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EBA's position on Digestate within the Nitrates Directive

The European Biogas Association (EBA) acknowledges the efforts that the Nitrates Committee has made to protect our water resources from environmental damage. EBA would like to offer the technical assistance of its experts and takes this opportunity to send its comments on how to improve the implementation of the Nitrates directive, notably in the use of animal manure in Nitrate Sensitive Zones.

EBA is aware that nutrients in manure are organically bound and only slowly become available for plant uptake ("slow release") causing nitrogen leeching, therefore we consider that a maximum limit for manure in Nitrate Sensitive Zones of 170 kg/ha nitrogen is a necessary measure. However, the need for "quick release" fertilisers is pushing farmers to purchase large quantities of costly mineral fertilisers which have a very big carbon footprint.¹ Within this context, EBA sees a unique opportunity to save farmers money, radically reduce GHG emissions coming from mineral fertilisers and assure a high standard of water protection.

By exposing animal manure to anaerobic digestion (natural process), a large part of the "slow release" organic nitrogen is mineralized and converted into "quick release" mineral nitrogen (predominantly NH₄-N). Therefore digestate, the product of anaerobic digestion, enjoys higher nutrient use efficiency², what greatly reduces the risk of eutrophication, while at the same time it allows farmers to use a cost-efficient and environmentally friendly option to conventional mineral fertilisers.

In spite of the clear advantages of digested manure over raw manure, EBA is concerned that the Nitrates directive makes no distinction and defines livestock manure under article 2(g) as: *"waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, even in processed form"*.

This implies that all digestate from animal manure origin retains the status of animal manure in spite of its new "processed form" which increases nutrient use efficiency. Furthermore, as a

¹ Mineral N requires 35-40 GJ/ t to get nitrogen from the atmosphere using the Haber-Bosch procedure. This process now produces 454 million tons of nitrogen fertilizer per year globally, mostly in the form of anhydrous ammonia, ammonium nitrate, and urea. 3–5% of the world's natural gas production is consumed in the Haber process (~1–2% of the world's annual energy supply).

² Common digestate has levels of 75-85% NH₄-N (directly available N) as compared to its total N, whereas pig slurry for example only has 60-65% of NH₄-N (directly available N) as compared to its total N. A simple process of separation results in manure based fertilisers with even higher ratios of 90-95% NH₄-N (directly available N) as compared to its total N.

consequence of the wording “*mixture of litter and waste products excreted by livestock*”, the directive leads some member states to take a very stringent interpretation where any organic material which is co-digested with manure automatically becomes manure (regardless of the manure quantity in the mix), something that we consider disproportionate.

EBA understands that opening a revision of the Nitrates directive may not be an option at this point. Nevertheless, we would like to bring to your attention that this inappropriate wording has brought an uneven implementation of the directive when it comes to applying digestate on fields across member states, particularly for co-digested manure³. This is something that we consider inadequate for a common market. To remedy it, EBA proposes the following 3 actions.

EBA's Key messages:

1. The Commission should take the lead and recommend a harmonised interpretation of how to deal with nutrients within digestate coming from co-digested manure.
2. The Commission should give a clear definition of what manure “in processed form” is. Does it only include mechanical processing, or does it also encompass naturally occurring biomass conversion processes such as incineration or anaerobic digestion?
3. The Commission should endorse the ‘pro rato’ principle in co-digested manure, where only the nutrient share in manure is counted towards the 170 kg/ ha limit. This principle is relevant only if anaerobic digestion is seen as manure processing (point 2). In the current legal definition as provided under the Nitrate Directive, there is no legal basis for interpretations otherwise.

We consider that these three measures would provide adequate legal certainty for digestate producers, farmers as well as for national legislators. We remain available to explain any point that may need further clarifying.

Kind regards,

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President of EBA



Prof. E. Meers
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³ There are mainly two diverging legal interpretations across the EU on spreading co-digested manure:

- a) Certain member states take a stringent approach, where it is assumed that all nutrients in digestate retain the animal manure status. This implies that the additional nutrients coming from other sources are automatically converted to animal manure status.
- b) Other member states uphold the more open ‘pro rato’ principle stating that only the nutrient fraction coming from manure will be considered as manure and will be counted towards the 170 kg/ ha limit.