Research and analysis: Reservoir safety post-incident annual reports

Updated: The post-incident reporting for UK reservoirs 2017, has been added to this page.

The Environment Agency has produced an annual report on reservoir incidents in the UK since 2007.
Owners and operators of statutory reservoirs in England must report incidents and submit a post-incident report form to the Environment Agency. Owners and operators of small raised reservoirs in England (those with a capacity of less than 25,000 cubic metres of water above ground level) continue to report incidents to the Environment Agency on a voluntary basis.

Form: Claim a facilitation fund grant and record progress: Countryside Stewardship

Updated: Form updated to make it editable.

See the Countryside Stewardship facilitation fund page for more information.

Detailed guide: Packaging of radioactive waste: specifications and guidance

Updated: WPS/999/01 document added

Packaging specifications

The RWM packaging specifications take the form of a structured hierarchy with each level having a specific purpose. The Generic Waste Package Specification

(GWPS) defines the requirements for all waste packages destined for geological disposal, and provides the basis for the definition of the Generic Specifications, which define the standards and specifications for waste packages containing specific categories of waste. The Generic Specifications are used to specify the requirements for the waste packages that could be manufactured using standardised designs of waste container, these being referred to as the Waste Package Specifications (WPS)

Geological Disposal – Generic Waste Package Specification
(PDF, 1.9MB, 37 pages)

Please note that all the requirements from the document 'Geological disposal – Generic Waste Package Specification' have now been subsumed into the DSS Part B, verbatim. This document has therefore been superseded.

Generic specifications for specific categories of waste

Generic specification for waste packages containing low heat generating waste
(PDF, 391KB, 57 pages)

WPS/240/01 Generic Specification for waste packages containing high heat generating waste
(PDF, 5.15MB, 67 pages)

WPS/230/01 Generic Specification for waste packages containing depleted, natural and low enriched uranium
(PDF, 1.47MB, 63 pages)

Waste package specifications

WPS/300/03 Specification for 500 litre drum waste package
(PDF, 532KB, 17 pages)

WPS/310/04 Specification for side lifting variant of 3 cubic metre box waste package
(PDF, 449KB, 17 pages)

WPS/315/05 Specification for corner lifting variant of 3 cubic metre box waste package
(PDF, 2.1MB, 17 pages)

WPS/320/04 Specification for 3 cubic metre drum waste package
(PDF, 421KB, 17 pages)

WPS/330/03 Specification for 4 metre box waste package
(PDF, 549KB, 19 pages)

WPS/340/01 Specification for miscellaneous beta gamma waste store box waste packages
(PDF, 1.75MB, 17 pages)

WPS/350/03 Specification for 2 metre box waste package
(PDF, 519KB, 19 pages)

WPS 360/03 Specification for 6 cubic metre concrete box waste package
(PDF, 488KB, 17 pages)

WPS/361/01 Specification for 500 litre concrete drum waste packages
(PDF, 1.3MB, 17 pages)

WPS/362/01 Specification for 1 cubic metre concrete drum waste packages
(PDF, 1.32MB, 17 pages)

WPS/380/01 Specification for 500 litre robust shielded drum waste packages to be transported in a SWTC-150
(PDF, 2.31MB, 18 pages)

WPS/381/01 Specification for 3 cubic metre robust shielded box waste packages for transport as part of a Type IP-2 package
(PDF, 2.83MB, 18 pages)

Other specifications

WPS/400/03 Geological Disposal: Waste Package Data and Information Recording Requirements
(PDF, 1.82MB, 18 pages)

WPS/410/03 Specification for waste package identification system
(PDF, 1.62MB, 12 pages)

WPS/420/01 Management System Requirements for Waste Packaging
(PDF, 1.55MB, 15 pages)

WPS/430/01 Specification for waste containers for the packaging of low heat generating waste
(PDF, 1.67MB, 19 pages)

Wasteform specifications and guidance

WPS/501/01 Wasteform specification for waste packages containing low heat generating waste
(PDF, 321KB, 17 pages)

WPS/503/01 Guidance on the production of non-encapsulated wasteforms
(PDF, 1.55MB, 63 pages)

WPS/502/01 Geological Disposal: Guidance on the production of encapsulated wasteforms
(PDF, 3.15MB, 77 pages)

