The Grassland Derogation: Guidance for applicants

The Action Programme for Nitrate Vulnerable Zones (Scotland) Amendment Regulations 2009 allow individual farmers to obtain a derogation from the 170 kg N/ha limit specified in the 2008 Regulations.

Derogated farms can operate at a higher limit of up to 250 kg/N/ha per year from grazing livestock manure. The eligibility criteria for a derogation are set out below.

Who can apply ?

To be eligible for a derogation a farm must be a **grassland farm** and it must be stocked with **grazing livestock**.

Grassland farm means a farm where **at least 80%** of the agricultural area is sown to **grass**, which means permanent or temporary grassland (with a clover content of less than 50%), or any other crop undersown with grass. **Grazing livestock**, means cattle (except veal calves), sheep, deer, goats and horses

Additional rules for derogated farms

If you are successful in obtaining a derogation, **you must continue to comply with the** existing NVZ rules, plus the additional rules summarised below:

The derogation limit

YOU MUST ensure that the total loading of nitrogen from livestock manure on your farm does not exceed 250 kg N/ha per year.

Annual application

YOU MUST submit a new application for each year that you want a derogation. The application form must be submitted to your local Rural Payments and Inspections Directorate (RPID) office by 30 April each year. Application forms are available on the SG website (see website address / link below).

http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/Environment/NVZintro/ /Gra sslandDerogation

Fertilisation plan

YOU MUST prepare and implement a fertiliser plan for your farm. This plan must be produced and available for inspection by **1 March** in each year that you apply for a derogation.

The plan must include details of the following:

- Planned average livestock numbers for the year
- Description of the housing and storage system
- Volume of livestock manure storage
- An assessment of the N and Phosphate (P₂O₅) that will be produced by the livestock on the farm
- Planned areas of grass and other crops to be grown and a map identifying each field
- An assessment of the N and P_2O_5 requirements for each crop.
- Results of soil analysis when available
- Livestock manure to be exported or imported
- Planned applications of livestock manure and the N / P₂O₅ that will be available to the crop from the application

You should already be recording most of this information as part of your compliance with the main Action Programme. The **additional** requirements are that you must:

- include an assessment of the Phosphate (P₂O₅) produced by livestock on the holding
- assess the phosphate fertiliser requirement for each crop on each field
- keep a record of phosphate applied in livestock manure and chemical fertiliser
- revise the plan no later than 7 days after any changes in agricultural practice e.g. update the plan to reflect changes in livestock numbers or cropping compared to the original plan.

The Phosphate requirement for crops can be calculated using:

- The PLANET Scotland software (available free to all farmers in Scotland). This software will also assist you with all of the recording and calculation requirements of the main Action Programme. Note that some commercially available software packages will also incorporate the PLANET Scotland software
- PK balance sheets, as described in SAC Technical Note T308 Removal by crops and PK balance sheets. If you use the balance sheet method you should refer to Table D5 to determine the phosphate content and availability of the various livestock manure types.

If you use another method to calculate your phosphate requirements you should confirm the acceptability of that method with your local RPID area office.

Soil sampling and analysis

As part of this planning process, fields **must** be sampled and analysed for P at least once every 4 years.

The farm should be split into representative blocks no larger than 5 ha. Representative blocks could comprise areas of similar soil types, previous cropping and manure applications. At least one sample should be taken for each representative 5ha block of agricultural land. A record of the analysis must be kept as part of your records.

Any fields that do not have a current P analysis must be sampled at an early stage, preferably in the first year you apply for the derrogation. The results of the soil analysis must be recorded and the record must be kept for 3 years.

Soil sampling procedure

- Take at least 20 soil cores throughout the field following a W pattern. Start away from the gate and avoid all areas which are not representative of the field as a whole such as headlands, hedges, ditches, footpaths, fences, fertiliser, lime or manure dumps. At each of the sites, remove the top 5 cm of soil and discard. Take a core to a depth of 15 cm for arable crops or 7.5 cm for grassland and place in a bucket. Bulk and mix the soil cores for each representative block of agricultural land to form a representative sample for that area.
- Fill your sample bag (available from the laboratory) and seal securely. Label with your name, farm name and address, field name/ sample reference and the date.
- Send the mixed sample to the laboratory immediately suitable packaging will normally be provided by the laboratory that you use

Land management conditions

YOU MUST

immediately follow ploughed grassland with a crop with a high nitrogen demand
only plough grass on sandy soils during spring.

