

## Practical Use of Manures

A clear solution for farmers



## Taw Catchment NVZ Newsletter

Newsletter 2.

September 2007

Welcome to the second of our series of four newsletters for farmers in the Taw Catchment.

This newsletter is designed to refresh your memories on all things manure and keep you informed with workshops and events planned for this winter.

The hot topic of the moment is that DEFRA have finally released their NVZ consultation, news of which is included in this newsletter.

You will also find enclosed a reminder of the all important NVZ definition of slurry and dirty water and in response to ongoing confusion a explanation of the difference between N loading and N field limits.

Those of keen to develop your understanding of manure use as fertiliser will hopefully be keen to take up the option of an individual farm visit as well as or instead of attending one of the 5 winter meetings planned for the coming months.

Information overload you may say but never enough to outweigh what has been great news on the milk price front in the last couple of months!

We hope you find the newsletter useful and would continue to ask that if you have any queries you either visit the project specific web site via the Creedy site

[www.creedyassociates.com](http://www.creedyassociates.com)

Or contact us at the office on 01363 776162

### NVZ CONSULTATION ARRIVES

DEFRA has released the consultation for the review of the NVZ and at the same time are looking for comments. The Creedy team will of course be responding but we encourage you all to do the same (details on page 4).

The key changes that are expected to affect those already in an NVZ are:

- Reduced farm loading limit to 170kgN/ha over the whole farm (DEFRA are minded to seek a derogation on grassland to 250kgN/ha from Europe).
- New rules on slurry application timings, methods and locations
- Storage requirements for all soil types
- Closed period for all soil types
- Manure plan required for all farms
- Spreading on slopes issues
- Increased record keeping and paperwork.

#### Implementation

For areas currently in an NVZ it is expected that the majority of the regulations will be in place by Spring 2008, however all farms will have two years in which to comply to the new storage rules.

#### A Quick Reminder .....

##### The Farm Loading Limit

The annual limit of organic nitrogen that can be applied to the farm per year from 19th December to 18th December the next year. This figure is important as it determines how many stock you can keep on your farm based on the amount of nitrogen they produce per year.

##### The Field Limit

Once you have calculated your farm loading limit and know how much stock you can keep you then have to work out what you are going to do with their manure when you spread it. For any individual field you may apply a maximum of 250kg of organic nitrogen per hectare per year not including any deposited whilst grazing.

	Arable Land (non grass)	Grassland
Farm Loading Limit (organic manure)	170 kg N / ha	250 kg N / ha <b>Reducing to 170 kg N / ha</b>
Field Limit (organic manure)	250 kg N / ha	250 kg N / ha
Nitrogen Fertiliser (bagged nitrogen)	Up to crop requirement	Up to crop requirement

## Dealing With Dirty Water ....

Dirty water is NOT included in NVZ rules –there are no closed periods for spreading or N spreading limits. Remember though that:

- This only applies to “true dirty water” i.e. water from parlour washing and rainfall run-off from lightly contaminated yards etc used by stock.  
*If it contains any slurry, strainer box/weeping wall store liquid, run-off from a dung heap, silage effluent or heavily contaminated run-off –it counts as slurry and is subject to the NVZ rules.*
- It is illegal to cause water pollution e.g. by run-off of even “true dirty water” into a stream, ditch, river etc. Even though it does not usually contain much N, dirty water has a high Biological Oxygen Demand (BOD) so can cause rapid oxygen depletion in these habitats and kill aquatic life.
- It cost money to store and pump dirty water –we reckon 70p - £1/m<sup>3</sup> to pump alone.

Bearing these points in mind, it makes sense to minimise the amount of dirty water produced on your farm and, where feasible, to manage it separately from the slurry.

### Minimising dirty water.

Time permitting, this is a good time of year to sort out dirty water before the winter rains (summer rains as well if this year is anything to go by). Rain falling on roofs, clean yards/ tracks etc and even on clean silage sheeting is not dirty water and should be diverted to the drains. If your annual rainfall is 1m (about 40 inches), there will be 1m<sup>3</sup> (220 gallons) of clean water from every square metre of roof!). Every farm will be different but the key you may wish to think about:

- Making sure that gutters and downpipes are in good repair so that there is no overflow of clean water on to dirty yards.
- Considering the feasibility of making minor alterations to drains if clean water is getting into the dirty water system.
- Collecting clean water from silage clamp sheeting before it hits the concrete and picks up silage effluent.
- Making changes to management and stock movement so that dirty yards are kept clean.
- Roofing over yards etc heavily used by stock –albeit a potentially expensive option.



Repairing gutters is a good place to start

[www.defra.gov.uk/farm/environment/water/csf](http://www.defra.gov.uk/farm/environment/water/csf)

*The England Catchment Sensitive Farming Delivery Initiative (ECSFDI) is delivered in partnership by Natural England, the Environment Agency and Defra*



Slurry or Dirty Water?

### Managing slurry and dirty water separately.

Depending on your type of store, you are probably going to need some water in the slurry to make easy to mix, pump and spread evenly. But putting an excess of dirty water in the store:

- Reduces the storage capacity for slurry that means you may have difficulty complying with the NVZ closed periods and cannot store slurry long enough to spread at the safest and best time of year.
- Results in you having to spread dilute slurry (“thin soup”) with a lower nutrient content and having more loads to tanker out.