Ancillary information and guidance

WPS/600/02 Lifting grab for 500 litre drum waste package description and design guidelines
(PDF, 191KB, 16 pages)

WPS/601/02 Lifting frame for side lifting variant of 3 cubic metre box and 3 cubic metre drum waste package description and design guidelines
(PDF, 471KB, 18 pages)

WPS/602/02 Lifting frame for 4 metre box waste package description and design guidelines
(PDF, 366KB, 18 pages)

WPS/603/02 Lifting frame for 2 metre box waste package description and design guidelines
(PDF, 348KB, 14 pages)

WPS/604/02 Lifting frame for stillage and corner lifting variant of 3 cubic metre box waste package description and design guidelines
(PDF, 465KB, 18 pages)

WPS/605/01 Specification for stillage for the transport and disposal of 500 litre drum waste packages
(PDF, 688KB, 17 pages)

WPS/620/03 Guidance on the structure and format of waste product specifications
(PDF, 1.7MB, 21 pages)

WPS/625/02 Guidance on the preparation of criticality compliance assurance documentation for waste package proposals
(PDF, 127KB, 24 pages)

WPS630/02 Guidance on environmental conditions during storage of waste packages
(PDF, 133KB, 22 pages)

WPS/640/02 Guidance on monitoring of waste packages during storage
(PDF, 230KB, 30 pages)

WPS/650/03 An overview of the RWM Disposability Assessment Process
(PDF, 2.71MB, 50 pages)

Waste package specifications guidance material

WPS/701/01 Guidance on the application of the waste package specifications for unshielded waste packages
(PDF, 10MB, 84 pages)

WPS/702/01 Guidance on the application of the waste package specifications for shielded waste packages
(PDF, 7.83MB, 76 pages)

WPS/705/01 Guidance on the application of the specification for stillages for use in the transport and disposal of 500 litre drum waste packages
(PDF, 2.27MB, 27 pages)

Miscellaneous guidance

WPS/850/03 Geological Disposal: Waste Package Data and Information Recording Requirements: Explanatory Material and Guidance
(PDF, 1.05MB, 46 pages)

WPS/860/03 Waste Package Identification System – Explanatory Material and Guidance
(PDF, 1.68MB, 20 pages)

WPS/870/03 Long-term Management of Information and Records – Explanatory Material and Guidance
(PDF, 1.6MB, 31 pages)

Thematic guidance

WPS901/02 Geological Disposal: Guidance on the use of organic polymers for the packaging of low heat generating wastes
(PDF, 14.1MB, 58 pages)

WPS/902/02 Geological Disposal: Guidance on the packaging of radon generating wastes
(PDF, 4.02MB, 44 pages)

WPS/903 Guidance on the immobilisation of radionuclides in wasteforms
(PDF, 361KB, 39 pages)

WPS/904 Guidance on the characteristics and demonstration of robust formulation envelopes for cementitious wasteforms
(PDF, 391KB, 29 pages)

WPS/905 Guidance Note on the packaging of filters
(PDF, 976KB, 41 pages)

WPS/906 Guidance on the packaging of closed sources
(PDF, 916KB, 48 pages)

WPS/907 Guidance on the packaging of Tritium Bearing Wastes
(PDF, 494KB, 47 pages)

WPS/908/05 Guidance on the preparation of submissions for the disposability assessment of packaging proposals
(PDF, 845KB, 43 pages)

WPS/909 Guidance on the scope of periodic review of final stage Letter of Compliance
(PDF, 218KB, 18 pages)

WPS/911/02 Guidance on the application of the criticality safety requirements of the 2012 IAEA Transport Regulations
(PDF, 5.81MB, 39 pages)

WPS/912 Guidance on the sentencing of non-compliant waste packages
(PDF, 265KB, 26 pages)

WPS/914 Guidance on the issues arising from the packaging of non-encapsulated wastes
(PDF, 324KB, 32 pages)

WPS/915 Guidance on the use of grout caps in waste packages
(PDF, 957KB, 36 pages)

WPS/916 Guidance on the control of fissile material in waste packages
(PDF, 5.58MB, 71 pages)

WPS/921 Guidance on the preparation of submissions for the disposability assessment of waste packages
(PDF, 285KB, 31 pages)

WPS/923 Guidance on the application of safeguards during the packaging of higher activity waste
(PDF, 2.8MB, 45 pages)