YOU MUST NOT

•spread livestock manures on grass in the autumn before it is to be ploughed

•include leguminous or other plants fixing atmospheric nitrogen in the crop rotation

(except grass with less than 50% clover and legumes undersown with grass).

Record keeping and fertilisation accounts

You must keep all NVZ records for a minimum of 3 years.

YOU MUST submit a summary of your record of livestock numbers and fertiliser use, for the previous derogation year, to your local Rural Payments and Inspections Directorate (RPID) office for inspection by 30 April. This summary must contain:

- •the area of grassland, undersown crops and other crops grown on the farm
- •a list of the crop types grown on the farm, along with the Nmax for each crop type and the total calculated phosphate requirement for each crop type
- •a record of the type and quantity of livestock manure and chemical fertiliser applied to each field on the farm, and the nitrogen and phosphate that will be available to the crop from these applications.
- •a record of the average livestock numbers under each category kept on the farm and an assessment of the total N and phosphate excreted by these animals
- •a record of the quantity and type of any livestock manure moved off the farm and the nitrogen and phosphate content of that manure.

IMPORTANT NOTES:

- The European Commission agreement allowing derogations to be granted in Scotland expires on 31 December 2016. The Scottish Government may seek to extend this agreement for a further four years, but there is no guarantee that future derogations will be possible.
- The approved derogation for your farm may be withdrawn if you fail to comply with any of the requirements of the derogation.
- You must continue to comply with all other aspects of the NVZ Action Programme that are not specifically mentioned in this guidance.

Basis for calculating the 80% grassland requirement and the 250 kg N/ha loading limit

For the purpose of calculating the minimum grassland requirement for the derogation, grass is defined as:

- permanent or temporary grassland with a clover content of less than 50%
- any other crop undersown with grass.

The area of grass on any given parcel of land will be determined based on the crop grown for the majority of the year.

The 80% grassland requirement is calculated on the basis of agricultural land for which you are considered to be the occupier under the NVZ rules.

An occupier is considered to be any person who has the use of the land within an NVZ for 2 years or longer. This means that land under the following categories **does not** count towards the 80% grassland calculation:

- any land taken on a seasonal basis
- any land that you occupy outside of the NVZ.

Note: Land which falls under either of the above categories does not directly count towards your 250 kg N/ha loading. This means that the N content of any FYM or slurry applied on this land, or manure deposited by grazing livestock on this land, is effectively "exported" from your NVZ holding and no longer contributes to your farm loading. It is therefore important that you record details about any livestock movements to this I a n d, in addition to exports of FYM/ slurry. For livestock movements this should include the following details:

•the date grazing livestock moved from your NVZ holding to the other land

- •the number and type of livestock which moved
- •the date the grazing animals returned to your NVZ holding.

Use Table D4 to record this information.

Calculating the N produced by livestock on your farm

You should continue to calculate the N produced by livestock on your farm in accordance with the steps outlined in Booklet 4 of the Guidelines for farmers in Nitrate Vulnerable Zones. Note, however, that the standard figures have changed slightly for some categories of livestock. See Table D1 at the end of this Booklet. Note that:

- any manure from non-grazing livestock cannot be applied on the derogated holding and must be moved off the farm
- •any manure that is moved to seasonal land or land that is outside of the NVZ does not count towards your farm loading and should be accounted for as an export, see step 4 in Booklet 4 of the Guidelines. Note that the N content of any manure deposited by grazing animals on this land is also considered to be exported. A new table (Table D4) is available to allow you to record this information.

Calculating the P₂O₅ produced by livestock on your farm

Table D1 contains standard values for N and P_2O_5 excretion from the different livestock types. Follow the steps for calculating N production, but using the P_2O_5 excretion figures.