

## RECYCLED MANURE SOLIDS – SELF ASSESSMENT AND VET REVIEW

To use Recycled Manure Solids (RMS) bedding as a Red Tractor Assured Dairy farmer you must:

- Complete a self-assessment when you begin using the material and thereafter at least annually (PART A)
- Ask your vet to review and discuss usage of RMS bedding on-farm on an annual basis. This will require that the vet reviews the bedding in use and discusses its potential effect on cow health and welfare\*. This review can be undertaken at the same time as the full herd health and performance review as required by the Red Tractor Dairy standards (PART B)
- Allow Red Tractor to carry out an assessment on your farm to confirm that the Conditions of Use are being met on a nine-monthly basis (The cost of the additional assessment will be charged to your milk buyer who may pass this cost on to you)

To demonstrate that parts A and B have been undertaken, complete this template and keep a copy to show your assessor.

### PART A – FARMER SELF ASSESSMENT

The requirements listed below are required by law and **must be** followed at all times. Please indicate that you adhere to each of the requirements below and complete the declaration overleaf:

	Yes, I adhere (please tick)
<p><b>1. RMS must only be produced using raw cattle manure/slurry from housing and/or yards</b> Manure from other livestock species must not be included for the production of RMS, to avoid introducing external pathogens which may affect cattle health</p>	
<p><b>2. RMS must only be used as bedding for cattle which are in the same epidemiological unit as those cattle from which it is generated</b> To minimise the risk of disease transfer, RMS must only be produced on the unit on which it is to be used and only from slurry originating from that unit. Slurry or manure must not be moved between units either before or after separation. An epidemiological unit comprises animals which come into contact with each other directly or indirectly (e.g. shared facilities or personnel) as part of the same farm business. They may not necessarily be housed on the same site or premises.</p>	
<p><b>3. RMS must be produced from a slurry separator unit, designed for the purpose, which produces manure solids of at least 34% Dry Matter</b> Slurry is mechanically separated into a liquid fraction and a 'solid' fraction, typically by using a screw or roller press action. The equipment needs to be capable of extracting sufficient water to make the solid fraction at least 34% dry matter. If the material is too wet (below 34%) it is unsuitable for use as bedding.</p>	
<p><b>4. Material that has been composted or digested must not be used</b> The spores of certain bacteria, particularly those that are heat-resistant may be encouraged by composting. Too high a concentration of spores can lead to losses during the manufacture of cheese and reduce the shelf life of pasteurised milk. Putting manure through a digester will also increase temperatures, which can affect pathogen load. Until further information is available, use of RMS produced from the output of a digester is not permitted. Equally, use of digestate which contains feedstock from non-farm sources could cause an additional unacceptable risk, and must not be used. RMS must be used within 12 hours of its production to avoid composting or anaerobic digestion of the material and significant change to its nature and microbiological composition.</p>	
<p><b>5. RMS must not be produced from manure/slurry of herds which are subject to official restriction for notifiable diseases, (refer below for TB specific conditions)</b> A list of notifiable diseases is available on Defra's website (<a href="http://www.defra.gov.uk/animal-diseases/notifiable">http://www.defra.gov.uk/animal-diseases/notifiable</a>). The main notifiable disease of concern is foot and mouth disease, as the infective agent can occur in faeces and urine up to four days before clinical signs appear.</p>	