WPS/926/01 Guidance on the use of polycarboxylate ether superplasticisers for the packaging of low heat generating wastes
(PDF, 1.76MB, 25 pages)

WPS/928/01 Geological Disposal: Guidance on the disposability of waste packages containing chemical decontamination agents
(PDF, 2.02MB, 45 pages)

WPS/929/02 Thematic Guidance on the management of Larger PCM Waste Items
(PDF, 3.89MB, 79 pages)

Options guidance

Upstream Options – Overview and uses of the 6 cubic metre concrete box
(PDF, 1.06MB, 53 pages)

Upstream optioneering: centralised intermediate level radioactive waste finishing facility (NDA/RWM/117)
(PDF, 6.84MB, 60 pages)

WPS/999/01 Supplementary Specification for Requirements Based on the 2016 Generic Disposal System Safety Case (gDSSC)
(PDF, 1.95MB, 20 pages)

Guidance: Pet travel: approved air, sea and rail carriers and routes

Updated: Updated airline and airports entries for PHS, Windsor Jet Management, Albinati Aviation, PHS, VIP Flight and Executive Jet Management.

You can only use these carriers and routes approved by the Animal and Plant Health Agency to bring your pet to England or Scotland. There are no approved routes to Wales.

You must follow pet travel rules. Ask your travel company if they have extra rules you must follow.

Exemptions

You don’t have to use an approved carrier or route if you travel to England, Scotland or Wales from:

- UK countries
- the Channel Islands
- the Isle of Man
- the Republic of Ireland

Detailed guide: Using nitrogen fertilisers in nitrate vulnerable zones

Updated: Corrected link

You must follow this guidance if you use any manufactured fertilisers, manures or other materials that contain nitrogen on agricultural land in a nitrate vulnerable zone (NVZ).

Find out if you’re in an NVZ.

You must also follow the guidance on storing organic manures in NVZs and storing silage, slurry and agricultural fuel oil if you produce or import livestock manures.

The NVZs rules are part of the requirements for cross compliance, known as Statutory Management Requirement 1. You must meet cross compliance requirements to qualify for full payment under the basic payment scheme and other direct rural payments.

Fertilisers that contain nitrogen

Nitrogen fertilisers can be manufactured (inorganic, bagged) fertilisers that you buy, other materials containing nitrogen (like waste soil) or organic manures that you produce or bring on to your holding.

Organic manures come from animals, plants or humans. They include:

- slurry
- poultry manures
- solid manures (such as farmyard manure, sludge cake or compost)
- sewage sludge (also called biosolids)
- other liquid manures (such as abattoir waste or anaerobic digestate)

How much nitrogen you can apply to your crops

There's a limit on the average amount of manufactured fertiliser and crop-available nitrogen from organic manure that you can apply to most crops each year – this is known as the N-max limit.

These are shown in the following table:

Crop	N-max limit (kilograms of nitrogen per hectare)	Standard crop yield (tonnes per hectare)
Autumn or early winter-sown wheat	220	8
Spring-sown wheat	180	7
Winter barley	180	6.5
Spring barley	150	5.5
Winter oilseed rape	250	3.5
Sugar beet	120	–
Potatoes	270	–
Forage maize	150	–
Field beans	0	–
Peas	0	–
Grass	300	–
Asparagus, carrots, radishes, swedes, individually or in any combination	180	–
Celery, courgettes, dwarf beans, lettuce, onions, parsnips, runner beans, sweetcorn, turnips individually or in any combination	280	–

Crop	N-max limit (kilograms of nitrogen per hectare)	Standard crop yield (tonnes per hectare)
Beetroot, brussels sprouts, cabbage, calabrese, cauliflower, leeks individually or in any combination	370	–

Crops that you can apply more nitrogen to

You can apply more nitrogen to some crops if your expected yield is higher than the ‘standard crop yield’ shown in the table.

You can use an additional 80kg of nitrogen per hectare if you’ve used straw or paper sludge on the previous or current crop.

Wheat and barley

For wheat and barley, you can use an additional 20kg of nitrogen per hectare for every tonne that the expected yield exceeds the standard yield.

Milling wheat

On milling wheat varieties, you can use an additional 40kg of nitrogen per hectare.

Wheat and barley on shallow soils

On autumn and winter-sown wheat and winter barley you can use an additional 20kg of nitrogen per hectare on fields with a shallow soil type (except on shallow soils over sandstone).

