



DairyCo

BATH & WEST
GRASSLAND UK

GRASSLAND UK 2009 FACTSHEET

Strategies for slurry storage

Chris Coxon – DairyCo, Extension Officer

Phone: 07989 959517

E-mail: chris.coxon@dairyco.org.uk

The cost of storing slurry can range from £75 a cow or £5/m³ for a clay lined lagoon to £585 a cow or £39/m³ for a concrete store. There are many storage options to consider, as well as regulations on planning and locating stores, and meeting the requirements of the Environment Agency.

Key points to consider include:

- The value of stored slurry is around £15 a cow a month in terms of fertiliser equivalent values. There are good cost saving opportunities with increasing slurry storage as well as meeting Cross Compliance rules.
- Remember only high available nitrogen content manures (above 30% available N) need to be stored – this includes dairy slurry and liquid from a weeping wall system designed for dairy slurry.
- On average only 50% of the volume of slurry entering the store is made up of this high available N material. The rest is parlour washings and rainwater. It may be worth considering if clean rainwater can be separated and diverted out of the slurry store.
- A high volume hose uses around 30 litres/cow in-milk a day whereas a high pressure hose will use a third less at around 20 litres/cow a day. Therefore, a cow requires about 10,000 litres of wash down water a year when using a high volume hose – that is equivalent to a 2,200 gallon tanker full for each cow every year.
- Dirty water is not covered by the NVZ regulations and will have a nutrient value of 0.3 kg total N/m³ or less to meet this classification. This usually includes parlour washings and lightly fouled yard run-off and therefore the opportunity to reduce the storage requirement and cost is significant. Routine testing following appropriate protocols set out in the NVZ regulations would determine the nutrient value of dirty water being handled.
- A slurry store must comply with the 'Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 as amended'. This includes that a store must be constructed to last at least 20 years and that the edge of the store must not be within 10m of a water course or land drain.
- New stores involve significant investment. Start planning early and follow the correct channels for approval. Planning permission is likely and the Environment Agency need 14 days written notice before using a new store. It may pay to consult the EA early on in the planning phase.
- For existing stores the EA will need to be contacted if it is being extended by more than 10%. The extension of an existing store may reduce the structural integrity of the store and may invalidate any warranty – this could be more expensive than constructing a new store.
- For help calculating slurry storage requirements you can use the DairyCo Slurry Wizard – ask your local extension officer for a copy or phone 01285 646500.

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