Renure criteria uit JRC rapport:

2 Technical proposals

Definition:

RENURE stands for "REcovered Nitrogen from manURE". RENURE is defined as any nitrogen containing substance fully or partially derived from livestock manure through processing that can be used in areas with water pollution by nitrogen, following otherwise identical provisions applied to nitrogen containing chemical fertilisers as defined in the Nitrates Directive (91/676/EEC), while ensuring the achievement of the Nitrates Directive's objectives and providing adequate agronomic benefits to enhance plant growth.

RENURE criteria – all of the following apply:

(i.) RENURE is obtained through a process where the handling chain for the manure(s) applied as input material involves a physical, chemical, or biological process step for the treatment of manure other than solely mixing, blending, drying, rewetting, granulation and/or storage, that increases the concentration of mineral N, urea N and/or crystal-bound N (% relative to total N) compared to the input material(s). The production process results in materials of a consistent quality that is in compliance with all other criteria.

(ii.) RENURE materials have a mineral N:TN ratio ≥ 90% or a TOC:TN ratio ≤ 3. This criterion is evaluated by correcting for any N derived from concentrated N materials (>3% N, dry matter basis) that classify as products or by-products and not originating from manure.

(iii.) RENURE materials do not exceed the following limit values:
- Cu: 300 mg kg^{-1} dry matter; and
- Zn: 800 mg kg^{-1} dry matter.

(iv.) Member States should ensure that the timing and application rates of RENURE and other fertilising materials are synchronised with plant NPK requirements to minimise nutrient leaching and run-off losses. In accordance with the application of good agro-environmental practices, this involves in particular:
- the specification of information on the content of N, P_2O_5, and K_2O in RENURE materials for any of these elements where the concentration exceeds 1% of dry matter, with a maximum deviation of 25% from the actual value, in order to monitor and record the field nutrient budget;
- unless inappropriate, maintaining a living plant cover on the land for as much of the year as possible or equivalent measures.

(v.) Member States should prevent and minimise NH_3 emissions during RENURE application on field (by injection, immediate incorporation of surface-applied materials or equivalent measures), especially for RENURE N fertilisers that have
- > 60% of the N present in N forms other than NO_3^--N, and
- a pH_{H2O} > 5.5.

(vi.) Member States should prevent and minimise emissions to air resulting from storage through enforcing appropriate storage conditions of RENURE.

- Renure ontstaat uit een proces dat een fysische, chemische of biologische processtap bevat waardoor de concentratie minerale stikstof verhoogd wordt. Er ontstaat een product van consistente kwaliteit uit het proces.
- Renure heeft een minerale stikstof : totale stikstof verhouding van 90% of hoger, of een totaal organische koolstof : totaal stikstof verhouding van 3 of lager.
- Renure bevat maximaal 300 mg koper per kg droge stof en maximaal 800 mg zink per kg droge stof.
- Lidstaten moet zorgdragen dat de bemesting aansluit op de behoefte van de plant om nutriëntverliezen te voorkomen.
- Lidstaten moeten ammoniakemissies tijdens de aanwending minimaliseren.
- Lidstaten moeten emissies naar de lucht voorkomen door eisen te stellen aan de opslag van Renure.