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SUMMARY OF NVZ ACTION PROGRAMME RULES

Definitions	Rules relating to the application and storage of nitrogen fertiliser and specific manure types		
<p>(1) “Nitrogen fertiliser” means any substance containing a nitrogen compound or nitrogen compounds utilised on land to enhance growth of vegetation.</p> <p>The general rules relating to nitrogen fertiliser, on the right, apply to all categories defined below.</p>	<ul style="list-style-type: none"> You must have completed the Nmax calculation for a particular crop type (including grass), before applying any nitrogen fertiliser (see Nmax definition at 12 in this booklet). The total nitrogen available to the crop type must not exceed the crop requirement, as determined by the Nmax calculation (see Nmax definition at 13 in this booklet). No applications must take place when the land: <ul style="list-style-type: none"> is waterlogged; is flooded; has been frozen for 12 hours or longer in the preceding 24 hours; is snow covered. The following environmental factors must be considered before making any applications: <ul style="list-style-type: none"> soil conditions, type and slope, climatic conditions, rainfall and irrigation. No application to slopes over 12 degrees if there is a significant risk of nitrogen entering a surface water. All nitrogen fertiliser must be applied accurately to land. All applications of nitrogen fertiliser must be recorded (see summary of record keeping requirements below). 		
<p>(2) “Chemical Fertiliser” or “Manufactured Fertiliser” means nitrogen fertiliser which is manufactured by an industrial process.</p>	<ul style="list-style-type: none"> Closed period: No application to land within the NVZ during the following periods: 		
		Grassland	Other land^{1,2}
	Moray, Aberdeenshire, Banff and Buchan NVZ	15th September to 20th February	1st September to 20th February
	All other NVZs	15th September to 15th February	1st September to 15th February
<p>¹ application to winter oilseed rape permitted (use autumn value in crop requirement tables).</p> <p>² a maximum 100 kg/ha can be applied to other brassica crops during the closed period.</p> <ul style="list-style-type: none"> No application in a location or manner that makes it likely that fertiliser will directly enter any surface water. No application within 2m of a surface water (not an NVZ rule, but included as covered by General Binding Rule 18 of the Water Environment (Diffuse Pollution) (Scotland) Regulations 2008). 			

Definitions	Rules relating to the application and storage of nitrogen fertiliser and specific manure types		
<p>(3) “Organic Manure” means any nitrogen fertiliser derived from animal, human or plant sources.</p>	<ul style="list-style-type: none"> 250 kg N/ha/field application limit for organic nitrogen – This rule restricts the total amount of nitrogen that can be spread on an individual field from all sources of organic manure, other than compost. It is calculated on the basis of the spreading area of the field (i.e. ‘excluding no spread areas’) and excludes manure deposited during grazing No spreading within 10m of a watercourse. No spreading within 50m of a well, borehole or other water supply. Additional rules apply to specific types of organic manure, as explained at definitions (4), (5), (6), (7), (8), (9), (10) & (11) in this booklet. 		
<p>(4) “Organic Manure with a high available N content” means more than 30% of the total nitrogen content of the organic manure is present in molecular forms that will be released in the year in which it is spread on land. This includes slurry, poultry manure and some organic wastes such as liquid digested sewage sludge.</p>	<ul style="list-style-type: none"> Closed period: No spreading within the NVZ during the following periods: 		
		Grassland	Other Land
	Sandy or shallow soil	1st September to 31st December	1st August to 31st December*
	All other soils	15th October to 31st January	1st October to 31st January
<p>(5) “Solid Manure” means organic manure which can be stored in a free standing heap without slumping and does not give rise to free drainage of liquid from within the stacked material.</p>	<p>* Applications permitted up to and including 15th September, if a cereal crop is sown before that date, also permitted up to 30th September if the land is sown with oilseed rape, a catch crop or a cover crop before that date.</p> <ul style="list-style-type: none"> Quantitative restrictions apply during the 4 weeks prior to the commencement of the relevant closed period and from the day following the last day of the closed period until 14th February. If applied to bare ground during July, August or September, crop must be sown within 6 weeks of first application. For other rules that apply see definitions (1) & (3) in this booklet. 		
	<ul style="list-style-type: none"> Can be stored in temporary field heaps for no longer than 12 months. The site of a temporary field heap cannot be reused until at least 24 months have passed. Temporary heaps cannot be located in areas identified as a “no spread” or “high risk area” on the Risk Assessment Map. Any permanent storage site must be on an impermeable surface which prevents drainage to the water environment. It must either be enclosed by a waterproof covering or have adequate facilities to collect any run-off. 		
<p>(6) “Livestock Manure” means excreta from livestock, including any material that is mixed with the excreta, even if processed.</p>	<ul style="list-style-type: none"> 170 kg N/ha loading limit for livestock manure – This rule restricts the total amount of nitrogen that can be applied from livestock manure to the agricultural area of the holding within the NVZ. This includes application by spreading and deposition by the animals themselves. The Farm Limit is calculated on the basis of standard figures or by agreed analysis. At least 3 weeks must elapse before a repeat application. Additional rules relating to specific types of livestock manure are explained at definitions (7), (8), (9) & (10) in this booklet. For other rules that apply see definitions (5) & (7) in this booklet. You must ensure that storage facilities for livestock manure are maintained free from structural defect and of sufficient standard to prevent run-off or seepage of the contents to groundwater. 		

