

ESPP proposals on recycled manure nutrients under the Nitrates Directive v15/2/24

What is the problem ?

The Nitrates Directive limits the application of manure, and also of manure "*in a processed form*" ⁱ, to 170 kgN/ha/year in Nitrate Vulnerable Zones (NVZs), unless case-by-case derogations are granted by the EU. For other fertilisers, including synthetic (mineral) fertilisers or non-manure-derived organic fertilisers (e.g. food waste digestate), the Directive does not specify an application limitⁱⁱ, but in most NVZs a limit is fixed which is significantly higher than the 170 kgN/ha/year.

This results in an unlevel playing field for recycled fertilisers which are derived partly or wholly from manure.

For example, if the mineralⁱⁱⁱ fertiliser ammonium sulphate is recovered from digestate (via gas stripping) from a digester with intake part manure, part biomass, part food waste, then this ammonium sulphate (if considered to be manure "*in a processed form*") will be limited to lower nitrogen application rates than ammonium sulphate produced by the Haber Bosch process.

This directly limits use of recycled nutrients (even when in the same product form as synthetic fertiliser). It means that manure-derived recycled ammonium sulphate must be marketed with specific labelling "*subject to Nitrates Directive application limits in NVZs*". It is an obstacle to rollout of nutrient recycling technologies, because Nitrates Directive status of the product is unclear and can be different in different Member States / regions.

The manure-recovered ammonium sulphate has the same agronomic effect and poses the same nitrates leaching potential as the same Haber Bosch derived chemical, so that the Nitrates Directive spreading limit of 170 gkN/ha/year is not justified.

Manure-recovered fertilisers with <1% organic carbon

ESPP considers that the limit to application of manure-recovered N should be not be applicable to manure-recovered recycled nutrient products which:

- a) respect the specifications^{iv} for "**mineral fertilisers**" of the EU Fertilising Products Regulation (Annex III, part 1, point 4), that is:
 - contain not more than 1% organic carbon (dry mass)
 - fulfil the criteria of PFC1(C), that is minimum nutrient contents, contaminant limits ...
- b) have **End-of-Waste status** and are **recognised as a fertiliser**, either via the EU Fertiliser Regulation (CE-mark fertiliser) or under national legislation.

ESPP suggests that the above could be implemented without modifying the Nitrates Directive, by interpretation that such mineral products are no longer "*manure* … *in a processed form*"^v.

ESPP notes that considering a material is no longer "*manure … in a processed form*" under the Nitrates Directive would not imply that it is no longer covered by the Animal By Products (ABP) Regulation. If the processing does not result in reaching an ABP End-Point, then the recovered fertiliser will remain subject to ABP obligations (use limitations, traceability).

Recovered fertilisers where only part of the input is manure

ESPP suggests that for recovered nutrient materials where only a small proportion of the inflow material is manure:

a) **if manure is <10% of input material is manure** then these be not considered as "*manure* … *in a processed form*",



b) **if manure <75% of input material**, then the Nitrates Directive NVZ application limit be calculated pro-rata to the % manure input.

In both cases: % of dry weight of all input materials, over both (a) one year and (b) all two month periods.

Harmonisation of definitions and implementation

Additionally to the above, ESPP requests that the Commission should ensure a progressive harmonisation of definitions in NVZ Action Programmes for:

- a) how nitrogen "efficiency" is calculated for organic nutrient fertilising materials (different manures, digestates, composts ...),
- b) efficiency coefficients for different CE-mark Organic and Organo-Mineral Fertiliser types,
- c) definitions of fertilisers vs. soil improvers coherent with the EU Fertilising Products Regulation,
- d) inclusion of soil improver nutrients in Action Programmes.

This harmonisation of definitions and classifications is not intended to hinder subsidiarity in defining appropriate Action Programmes (adapted to local climate, crop, environmental challenges ...) by specify relevant application rates for different materials.

^{*i*} art. 2(g) of the Nitrates Directive: "livestock manure': means waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, even in processed form".

ⁱⁱ The Nitrates Directive, Annex III, point 1.3 specifies that NVZ Action Programmes must include rules to limit application of "fertilisers", effectively covering all fertilisers including synthetic fertilisers, manures, organic fertilisers ...

[&]quot;" "Mineral fertiliser" is here used as defined in the EU Fertilising Products Regulation.

iv Note : this wording does not require CE-mark certification (FPR Conformity Assessment) of the product. The respect of the specifications may be ensured by the validation processes applicable under national legislation. However, if the product is CE-marked as a "Mineral fertiliser", then this should lead to recognition across Europe (in all NVZs) of exemption from the 170 kgN/ha/y manure spreading limit.

v At some stage of processing a material must cease to be considered as "manure ... in a processed form". For example: if manure is spread on a field, soya is grown and used for biogas production, and the digestate is used as organic fertiliser? If manure is incinerated, and ammonium sulphate is recovered from NO_x stripping of the incinerator offgas?