Interreg Co-funded by the European Union

North-West Europe

ReNu2Cycle

FEEDBACK on draft text for COMMISSION DELEGATED REGULATION (EU) .../... of XXX amending Regulation (EU) 2019/1009 of the European Parliament and of the Council as regards adding processed manure as a component material in EU fertilising products

Background

The EU has made huge progress in the implementation of circular economy solutions. With a new legal framework within the Circular Economy package (FPR, WFD, CAP-Farm to Fork) and a continued commitment to invest in research (H2020) and practical implementation (INTERREG) the recovery and use of nutrients from wastes and residues is stimulated and facilitated.

The NWE Interreg project ReNu2Cycle aims to encourage the use of recovered nutrients on farms in Europe in the form of recycling-derived fertilisers. We welcome the continuous work on the inclusion of new materials in the FPR. With this feedback we want to contribute to the improvement of the text for the inclusion of processed manure as a CMC 10 component in the FRR.

Ad 1. Unclear description of the component material

Processed manure that has reached an end point according to ...

Processed manure is a term that is defined differently in several relevant pieces of legislation dealing with manure application. In the EU regulations on Animal by-products , processing is understood to be hygienisation process, whereas in the Nitrate directive it is understood to be any manure treatment.

- **The Animal by-product regulation** EC 1069/2009 art 3.20defines manure as:
  'Manure *'means any excrement and/or urine of farmed animals other than farmed fish, with or without litter'* .
  The regulation further distinguishes processed manure and manure-derived products:
  Processed manure: manure treated with one of the sanitation methods mentioned in the Annex IV of EU 142/2011.
  Manure-derived product: products obtained from one or more treatments, transformations or steps of processing of manure;

- **Nitrate Directive** art. 2.g defines manure in a different way
  'livestock manure': *'means waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, even in processed form;*
  In this definition, processed manure means any product that is obtained from manure, including nutrients and carbon recovered from the manure, even in a pure mineral form.

We suggest that this is clearly explained in the FAQ document on the FPR.

Ad 1.1 stability criteria

We **do not agree with the imposition of a strict stability criterion for organic fertilisers**. In the draft JRC report (Huygens, 2023) it is stated that "Organic fertilisers are generally considered stable when they have a low rate or degree of organic matter decomposition, and when they are able to maintain their nutrient content over time". Stability is however a desired property of organic soil improvers, as a stable organic matter content contributes to soil quality.

However, **there is no argumentation why this should be a desired property for fertilisers**. Fertilisers are aimed to supply nutrients to plants. For this function, it is not necessary to have a low rate of decomposition or to maintain nutrients over time. In contrast, stabilising may reduce the N fertilising value, resulting in an increased need of mineral fertilisers.I

The proposed stability criterion - *oxygen uptake rate of less than 25 mmol O_2/kg organic matter/h* – is aligned to the one for compost. We do not dispute that it is a useful criterion for compost that is used for soil improvement. These are however already covered under CMC 3.

In order to meet this criterion, the processed manure would have to be composted. During the composition process, a significant amount of the N and organic carbon will be converted and evaporated. This will result in product with a lower N content compared to the processed manure, which is undesirable for use as a fertiliser.

An additional argument for the stabilisation is given as that stability 'also refers to absence of viable weed seeds and pathogens, whereas the hygienisation method for processed manure "may only reduce" the survival of weed seeds. However, a comparison between the presence of viable weed seeds in processed manure and stabilised (i.e. composted) processed manure is not presented and the difference is not demonstrated. As the hygienisation method is targeted at the reduction of pathogens, we would assume that this would be sufficient for plant pathogens as well.

Another argument in the JRC report is stability of organic fertilisers also refers to the decomposition of potential phytotoxic organic substances (small organic acids such as phenolic acids, humic acids). No references are given for the supposedly potential phytotoxic effects of these substances. The potential phytotoxic organic substances are present in unprocessed manure as well. Unprocessed manure is a well-established and highly valued organic fertiliser in agriculture. The JRC report does not demonstrate the need for decomposition of these substances prior to the use as fertiliser. We would also like to point out that humic acids are commonly used as a soil improver and biostimulant.

We also note that this criterion is not set for CMC 2 plants, which has a higher risk of weeds, or for other organic by-products CMC 6 agro-food byproducts.

The **oxygen uptake rate is not a method that can be applied to liquid materials, thereby effectively excluding the liquid fraction of processed manure** as a component material.

Ad 1.4 Add filtering

In addition to the treatments mentioned under 1.4 filtering is commonly used in manure treatment processes. We would propose to **add filtering to the allowed treatments**.

Ad 1.5 a. Recovered nutrients

We would suggest to **replace the mention of 'ammonium' by 'nitrogen'**. Not all recovered nitrogen will be in the form of ammonium.

In addition, we would prefer to **replace the mentioning of nitrogen and phosphorus by the more general mention of 'nutrients'.** Manure does not only contain nitrogen and phosphorus but also potassium, magnesium and other nutrients. These will be recovered to some extend by the same recovery processes.

We would strongly argue that the text should allow innovations for the recovery of nutrients that may not be common yet. The content of micronutrients copper and zinc can be relatively high which is not always preferable from an agronomical point of view. Techniques to recover these micronutrients should not disqualify the processed manure from CMC 10.