Definitions	Rules relating to the application and storage of nitrogen fertiliser and specific manure types
<p>(7) “Slurry”: Excreta produced by livestock while in a yard or building, including any bedding, rainwater and washings that are mixed with the excreta, that has a consistency that allows it to be pumped or discharged by gravity at any stage of the handling process.</p>	<ul style="list-style-type: none"> ■ 26 weeks minimum storage requirement for pig enterprises. ■ 22 weeks minimum storage requirement for cattle enterprises. ■ Must not be applied by high trajectory splash plate, except where the application is to a growing arable crop. ■ All rules relating to definitions (1), (3), (4) & (6) in this booklet apply. ■ You must ensure that storage facilities for livestock manure are maintained free from structural defect and of sufficient standard to prevent run-off or seepage of the contents to groundwater.
<p>(8) “Farmyard Manure”: A solid manure comprising livestock excreta mixed with bedding material (e.g. straw). Includes duck manure.</p>	<ul style="list-style-type: none"> ■ All rules relating to definitions (1), (3), (5) & (6) in this booklet apply. Note run-off from a permanent storage site may be directed to a constructed farm wetland.
<p>(9) “Poultry Manure”: a mixture of excreta produced by poultry and bedding material (excludes duck manure). Generally has a high available N content.</p>	<ul style="list-style-type: none"> ■ 26 weeks minimum storage requirement (storage permitted in temporary field heaps if it meets the definition of solid manure). ■ For other rules that apply see definitions (1), (3), (4), (5) & (6) in this booklet.
<p>(10) “Layer Manure”: Excreta from poultry, which is not mixed with any bedding material.</p>	<ul style="list-style-type: none"> ■ 26 weeks minimum storage requirement. ■ May be stored in field heaps if sheeted with a waterproof cover. ■ For other rules that apply see definitions (1), (3), (4), (5) & (6) in this booklet.
<p>(11) “Compost” means compost that complies with PAS 100:2011 (specification for composted materials) published by the British Standard Institute and does not contain livestock manure.</p>	<ul style="list-style-type: none"> ■ 500 Kg N/ha/field application limit for organic nitrogen from compost – This rule restricts the total amount of nitrogen that can be spread on an individual field from compost, including all other organic manure applications, in a 24 month period It is calculated on the basis of the spreading area of the field (i.e. ‘excluding no spread areas’) and excludes manure deposited during grazing. ■ No spreading within 10m of a watercourse. ■ No spreading within 50m of a well, borehole or other water supply. ■ Additional rules apply as explained at definition (5) in this booklet.

Definitions	Rules relating to the application and storage of nitrogen fertiliser and specific manure types
<p>(12) “Silage Effluent”: effluent produced from any forage crop which is being made into silage and a mixture of this effluent with rainwater or groundwater arising from a silo, silage effluent collection system or drain.</p>	<ul style="list-style-type: none"> ■ You must ensure that storage facilities for silage effluent are maintained free from structural defects and of sufficient standard to prevent run-off or seepage of the contents into the soil or water environment.
<p>(13) “Nmax”: The maximum nitrogen that can be applied to a particular crop type (including grassland) as manufactured fertiliser plus the crop available nitrogen from organic manure applications.</p>	<ul style="list-style-type: none"> ■ Must be calculated in accordance with standard tables and a defined procedure. ■ Must be calculated prior to making any applications of nitrogen fertiliser.
<p>(15) “Crop available nitrogen”: The amount of nitrogen in organic manure that is available for crop uptake in the season of application.</p>	<ul style="list-style-type: none"> ■ Forms part of the Nmax calculation and must be calculated in accordance with standard tables and a defined procedure.