Winter oilseed rape

On winter oilseed rape you can use up to 250kg of nitrogen per hectare. This includes a maximum autumn (closed period) application of 30kg of nitrogen per hectare of manufactured nitrogen fertiliser.

If you use 30kg of nitrogen per hectare in the autumn, you can only use up to 220kg of nitrogen per hectare in the spring. However, you can increase this by an additional 30kg of nitrogen per hectare for every half tonne that the expected yield exceeds the standard yield.

Grass

On grass that’s cut at least 3 times in a year, you can use an additional 40kg of nitrogen per hectare.

Grass grown for dehydration or chlorophyll production

You can use nitrogen up to the level recommended in writing by a FACTS-qualified adviser if you’re growing grass to achieve a protein content of at least 16% in the dried product.

If the land is irrigated, you must not use more than 700kg of nitrogen per hectare. If the land isn’t irrigated, you must not use more than 500kg of nitrogen per hectare.

In subsequent years, you must sample these fields between 1 September and 31 October for soil mineral nitrogen levels and give your FACTS-qualified adviser the results.

How much organic manure you can use (farm and field limits)

You can apply up to 170kg per hectare of nitrogen in livestock manure (including manure deposited directly by livestock and spreading) on your holding in each calendar year. This limit is the loading limit and applies as an average across your holding. It’s separate from the field limit of 250kg per hectare from organic manures.

You must not use more than 250kg of total nitrogen from all organic manures spread in any 12 month period on any single hectare of your land. This limit (the field limit) doesn’t include livestock manures deposited by grazing animals.

You must use standard values to work out how much nitrogen is produced by the livestock on your farm or bought on to your farm. You must plan so that you don’t exceed the limit.

You can find the standard values in the
blank field records and standard values tables
(XLSM, 128KB)

.

You can apply for a ‘grassland derogation’ to increase this limit if more than 80% of your holding is grassland.

Using compost

If the only organic manure you use is certified green or certified green/food compost, you can apply:

- up to 500kg of nitrogen per hectare every 2 years as mulch or worked into the ground
- up to 1,000kg of nitrogen per hectare every 4 years (only as mulch and in an orchard growing fruit of the genera Malus, Prunus or Pyrus)

The compost that you use must not contain livestock manure and must be produced to the PAS100 protocol.

Plan your nitrogen use

You must plan all your applications of nitrogen on each crop in each field

(including grass). This is your fertilisation plan. You must keep it as part of your farm records.

To help with your plan, you can use farm software like PLANET or tools like the 'Tried and Tested' nutrient management tools.

You can also use the
blank field records and standard values tables
(XLSM, 128KB)

to calculate how much nitrogen is available in different types of livestock manure.

Your plan must show you've taken the following steps before you apply nitrogen for the first time in a field where you're going to plant a crop or have planted a crop:

1. Calculate the amount of nitrogen in the soil that's likely to be available for the crop to use during the growing season.
2. Calculate the optimum amount of nitrogen that should be applied to the crop, taking into account the amount of nitrogen already available in the soil.
3. Calculate the amount of nitrogen from any planned applications of organic manure that's likely to be available to the crop in the growing season in which you spread it.
4. Calculate the amount of manufactured nitrogen fertiliser you need.

You must also carry out steps 1 and 2 before you apply any nitrogen fertiliser or manure for the first time.

You must carry out steps 3 and 4 every time you apply nitrogen fertiliser or manure.

In subsequent growing seasons, before you apply nitrogen to any crop or land where you're going to plant a crop (including grass) you must:

- repeat steps 1 and 2
- prepare a plan for your fertiliser use for that growing season

For permanent grassland, make your calculations based on the farming year starting on 1 January. Prepare a plan for any manure or fertiliser use for the year after that date.

Work out the total and crop-available nitrogen in organic manures

Before you apply livestock manure, you must calculate the:

- total amount of nitrogen in the manure, using standard values or results from sampling and analysis
- amount of crop-available nitrogen in the manure

You can find the values you need for these calculations in the blank field records and standard values tables.

Before you apply other organic manures, work out the total amount of nitrogen and crop-available nitrogen using the technical analyses supplied by the fertiliser supplier (for example, on the delivery note).