If you have not already done so, its worth thinking about installing a separate dirty water system that enables safe disposal to land as and when convenient.

We would be happy to discuss individual “dirty water problems” with you at any of our forthcoming evening meeting

## Using FYM for Winter Cereals

FYM applied in the autumn offers the opportunity of supplying nutrient to autumn/winter sown crops. Much of the available N from such an application will be leached however the bulk of the phosphate and potash will be useful for root and crop development.

To illustrate the point we have used the HOW MUCH TO APPLY form to work through the following example.

- Old (stacked in open for several months) FYM being applied to winter wheat (or feed barley)
- Medium soil type, Soil Indices for N, P & K all being 1
- Target grain yield 3.25 t/acre. Straw removed.

There was concern at some of our last workshops over the use of metric units. It's easy for us because we use metric all the time but if you are used to acres and units we understand it can be confusing. Therefore in this example we have used acres and units and have listed some conversion factors. We hope it helps—if not give us a ring.

### HOW MUCH TO APPLY:

	<b>N (seedbed)</b>	<b>P<sub>2</sub>O<sub>5</sub></b>	<b>K<sub>2</sub>O</b>
1. Crop fertiliser recommendations (units/ac) <sup>1</sup>	0	88	56
2. TOTAL nutrient content of FYM (units/ton) <sup>2</sup>	6.0	3.5	8.0
3. AVAILABILITY of nutrients (% of total)	10	60	90
4. AVAILABLE nutrient content of FYM (units/ton)	0.6	2.1	7.2
5. SPREADING RATE (ton/ac)	15		
6. AVAILABLE nutrients applied (units/ac)	9	32	108
7. Bag fertiliser required (units/ac)	0	56	0
8. Surplus nutrients (units/ac)	9	0	52

#### Conversion Factors

##### Acres and Hectares

Multiply acres by 0.41 for ha  
Multiply ha by 2.47 for acres

##### Units and Kilograms

Multiply units by 2 for kg  
Multiply kg by 0.5 for units

##### Meters cubed and Gallons

Multiply m<sup>3</sup> by 220 for gallons

#### Also note that...

1 unit/ac = 1.25kg/ha

1 ton/ac = 2.5 tonnes/ha

1kg/m<sup>3</sup> = 9 units/1000gallons

1000 gallons/ac = 11m<sup>3</sup>/ha

Notes: 1.Crop requirements and FYM nutrient contents have been taken from RB209 or from summary tables in the Workshop Handout.

2. Total nutrient content for nitrogen and potash has been reduced by 50% to allow for losses during storage of FYM outside.

3. No seedbed nitrogen is needed and the FYM supplies more than enough Potash (K). Additional bagged phosphate will be required and ideally would be applied in the seedbed.

### Individual Farm Visits Up for Grabs

Workshop attendees will hopefully be pleased to learn that the project offers a limited number of individual farm visits. The aim of the visits is to build on lessons learnt at the workshops and convert the ideas discussed into a farm specific plan.

Areas covered will include:

- How Much slurry/ FYM /dirty water is produced on farm
- What is the fertiliser value of manures on your farm
- Target crops on your farm
- How much manure and bagged fertiliser should be spread on these target crops
- Your farm and the existing / new NVZ rules

We will be completing 10 individual farm plans. To book yours please complete the return slip overleaf and fax or send it back to the office.

Phone/fax 01363 776162  
 Mobile 07740 432371

E mail [john.morgan@creedyassociates.com](mailto:john.morgan@creedyassociates.com)

Dear All,

You are invited to attend one of the evening meetings that we running over the winter. They are open to all farmers in the Taw catchment whether or not they have attended a Workshop. We will make sure there is something of practical use for everyone –and even provide some light refreshments!

The main aims of the meeting will be to:

- Refresh your memory about the topics covered during the Workshop.
- Provide some additional, practical information on complying with regulations and making the best use of manures.
- Update you on new information.
- Provide an opportunity for you to discuss your particular manure management problems or concerns with a member of the Creedy team.

The dates and locations of the meetings are listed below. Please sign up for the one that is most convenient for you by phoning the office on 01363 775050 (FAX 01363 776938) or emailing [john.morgan@creedyassociates.com](mailto:john.morgan@creedyassociates.com).

We look forward to seeing you.

Winter meetings on Practical Use of Manures.

Date	Start Time	Location
11th October 2007	8pm	Higher Ash Town Farm, Rose Ash (subject to F & M)
23rd October 2007	8pm	Chichester Arms, Bishops Tawton
30th October 2007	8pm	London Inn, Morchard Bishop
1st November 2007	8pm	TBC
8th November 2007	8pm	Fox and Hounds, Eggesford

### FARM VISIT REPLY SLIP

I would be interested in having an individual farm visit on my farm to discuss and work towards producing an individual farm plan.

My Preferred month for the visit would be:

Sept ..... Oct ..... Nov ..... Dec ..... Jan ..... Feb .....

Contact Name .....

Phone number .....

Address .....

E mail Address .....

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