

Crucial to assess risk of run-off

Following on from last week's article on Nitrate Vulnerable Zone (NVZ) regulations, land agent and surveyor expert **Hugh Townsend** looks in more detail at the Risk Map, assessing the risk of run-off and the spreading restrictions that farmers must follow



AS part of the current farming rules for water enforced by the Environment Agency (EA), it is an offence to let fertiliser enter surface water.

The risk of run-off from your fields must be considered, and if there is risk then you must not spread.

Once the fertilisation plan and field records are complete then, if spreading organic manure, a risk map must be created and kept for five years.

This map can be hand-drawn or printed out and must be updated within three months of any change, and must show each field and its area, areas with sandy / shallow soils, land with a slope greater than 12 degrees and so on (see the guide to cross compliance in England for further information).

Restrictions on spreading

Neither manufactured nor organic manure may be spread if a field is waterlogged, flooded, covered in snow or frozen for more than 12 hours out of the previous 24 hours. Neither type may be spread during its 'closed period' outlined below.

Areas where you must not spread certain nitrogen fertilisers include:

- Manufactured fertiliser within 2m of surface water;
- Manufactured fertilisers within a 2m zone from the centre of a hedge;
- Manure within 50m of a spring, well or borehole or 10m of surface water.

Exceptions

If using precision spreading equipment such as band spreaders, shallow injectors or dribble-bar applicators then slurry, sewage and anaerobic digestate can spread to within 6m of surface water. There are also exceptions for spreading manure on some sites of Special Scientific Interest or those in some agri-environment schemes.

Closed periods

Manufactured nitrogen fertiliser: Cannot be spread on grassland between September 15 and January 15, or on tillage land between September 1 and January 15. Manufactured fertiliser can be spread during the closed period if certain crops are grown and the time frame and limits are abided by.

Manures with high readily available nitrogen: High readily available fertilisers include poultry manure and liquid organic manure such as sludge, cattle and pig slurry, poultry manure and anaerobic digestate. These have more than 30% of their nitrogen content immediately available to crops and have 'closed periods' when they may not be spread. The closed periods for the spreading of high readily available nitrogen manures are as follows.

Sandy or shallow soil: Grassland from September 1 to December 31. Tillage land from August 1 to December 31.

All other soil: Grassland from October 15 to January 31. Tillage land from October 1 to January 31.

If you sow a crop on sandy or shallow tillage land on or before September 15, you can apply manures with high readily available nitrogen between August 1 and September 15.

Organic farm exceptions

Organic farmers, or those formally converting to organic status, are restricted to 150kg of N/ha but can spread high readily available nitrogen manure, depending on the crop, in certain periods.

Restrictions outside the closed period

A single application of slurry must be no more than 30m³/ha or eight tonnes/ha for poultry manure from the end of the closed period to the end of February, with at least three weeks between each application.

Equipment

Slurry must be spread with precision equipment or equipment with a low spreading trajectory (below 4m from the ground) or thirdly equipment which spreads slurry at a maximum rate of 1mm per hour when operating continuously.

Organic manures spread on bare soil

If spreading on bare soil or stubble (except when sown with seed) then poultry manure, slurry, liquid-digestate and sludge must be worked into the ground as soon as possible and at least within 24 hours. Any other organic manure must also be worked into the soil within 24 hours if the land is sloping and within 50m of surface water. If slurry or liquid-digestate was applied using an injector, shoe band spreader, trailing hose or dribble bar applicator then it does not need to be worked in.

Greenhouses

If you land is enclosed by a greenhouse / glasshouse / polytunnel for the entirety of the calendar year, then there are no limits on fertiliser usage and records of use and yield of crops do not need to be kept. If the land is exposed to the open air at any point in a year, then the restrictions apply for the whole of that year.

Storage of organic manure

■ Slurry

All slurry and poultry manure must be stored, unless it is sent off the farm or spread on fields of low risk land. The storage period starts on October 1 and runs until March 1 for cattle, sheep, goats, deer and horses,



> Livestock should only be wintered on well-drained and level fields, to prevent any poaching of soil near fresh water sources

Barbara Goddard

and April 1 for pigs and poultry. Low risk land has a slope of less than three degrees, no land drains (unless sealed) and is 50m or more from a watercourse.

■ Solid Manure

Solid organic manure needs to have a consistency allowing it to be stacked in a free-standing heap whilst occupying as small a surface area as possible. It must not drain from within the stack and should be covered with a waterproof material if composed of poultry manure without bedding or litter. It can be stored in a container, on a waterproof base, in a roofed building or in a temporary field heap.

Temporary muck heaps must be 10m or more from any surface water or land drains or 30m if the land slopes at 12 degrees or more. They must be 50m or more from a spring, well or borehole. The field must not be at risk of flooding / becoming waterlogged. Their location should be moved every 12 months or more with a two-year gap before the same site is used. The site should be recorded on the risk map as described above.

Storage records

You should record the capacity of your storage facilities, the amount of

storage you will need based on your livestock, when this changes based on bringing new livestock onto the holding and the reductions when you spread or send off farm. Any location of heaps should be recorded on the Risk Map as described above. All records should be kept for five years.

Managing livestock

To prevent livestock compacting soil (poaching) within 5m of inland freshwater or coastal water you must not place feeders within 10m of these water sources or 50m of a spring, well or borehole. Fences should be erected to keep livestock from causing bankside erosion whilst they should only be wintered on well-drained level fields.

Additional precautions

In addition to complying with the NVZ rules, you must take reasonable precautions to reduce water pollution when: cleaning ditches, installing drainage, irrigating crops, spraying pesticides / herbicides / fungicides and creating farm tracks / gateways. You can do this through actions like planting crops in dry conditions, breaking up compacted soil, creating buffer strips along field edges and planting beds across the

base of sloping land.

Inspections / Enforcement

Complying with NVZ regulations forms part of your cross-compliance and is a statutory management requirement (SMR). It is required to receive funding from Basic Payment Scheme, Countryside Stewardship and Environmental Stewardship.

The Rural Payments Agency (RPA) will conduct random inspections and if non-compliance is found then there can be a reduction in funding regardless of whether the infringement is due to a mistake or otherwise. This can range from a 1% reduction in BPS up to 100%, based on the number and severity of breaches.

The main area of transgression tends to be sheep and cattle registration, specifically the movement records being incorrectly recorded or not recorded at all and sheep being incorrectly tagged. It is vital that these records are kept up to date and located with the farm records discussed above to avoid penalties.

■ **Hugh Townsend, FRICS, FAAV, FCI Arb. is the land agent/surveyor expert of WMN Farming and he may be contacted on 01392 823935 or htownsend@townsendchartered-surveyors.co.uk**