Where these technical analyses are unavailable, typical values may be obtained from other sources such as the Fertiliser Manual (RB209) or MANNER-NPK software. The Fertiliser Manual refers to the total amount of nitrogen as 'total nitrogen'. It refers to crop-available nitrogen as 'nitrogen available to the next crop'.

You can also use values from your own sampling and analysis.

You must not spread any organic manure unless you have used one of these methods to work out the crop-available nitrogen in the manure before applying it to crops that have an N-max limit.

Assess the risk of run-off before spreading

It's an offence to allow fertiliser or organic manure to enter surface water (such as rivers or ponds).

You must inspect the field to assess the risk of nitrogen getting into surface water (for example, through runoff) before you spread any fertilisers or organic manures.

In particular, when assessing the risk of runoff, you need to take account of:

- land that's sloping, especially if the slope is over 12 degrees
- ground cover provided by vegetation
- the distance to surface water
- weather conditions
- the soil type and condition
- the presence of land drains

Where you can't spread manufactured fertilisers or organic manures

You must not spread any manufactured fertilisers or organic manures if a field is either:

- waterlogged, flooded or covered in snow
- frozen for more than 12 hours in the previous 24 hours

You must not spread:

- manufactured nitrogen fertiliser within 2 metres of surface water
- manufactured nitrogen fertilisers within a 2 metre zone from the centre of an established hedge (this only applies if you need to meet cross compliance requirements)
- organic manure within 50 metres of a spring, well or borehole or 10

metres of surface water

You must only spread manufactured nitrogen fertilisers and manures on agricultural land that you're using to grow crops (including grass).

You must spread manufactured nitrogen fertilisers and organic manures as accurately as possible.

Exceptions for precision spreading equipment for organic manures

You can spread slurry, sewage sludge and anaerobic digestate no less than 6 metres from surface water if you use precision manure spreading equipment like:

- band spreaders (trailing hose or trailing shoe)
- shallow injectors (that inject no more than 10cm below the surface)
- dribble-bar applicators

Exceptions for straw-based solid manure

You can spread straw-based solid manure (such as farmyard manure) within 10 metres of surface water on land that's notified as a site of special scientific interest or managed under an agri-environment scheme if you meet one of the following conditions:

- you're managing the land for breeding wader birds
- the land is designated as a 'species-rich semi-natural grassland'

You must only spread between 1 June and 31 October and not:

- directly into surface water
- more than 12.5 tonnes per hectare each year

Using manures with high readily available nitrogen

Some organic fertilisers have more than 30% of their total nitrogen content immediately available to crops. These are called 'high readily available nitrogen manures'.

They include:

- poultry manure (layer manure and litter)
- liquid organic manures (such as sludge, cattle and pig slurries and anaerobic digestate)

If you use sewage sludge or slurry on your holding, you need to follow the rules in this guidance and separate rules on managing sewage sludge, slurry and silage.

When you can't spread manures with high readily available

nitrogen (closed periods)

You must not spread high readily available nitrogen manures on or between the dates shown in this table.

	On grassland	On tillage land
Sandy or shallow soils	1 Sep to 31 Dec	1 Aug to 31 Dec
All other soils	15 Oct to 31 Jan	1 Oct to 31 Jan

Your soil is sandy if it lies over sandstone or it has all the characteristics shown in this table:

Layer of soil	Up to 40cm	From 40cm to 80cm
Content of the soil	more than 50% by weight of particles from 0.06mm to 2mm in diameter	more than 70% by weight of particles from 0.06mm to 2mm in diameter
	less than 18% by weight of particles less than 0.02mm in diameter	less than 15% by weight of particles less than 0.02mm in diameter
	less than 5% by weight of organic carbon	less than 5% by weight of organic carbon

Your soil is shallow if it’s less than 40cm deep

Exceptions for crops on sandy or shallow soils

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

Exceptions for organic farms

If you’re an organic farmer, or you’re formally converting to organic status, you can spread manures with high readily available nitrogen in the periods shown in the table.

You must not spread more than 150kg of total nitrogen per hectare.

Crop	When you can spread nitrogen	Additional limits on spreading
Asparagus, overwintered salad onions, parsley, bulb onions	from the start of the closed period to the end of February	
Brassica	from the start of the closed period until harvest	no more than 50kg of nitrogen per hectare every 4 weeks
Winter oilseed rape	from the start of the closed period to the end of October	

Crop	When you can spread nitrogen	Additional limits on spreading
Grass	from the start of the closed period to the end of October	no more than 40kg at any one time

Restrictions on applications outside the closed period

You must not spread more than 30 m^3 /ha of slurry or 8 tonnes/ha of poultry manure in a single application from the end of the closed period until the end of February. You must allow at least 3 weeks between each individual application.