Ad 1.5 b. Status of recovered nutrients and carbon

We would like to have a **explicit clarification on the status of the recovered nutrients and carbon.**

- Are these recovered nutrients also included in the definition of processed manure?
- If not will they be covered by future entries in CMC 10?
- Are the recovered nutrients and carbon considered as manure under the FPR?
- If not covered by the CMC 10 and not considered manure, how to account for under the Nitrate Directive?

This is in particular of importance given the different definitions of manure in the pieces of legislation that regulate the use of manure (see under ad 1.).

These differences in terminology are very confusing, especially -but certainly not only- for stakeholders that are not very familiar with the different pieces of legislation and the juridical terms and phrases used.

We understand that it might not be feasible to align the different pieces of legislation on the short term, especially when covered by the different DG of the EC. Therefore we suggest that the questions should be covered in the FAQ document.

Ad 1.8 'Protection against precipitation and direct sunlight' not effective

Manure can be released in the environment as spills in cases subject to environmentally unsound storage practices. Therefore a requirement is added that '*the processed manure should be stored in a way that protects it against precipitation and direct sunlight*

As already brought forward by the ESPP feedback paper, this text is not targeted to the intended goals. We support the suggestion from the ESPP: *"Processed manure must be stored and transported with precautions to limit pollution to air (in particular ammonia emissions), losses to water (leaching), odours and accidental spillages, in particular by protection against precipitation, direct sunlight."*

In addition, we noticed that the requirements of the EU 2023/1605 also contain packaging requirements. Processed manure which has reached the end point must fulfil the requirements of Chapter I, Section 2, points (a), (b), (d) and (e), of Annex XI to Regulation (EU) No 142/2011.

The point (e) reads:

(e) They must be stored in such a way that once processed contamination or secondary infection and dampness is minimised. They must therefore be stored in:

(i) well-sealed and insulated silos or properly constructed storage sheds; or

(ii) properly sealed packs, such as plastic bags or 'big bags';

In order to avoid confusion , **we suggest the following text:**

Processed manure must be stored and transported in a way that fulfills the requirements of Chapter I, Section 2, points (a), (b), (d) and (e), of Annex XI to Regulation (EU) No 142/2011with precautions to limit pollution to air (in particular ammonia emissions), losses to water (leaching), odours and accidental spillages, in particular by protection against precipitation, direct sunlight."

Ad 1.8 Processed manure that 'loses' the end point

How to deal with the processed manure that will not be used as component of EU fertilising product? Under the point 1.8, the processed manure needs to be incorporated in an EU fertilising product within 36 months. However, the End point is conditional upon the use of the processed manure as a component for EU fertilising products (article 1 of EU 2023/1605).

Article 1
Subject matter

This Regulation determines end points in the manufacturing chain for organic fertilisers and soil improvers manufactured in the Union beyond which they are no longer subject to the requirements laid down in Regulation (EC) No 1069/2009, *provided that they are used as component materials* in EU fertilising products in accordance with Regulation (EU) 2019/1009.

This would mean that a processed manure with an end point status will lose this status 36 months after treatment if the EU DoC is not signed for the EU fertilising product in which it is used as a component. Likewise, the end point status will also be lost if the EU DoC is not signed for any other reason or the processed manure is not used in an EU fertilising product for other reasons.

However, the regulation EU 2023/1605 nor the current draft text for processed manure to be used as a component indicate the legal status of such materials. Producers of processed manure and EU fertilising products that intend to use processed manure will need to know this.

- Does the processed manure fall back under the scope of the Animal by-product regulations EC 1069/2009
- If so, do all the requirements on registration and approval apply?
- At which point does the product lose the end point status? Are producers held liable for the period that the processed manure was treated as an end point product, if the condition to be used in EU fertilising product cannot be met?

The questions to these answers will need to be clear to producers, as uncertainties will influence the willingness to incorporate the processed manures. Also, if this is not regulated at the EU level the national authorities might take their own actions, leading to an uneven level playing field between the different EU countries.

Ad part I of Annex III 7c Missing: declaration of total amount of N coming from manure.

There is a need for alignment with the Nitrate directive: Farmers in Nitrate Vulnerable zones (as defined by the Nitrate Directive) **need to know the total amount of N** coming from the processed manure.

In the FPR, only the amount **N-organic** needs to be declared as derived from animal origin or manure, and only for the fertilisers under PFC 1A and PFC1B.

> (i) nitrogen (N):
>
> — total nitrogen (N);
>
> — minimum amount of organic nitrogen (N_{org}), followed by a description of the origin of the organic matter used;
>
> — nitrogen in the form of ammoniacal nitrogen;

This provision should be broadened to include a statement of all N that is present in the product as manure, in such a way that farmers can comply with the requirements of the Nitrate Directive.

➔ Total nitrogen, of which [ ] % from livestock manure.

In addition, **this provision should be included for all PFCs** that might contain manure-derived products. Given the broad interpretation of the definition of livestock manure in the Nitrate Directive (see under Ad 1.5 b.), this would apply to most PFC with the exception of PFC 5.

We would like to point out that this would **also apply to the N in CMC 3 compost and CMC 5 digestate** component materials for which manures have been used as a feedstock (EU 2023/1605 art 2.b-c).

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ReNu2Cycle

Novafert

FERTIMANURE

NWE Interreg project ReNu2Cycle.
Drafted Dr. ir. L. van Schöll, NMI, Laura.vanscholl@nmi-agro.nl
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