What you must do and records you must keep	
Regulatory Requirement	What you must do and location of guidance and tables
<p>A Fertiliser and Manure Management Plan must be prepared and implemented each year.</p>	<p>You must prepare a fertiliser and manure plan before 1st March annually, which must contain</p> <ul style="list-style-type: none"> Risk Assessment Plan (only applicable if you apply organic manures) – See Booklet 4. A calculation and record of the capacity of storage facilities required for livestock manures – See Booklet 5. A calculation and record of 170 kg N/ha loading limit for livestock manure – See Booklet 4. An Nmax calculation for each crop type grown on the farm, including grassland – See Booklet 6. <p> Booklet 4 – Manure Planning Part 1, (Risk Assessment for Manures and Slurries), you must identify:</p> <ul style="list-style-type: none"> the boundary of every field within a NVZ; the area of the field in hectares within a NVZ; the location of all surface water, wells, boreholes or similar works providing a water supply within a NVZ; areas where no application of organic manure may take place within a NVZ; areas of land with a slope of 12 degrees or more within a NVZ; areas of high risk within a NVZ; location of field heaps within a NVZ. <p> Booklet 4 – Manure Planning Part 1, (170 kg N/ha loading limit for livestock manure).</p> <ul style="list-style-type: none"> Use Booklet 4 to calculate and record your compliance with 170 kg N/ha/year loading limit for livestock manure. <p> Booklet 5 – Manure Planning Part 2. You must calculate and record the capacity of storage facilities required for livestock manure.</p> <ul style="list-style-type: none"> Follow the guidance and procedures in Booklet 5 to calculate your current storage capacity for livestock manure against the volumes of livestock manures produced on you farm. <p> Booklet 6 – Calculate and record the standard nitrogen requirement for each crop including grassland on farm.</p> <ul style="list-style-type: none"> This process is known as Nmax and will allow you to calculate the crop standard nitrogen requirement using the defined procedures set out in Booklet 6. It uses a combination of field & management information and standard figures to determine the nitrogen requirement of a crop.

What you must do and records you must keep	
Regulatory Requirement	What you must do and location of guidance and tables
<p>The occupier of land within an NVZ must keep adequate records on an annual basis.</p> <p>Records must be retained for a period of 3 years.</p>	<p>The annual records must contain the following details</p> <ul style="list-style-type: none"> I The area of the farm within an NVZ. I For each field within the NVZ: <ul style="list-style-type: none"> I the area of the field in hectares: you will record the area of each field in doing the Nmax calculation; I the soil type in the field: you will record the soil type of each field in doing the Nmax calculation; I the crop or crops grown in the field and the date of sowing. You will record the crop type grown in a field in doing the Nmax calculation. You will record the crop sown date in your individual field record for applications of manufactured and organic nitrogen found at Table 11 of Booklet 8; I the quantity and type of chemical fertiliser & organic manure applied to each crop and the date of application. You will record the quantity and types of chemical fertiliser & organic manure applied to each crop in your individual field record for applications of manufactured and organic nitrogen found in Table 11 of Booklet 8. I The number of livestock kept on the farm, detailing: <ul style="list-style-type: none"> I the species, type and the length of time they were kept on the farm. You will record the required information by completing the 170 kg N/ha loading limit for livestock manure calculation in Booklet 4. I The movement of any livestock manure off the farm, or onto the farm, detailing: <ul style="list-style-type: none"> I the type of livestock manure; I the nitrogen content of the manure, based on standard figures or own analysis; I the quantity moved; I the date of the movement; I the name and address of the person receiving or supplying the manure. <p>If you do not normally keep a record of imports and exports of organic manures, a template record sheet and instructions are located at Table 13 of Booklet 8. The nitrogen content of any imported or exported organic manure will have to be accounted for in the 170 kg N/ha loading limit for livestock manure calculation at Booklet 4, Table 7.</p> <ul style="list-style-type: none"> I The quantity and type of chemical fertiliser brought onto the farm, used on the farm and retained on the farm. <ul style="list-style-type: none"> I You must keep an inventory of the manufactured nitrogen fertiliser that you purchase, use or retain on farm. If you do not normally keep an inventory of your manufactured nitrogen fertiliser use, a template balance sheet is located at Table 12 of Booklet 8.

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