The poultry manure limit remains the same but the slurry limit has been reduced from 50 m^3 to 30 m^3.

Equipment for spreading slurry

You must only spread slurry using precision spreading equipment or equipment that either:

- has a low spreading trajectory (below 4 metres from the ground)
- spreads slurry at a maximum rate of no more than 1 millimetre per hour when operating continuously

Work organic manures into the soil after spreading

When you spread manure on bare soil or stubble (except if it’s been sown with seed), you must:

- work poultry manure, slurry and liquid-digested sludge into the soil (for example, by ploughing) as soon as it’s practically possible to do so and within 24 hours at the latest
- work any organic manure into the soil (unless it’s been spread as mulch on sandy soil) as soon as possible and within 24 hours at the latest if the land is sloping and within 50 metres of surface water that could receive run-off from it

You don’t have to work in slurry and liquid-digested sludge if you have applied it using a trailing hose, shoe band spreader, dribble bar applicator or an injector.

When you can’t spread manufactured nitrogen fertilisers (closed periods)

You must not spread manufactured nitrogen fertiliser on or between the following dates (closed periods):

- from 15 September to 15 January on grassland
- from 1 September to 15 January on tillage land

Exceptions to the closed periods for manufactured nitrogen fertilisers

You can spread manufactured nitrogen fertiliser during the closed period if you grow the crops listed in the table and you keep to the limits and times shown.

If you grow crops that aren’t listed in the table, you must have written advice from a FACTS-qualified adviser before you spread manufactured nitrogen fertilisers.

Crop	Maximum amount of nitrogen you can spread within the closed period on each hectare
Winter oilseed rape	30kg (you must not spread nitrogen after 31 October)
Asparagus	50kg
Brassica	100kg (no more than 50kg can be applied every 4 weeks, up to the date on which you harvest the crop)
Grass	80kg (you can apply a maximum of 40kg at any one time, and you must not spread nitrogen after 31 October)
Over-wintered salad onions	40kg
Parsley	40kg
Bulb onions	40kg

Exemptions for greenhouses and low-intensity farms

Greenhouses

You don’t need to keep to limits on fertiliser use on land inside greenhouses, glasshouses and polytunnels where the land is enclosed for the whole calendar year. If land is exposed to the open air at any time (for example, if you uncover a polytunnel) the limits apply for the whole of that year.

You don’t need to keep records of your use of nitrogen fertilisers or the yield of arable crops in a greenhouse.

Low-intensity farms

You’re a low-intensity farmer if all of the following apply to you:

- at least 80% of your land is grassland
- you apply no more than 100kg of nitrogen per hectare per year as organic manure (including any nitrogen in manure deposited on the field by livestock)
- you spread no more than 90kg of nitrogen per hectare per year as manufactured fertiliser
- you don’t bring any organic manure onto your holding

You don’t have to keep a record of your actual applications of manufactured fertiliser and organic manure in each field. You must have recorded information to show that you meet the criteria for low-intensity farms. You must still plan your nitrogen use by keeping a fertilisation plan.

When calculating your fertiliser applications, you must not include any area of your holding where you don’t spread any fertiliser or work the soil (for example, on rough grazing areas).

Keeping records

You must keep all records of your fertiliser use for at least 5 years.

Fertilisation plan

You must keep records of each step in your fertilisation plan for each field in which you use nitrogen fertiliser.

Step 1

Record the:

- name and area of the field to be planted
- type of crop to be grown
- month in which you plan to plant the crop
- soil type
- previous crop (If the previous crop was grass, record whether it was cut or grazed)
- amount of nitrogen from the soil that is likely to become available for uptake by the crop during the growing season (the soil nitrogen supply)
- method you used to work out the soil nitrogen supply

Step 2

Record the:

- anticipated yield, if it’s an arable crop
- how you’ll manage the crop, if it’s grass (cut or grazed)
- the month when you’ll plant the crop (unless the previous crop is grass and it has not been ploughed out)
- the crop nitrogen requirement, taking account of the soil nitrogen supply

You must also keep a copy of any advice from a FACTS-qualified adviser with your plan.

