

### **Waterway**

Has the same meaning as in Article 2(2) of the Water (Northern Ireland) Order 1999

## Annex 2

### List of Families and Groups of Substances

#### LIST I OF FAMILIES AND GROUPS OF SUBSTANCES

List I contains the individual substances which belong to the families and groups of substances enumerated below, with the exception of those which are considered inappropriate to list I on the basis of a low risk of toxicity, persistence and bioaccumulation.

Such substances which with regard to toxicity, persistence and bioaccumulation are appropriate to list II are to be classed in list II.

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
2. Organophosphorus compounds.
3. Organotin compounds.
4. Substances which possess carcinogenic mutagenic or teratogenic properties in or via the aquatic environment.<sup>1</sup>
5. Mercury and its compounds.
6. Cadmium and its compounds.
7. Mineral oils and hydrocarbons.
8. Cyanides.

#### LIST II OF FAMILIES AND GROUPS OF SUBSTANCES

List II contains the individual substances and the categories of substances belonging to the families and groups of substances listed below which could have a harmful effect on groundwater.

1. The following metalloids and metals and their compounds:
  - i. Zinc
  - ii. Copper
  - iii. Nickel
  - iv. Chrome
  - v. Lead
  - vi. Selenium

---

<sup>1</sup> Where certain substances in list II are carcinogenic, mutagenic or teratogenic, they are included in category 4 of this list.



- vii. Arsenic
- viii. Antimony
- ix. Molybdenum
- x. Titanium
- xi. Tin
- xii. Barium
- xiii. Beryllium
- xiv. Boron
- xv. Uranium
- xvi. Vanadium
- xvii. Cobalt
- xviii. Thallium
- xix. Tellurium
- xx. Silver.

- 2. Biocides and their derivatives not appearing in list I.
- 3. Substances which have a deleterious effect on the taste and/or odour of groundwater, and compounds liable to cause the formation of such substances in such water and to render it unfit for human consumption.
- 4. Toxic or persistent organic compounds of silicon, and substances which may cause the formation of such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
- 5. Inorganic compounds of phosphorus and elemental phosphorus.
- 6. Fluorides.
- 7. Ammonia and nitrites.<sup>1</sup>

---

<sup>1</sup> Where certain substances in list II are carcinogenic, mutagenic or teratogenic, they are included in category 4 of this list.

## Annex 3

### Animal Welfare Guidance

Further guidance on SMR 11 Minimum Standards for the Protection of Calves can be found in:

- Northern Ireland Code of Practice for the Welfare of Beef Cattle;
- Northern Ireland Code of Practice for the Welfare of Dairy Cattle.

Further guidance on SMR 12 Minimum Standards for the Protection of Pigs can be found in:

- Northern Ireland Code of Practice for the Welfare of Pigs.

Further guidance on SMR 13 Protection of Animals Kept for Farming Purposes can be found in:

- Northern Ireland Code of Practice for the Welfare of Beef Cattle
- Northern Ireland Code of Practice for the Welfare of Dairy Cattle
- Northern Ireland Code of Practice for the Welfare of Pigs
- Northern Ireland Code of Practice for the Welfare of Laying Hens
- Northern Ireland Code of Practice for the Welfare of Meat Chickens
- Northern Ireland Code of Practice for the Welfare of Sheep
- Northern Ireland Code of Recommendations for the Welfare of Livestock: Deer
- Codes of Recommendations for the Welfare of Livestock: Ducks (Defra)
- Codes of Recommendations for the Welfare of Livestock: Goats (Defra)
- Codes of Recommendations for the Welfare of Livestock: Rabbits (Defra)
- Codes of Recommendations for the Welfare of Livestock: Turkeys (Defra)





Department of  
**Agriculture, Environment  
and Rural Affairs**

[www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)



**INVESTORS  
IN PEOPLE**