SOILED WATER STORAGE & MANAGEMENT

The introduction of the current Nitrates Action Plan in 2022 brought with it new restrictions on the application of soiled water and increased storage requirements. Many farms will need to raise their storage capacity to meet these new requirements.

In 2022, farmers were prohibited from spreading soiled water from Dec 21st to Dec 31st, this has now increased for 2023 to a closed period between December 10th to Dec 31st. Next year no soiled water can be spread in the month of December with the exception of winter/liquid milk suppliers, who have an additional year to meet the 31-day requirement.

Soiled water results mainly from parlour washings, but also includes runoff from open silage pits, etc. Spreading soiled water on land will not be allowed during the final three weeks of this year. The storage requirement is for the cow numbers milked at peak during the year and does not relate to the numbers milked during December. Nevertheless, farmers milking cows through December need to provide ample storage to comply with the new closed period.

Parlour Washings

The amount of soiled water produced varies from farm to farm. It depends on the type of parlour, cows per unit and the area cleaned with a volume washer, etc. The volume of dairy washings and slurry produced per cow is under review in the Nitrates Action Programme. On many dairy farms, there is a slatted tank in the collecting yard and the milking machine and bulk tank washings are pumped into it. The typical volume of parlour washings produced on farms is 30L/cow/day. Rainfall on unroofed collecting and return yards may bring the storage requirement up to about 40L/cow/day.

It's worth noting that if cows are eating silage while standing in the collecting yard, the contents of the tank is regarded as slurry and it must be stored from the 1st of October until the end of the closed period for spreading slurry. It is acceptable to store parlour washings in slurry tanks, but it must be stored for the full closed period. Parlour washings are classified as soiled water provided, they have a biochemical oxygen demand (BOD) of less than 2,500 and a dry matter content of less than 1%.

If you are considering building additional soiled water storage use the calculation below:

100 cows x 40ltrs x 31 days = 124m³
124m³ = 39' x 12.5' x 9' tank required

TAMS and accelerated capital allowances

Additional soiled water storage is eligible for grant aid under TAMS III. Planning permission must be sought and submitted when applying for TAMS. Slurry / soiled water and farmyard manure storage, automatic scrapers, simple slurry aeration systems and the floors and walls of buildings used to house animals are eligible for a two-year write-off against income tax. The Finance Bill Section 658A specifies that slurry / soiled water stores have to be covered. Slats meet this cover requirement.

Tips to reduce your soiled water

1. Scrape yards instead of washing, where possible.
2. Reduce the soiled area. For example, by confining cows leaving the parlour to a drafting chute. Holding yards where cows are held for AI will be clean for most of the year and any clean runoff should be diverted away from tanks where appropriate.
3. Switch from a high-volume low-pressure washer, typically having an output of 182L/minute of water to a low volume (45L/minute) medium pressure washer.
4. Drying off the entire herd for month of December will prevent soiled water being created.
5. Ensure that clean water from roofs and clean water yards isn't entering tanks.