You can estimate your expected yield using your farm records for previous crops.

Step 3

Record the:

- area (including location) to which you'll apply organic manure
- quantity and type of organic manure you'll apply
- month when you plan to apply the manure
- total nitrogen content of the organic manure
- amount of nitrogen that is likely to become available for crop uptake in the growing season in which you'll apply the organic manure

Step 4

Record the:

- amount of nitrogen needed from manufactured fertiliser, taking account of the crop available nitrogen from applications of organic manure
- month when you plan to apply the manufactured fertiliser

Field records

You must update your field records within 1 week of sowing, spreading fertiliser or harvesting a crop.

When you sow a crop on which you're going to spread nitrogen fertiliser, record the type of crop and the date you sowed it on.

When you spread manufactured fertiliser

Record the date of spreading and the amount of nitrogen you spread.

When you spread organic manure

Record the:

- area you spread
- quantity of manure you spread
- date of spreading
- method of spreading
- type of manure
- the total nitrogen content of the manure
- the amount of nitrogen that was available to the crop (crop-available nitrogen)

Recording nitrogen calculations

You must keep evidence of:

- the soil nitrogen supply and how you calculated it
- the crop nitrogen requirement and how you calculated it
- any written advice from a FACTS-qualified adviser

Keeping laboratory reports

You must keep original laboratory reports of any sampling and analysis you have done to find out the nitrogen content in organic manure that you use.

Recording yields

You must record the yield of any arable crop on which nitrogen fertiliser has been used, within one week of finding it out.

Recording the size of your holding

You must keep an up-to-date record of the total size of your holding and update it within 1 month if it changes. This applies to you if the change in area isn’t land covered by a greenhouse.

The total size of your holding must include any area not covered by greenhouses and excludes surface waters, any hardstanding (areas for parking vehicles), buildings, roads or any woodland (unless that woodland is used for grazing).

Making a risk map

You must make a risk map and keep it with your farm records if you spread organic manure on your land. You must mark on the map:

- the location of each field and its area in hectares
- areas with sandy or shallow soils
- land with a slope greater than 12 degrees
- land drains (except if they are sealed and impermeable)
- sites where you plan to use temporary field heaps to store manure
- all surface waters (for example, streams or ponds) and land within 10 metres of them
- all springs, wells and boreholes on your land or within 50 metres of the boundary of your land
- all land within 50 metres of a spring, well or borehole
- low run-off risk land (if you intend to spread to this land to reduce the amount of storage you need to provide)

Your risk map can be printed or drawn by hand and it doesn’t need to be to scale.

You must update the map with any changes within 3 months of the date of the change.

Keeping records of livestock manure

For the previous calendar year, you must complete a record by 30 April showing:

- the area of your holding in hectares
- the numbers of livestock kept on your holding
- the type of animal (‘category’ in the standard tables) and number of days each animal spent on your holding
- your calculation of the amount of nitrogen produced by livestock

Within 1 week of bringing livestock manure (including poultry manure and

slurry) onto your holding or sending it off, you must record:

- the type and amount of manure and the date it was brought onto or sent off your holding
- the total nitrogen content of any manure you send off or bring onto your holding
- the name and address of the supplier or recipient of the manure
- a contingency plan you'll follow if the manure isn't accepted by a recipient (for example, how you plan to store the manure)

If you don't know the nitrogen content of imported manure, you must find this out (by analysis or calculation) as soon as possible, and then record it within a week.

Further requirements for claimants of direct payments

You must follow the Code of Good Agricultural Practice for nitrates if you claim direct payments other than those under the basic payment scheme (for example, agri-environment payments).

Inspections

The Environment Agency enforces the NVZ rules. Its officers select which farms to inspect. If you have land in an NVZ and don't comply with the NVZ rules, you may be prosecuted and fined.

The Rural Payments Agency inspects a proportion of farmers who claim under the cross-compliance scheme. If you have land in an NVZ and don't comply with the NVZ rules your payment may be reduced.

Where to get help

Contact the Farming Advice Service for more information on using nitrogen fertilisers and manures in NVZs, and other requirements of cross compliance.

Telephone: 03000 200 301 (Monday to Friday, 8.30am to 5pm). (See call charges)

Email: advice@farmingadviceservice.org.uk

Find a local FACTS-qualified adviser.