<p><b>6. Manure from TB Inconclusive reactors and TB reactors must be excluded from the use of RMS.</b>  Unless TB is advanced in an animal, there are unlikely to be large numbers of organisms shed in faeces. However, as yet the specific risk of TB spread through manure/slurry has not been quantified. With regular testing, the chances of reaching this stage of infectivity are much reduced. However, if TB were present in slurry, it is not likely to be reduced by physical separation. Therefore, <b>RMS may only be made and used in herds that are Officially Tuberculosis Free (OTF) for bovine TB.</b> RMS made from manure/slurry originating during a period of non-OTF status is potentially contaminated and must not be used after OTF status is regained.</p>	
<p><b>7. The production and use of RMS must be suspended if animals on farm show clinical signs of infection or have tested positive for enteric pathogens or outbreaks of clinical disease (e.g. Salmonella, VTEC etc.).</b></p>	
<p><b>8. RMS must not be produced from slurry/ manure of cattle that are undergoing treatment for disease</b>  Using antibiotics and dry cow therapy responsibly are an essential element in the fight against animal disease. However, there are concerns over an increased risk of antibiotic resistance developing in manure being recycled for bedding. Every effort should be made to take the slurry to be processed for RMS from groups where no cow, or a minimal numbers of cows are currently being treated with antibiotics. You may want to consider putting a protocol in place to ensure slurry/manure from cows under treatment or withdrawal can be kept separate from the rest of the herd, e.g. using a quarantine/isolation pen. In the event that all cattle or a significant proportion of the herd are being treated with antimicrobials, then their slurry/manure should not be used to produce RMS during the treatment and withdrawal period.</p>	
<p><b>9. RMS must not be produced from manure/slurry produced in quarantine pens</b></p>	
<p><b>10. Manure from aborted cattle under brucellosis investigation must be excluded from use as RMS</b>  On farms where RMS are being used for bedding, rigorous biosecurity is even more important in relation to suspected brucellosis cases as it is a zoonosis.</p>	
<p><b>11. Other materials, such as birthing fluids and placental material, manure from calving areas, and waste milk must not be disposed of by adding these to manure/slurry going for RMS</b>  Afterbirth and other fluid materials are a potential risk for disease transmission. Waste milk, subject to withdrawal period, must not be added to the slurry pool, as there is an increased risk of developing antibiotic resistance and increased risk for Johnes. Anecdotally, inclusion of waste milk in material used for bedding has been associated with increased cell count/mastitis problems.</p>	
<p><b>12. RMS must only be used as bedding for housed cattle over twelve months old</b>  Regulations on calf health and welfare (Council Directive 2008/119/EC and the Welfare of Farmed Animals Regulation 2007) state that calves must have access to a lying area which is 'clean, comfortable and adequately drained and which does not adversely affect the calves'. Young-stock are particularly susceptible to disease and if infected may be highly contaminating themselves. Risks of disease transmission will be minimised by preventing calves less than twelve months old from having contact with faeces and slurry from adult cattle. Any calves that are inadvertently born in areas bedded on RMS must be removed as soon as possible from the area, to a location where suitable alternative bedding is provided</p>	
<p><b>13. RMS must only be used on cubicle beds, and not as a deep bed in pens or yards</b>  RMS must only be used in cubicles, either as a layer on top of mattresses, or as a cubicle bed up to 15cm in depth. It should not be used in calving areas, due to the susceptibility of new-born calves to Johnes disease or other pathogens.</p>	
<p><b>14. Excellent pre-milking teat preparation must be conducted which must include a pre-milking teat disinfection</b>  Pre-milking teat disinfection ('pre-dipping') allows a rapid reduction in the number of bacteria that are present on the skin of the teats and is associated with lower total bacterial counts (TBC) in bulk milk.</p>	
<p><b>15. Milk from herds using RMS must be pasteurised</b>  All bedding materials are potential sources of contamination for milk. Micro-organisms and their spores can get on to the teat from the bedding and through the milking process end up in the milk bulk tank. As a precautionary measure, all milk and milk products derived from farms using RMS must be pasteurised. Unpasteurised milk or milk products must not be consumed (this includes consumption by farmers, farmer families and farm workers).</p>	

16. <b>RMS must not be produced from the faeces of cattle that have been brought into the herd from elsewhere, for a period of one month after their introduction</b>	
17. <b>There should be no shared equipment for the handling and processing of feed and RMS</b> If any equipment is shared (loaders etc.) it must be thoroughly cleaned and disinfected between uses. Designed to prevent cross contamination of feed or forage.	
18. <b>Should any separation equipment be moved between different epidemiological units, it must be thoroughly cleaned and disinfected before moving and subsequent re-use</b> In mainland Europe, movement of contaminated equipment has been linked to transfer of pathogens from one farm to another.	
19. <b>Farms using RMS must notify APHA and Red Tractor.</b> In addition to the requirement to notify Red Tractor (email:dairy@redtractor.org.uk or phone 0203 617 3670) farmers must also notify APHA if they wish to use RMS. Complete the Notification of Registration of Farmers Using Recycled Manure Solids as Dairy Cattle Bedding (AB144) and submit to APHA either by email (CSCOneHealthABP@apha.gsi.gov.uk) or by post to: ABP Team County Hall Spetchley Road Worcester WR5 2NP	

<b>Declaration</b>		
I have completed a review of the use and systems around the use of Recycled Manure Solids on my farm and confirm that I believe all conditions of use are being met at all times. .		
Name	Signature	Self-assessment date

## PART B – VET REVIEW

It is a requirement that a veterinary surgeon completes an annual review of RMS as a bedding source. This will require that the vet reviews the product in use and discusses its potential effect on cow health and welfare\*. This review can be undertaken at the same time as the full herd health and performance review as required by the Health Planning standards

<b>Declaration</b>		
I have completed a review of the use and systems around the use of Recycled Manure Solids as a bedding material and have discussed current and relevant legal requirements along with the implications on cow health and welfare*. *This innovative bedding is still in its infancy and there are potential unknown risk factors associated with its use. Therefore, the vet surgeon cannot be held responsible for any subsequent adverse effects to cow or human health.		
Farm Name	Visit date	Vet practice
Vet Name	Vet Signature	

For more information on the Conditions of Use and to notify Defra that you are using RMS, go to <https://www.gov.uk/government/publications/use-recycled-manure-solids-as-cattle-bedding>