

AHDB Pork Model Template B3.5 8K Manure Management Plan

A completed example document for Illustrative Farm

Farm name: Illustrative Farm Applicant: Mr P Fffff

You may already have a Manure Management Plan compiled for another purpose such as Entry Level Scheme or Farm Assurance Scheme. This will usually be sufficient to fulfil part of the requirements here.

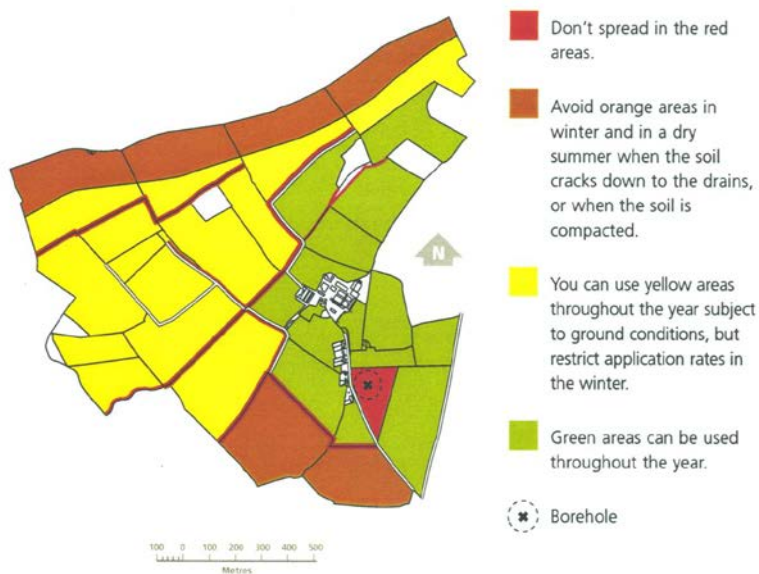
A step-by-step guide for producing a Manure Management Plan is available from Defra and has been used as the basis for this template:

<http://adlib.everysite.co.uk/resources/000/015/584/manureplan.pdf>

The Environment Agency has also produced guidance on nutrients, fertilisers and manures:

<https://www.gov.uk/managing-nutrients-and-fertilisers>

Manure spreading risk map



White areas are not normally spread with manure

Land available for spreading

This is the area of land associated with the unit (for which a PPC Permit is required) that is available for spreading organic manures including dirty water.

Table 1: Calculating the land area not available for spreading

Field name or number	Whole field area in hectares (ha)	Ditches and watercourses		Other red areas (ha)	White areas (not normally used) (ha)
		Total length in metres (m)	* metres divided by 1,000 = ha		
26	30.32	2400	2.40		
24	23.45	1900	1.90		
19	19.01	2000	2.00		
33	14.55	1300	1.30		
35	9.88	750	0.75		
34	1.23	200	0.20		
31	22.35	650	0.65		
29/30	2.85		0.00		
28	11.22	450	0.45		
22/23	20.98	750	0.75		2.43
20	15.42	500	0.50		
14/15	2.94		0.00	0.15	
13	23.07	700	0.70		
7/8/9/11	3.92	550	0.55		
12	12.11	450	0.45		
10	10.73	450	0.45		
2	1.68	550	0.55		
1	20.22	550	0.55		
35	6.95		0.00	6.95	
25	3.09		0.00	3.09	
Total farm area A	255.97				
Areas not available for spreading: Totals			x = 14.15	y = 10.19	z = 2.43

**This calculation is derived from ditches x 10m (red area) ÷ 10,000 to give hectares. If we do not multiply by the 10m first, we only need to divide by 1,000.*

Note

If you use a 1:2,500 scale map 1 grid square = 1 hectare, 1 side of a square = 100 metres
If you use a 1:10,000 scale map 1 grid square = 100 hectares, 1 side of a square = 1,000 metres

Area available for spreading: A - (x + y + z) = 229.2 ha

Remember: ditches and watercourses may be bordered by fields on two sides.

The minimum land area required for spreading organic manures on land directly associated with the Site for which a PPC Permit is required, based on an annual limit of 250kg/ha of total organic nitrogen applied (see Defra Nitrate Vulnerable Zone (NVZ) Guidance) is calculated using Table 2.

Defra NVZ Guidance:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261371/pb14050-nvz-guidance.pdf

Table 2: Calculating minimum area of land needed

Stock unit ss per Defra NVZ weight categories	Number of livestock units		Total N produced by 1 livestock unit/kg N/yr		Total N produced by all these livestock kg N/yr
1 weaner place (7-13kg)	620	x	1	=	620.0
1 weaner place (13-31kg)	1,200	x	4.2	=	5,040.0
1 grower place (31-66kg)	1,650	x	7.7	=	12,705.0
1 finisher place (over 66kg)	1,650	x	10.6	=	17,490.0
1 maiden gilt place (66kg and over)	40	x	11.1	=	444.0
1 boar place (150kg and over)	10	x	17.5	=	175.0
1 sow place (66kg and over)	480		16		7,680.0
Total N produced by livestock				=	44,154.0

Max allowed organic N kg/ha (NVZ limit)				=	170.0
Min area required for organic manures produced on site				=	259.7

If organic manures are imported onto the farm, indicate the type and land required for spreading					0.0
Total minimum land area required =				=	259.7 ha

If you have land in an NVZ or are a registered organic farmer, you must comply with the farm-based limits for nitrogen from organic manures.

If the minimum land area required (as calculated in Table 2) exceeds that available (as calculated using Table 1), then surplus manure must be exported off the farm.

Annual quantity of organic manure exported off the farm: _____

and/or (if applicable)

Area of land available on a regular basis for spreading exported organic manures:
_____ ha

Manure and slurry storage

Include an inventory of all facilities used for the storage of manures, slurries and dirty water. This may be taken from your buildings inventory.

Table 3: Inventory of manure and slurry storage facilities

Building/facility	Number of tanks or stores	Dimensions (m) <i>Effective storage depth is stated excluding freeboard*</i>	Total storage capacity <i>Excluding freeboard volume</i>	Typical storage period
Farrowing house 1	4	33.75 x 0.9 x 0.55	67m ³	30 days
First stage weaner	8	5.6 x 2.05 x 0.65	60m ³	3 weeks
Second stage weaner	8	6.5 x 3 x 0.6	93m ³	4 weeks
Finishing house	2	61 x 1.2 x 0.75	110m ³	10 days
Dirty water tank	1		22m ³	2 days
Slurry store	1	22.9m dia x 4.8	1,852m ³	4 months
Midden	1	18.3 x 13.7 x 1.5* *average height	376m ³	3 months

Note*: A minimum freeboard of 300mm for tanks and channels and 750mm for earth bank lagoons has been allowed.

If you have land in a Nitrate Vulnerable Zone, you must comply with minimum storage requirements for slurry.

Contingency measures

In the event of the land allocated for spreading not being available (because of soil condition or cropping) and the storage capacity on the farm for slurry is likely to be exceeded, the following measures will be carried out:

1. 50ha of land at XXXX Farm, Greendale will be used. This land is farmed by Mr P Ffff but is not normally used for spreading on account of its distance from the Installation. The land at XXXX farm is permanent pasture and spreading is normally possible. 20ha of pasture land is available at TTT Farm owned by Mr T Ffff for spreading if required
2. Slurry can be transported to an existing, unused lagoon at XXXX Farm
3. Options for hiring or purchasing additional storage vessels will be explored
4. In the event of the slurry transfer pump failing and its repair is not possible, a tractor driven tanker will be used to transfer slurry from tanks to the main slurry store.

This document has been prepared by the applicant using the AHDB Pork template.

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