

To: Claudia OLAZABAL Head of Unit DG Environment – Biodiversity - Land Use & Management Copy: Johanna Bernsel, Theodora Nikolakopoulou, DG GROW Angelo Innamorati, DG AGRI Hans Saveyn, Dries Huygens, JRC

20<sup>th</sup> October 2020

# **Object: Mineral fertilisers recovered from manure**

Your reference: ENV.D.1/GBM/FK of 18/1/2022 ENV D01 ARES env-d01-ares@ec.europa.eu

Dear Ms Olazabal,

Thankyou for your rapid, helpful and detailed reply to our letters concerning "mineral fertilisers" (as per the Fertilising Products Regulation 2019/1009 definition) recovered from manure processing.

We would like to clarify our position concerning the several aspects of your reply:

## 1) RENURE criteria

We engaged closely with the SafeManure process (now rebranded "RENURE"). The outcome RENURE criteria, as proposed by JRC, are not relevant to the object of this letter. This letter concerns only products which are "mineral fertilisers":

- The RENURE criteria cover a very wide range of organic materials derived from manures (organic-carbon based). Indeed, to our understanding, the RENURE criteria would authorise certain unprocessed manures, various scarcely-processed manures, and other similar materials. For example, it seems that 90% raw manure spiked with 10% urea would pass the RENURE specifications (such mixing is excluded in the criteria for this reason, but would be undetectable and impossible to control in practice), as would certain raw manures and most liquid fractions of manures.
- On the other hand, this letter concerns only "mineral fertilisers" (FPR definition: Annex I nutrient and safety criteria, Annex II component material quality specifications, and also Annex III part II \$4 which requires <1% C<sub>-org</sub>/DM), when recovered from manures, from manure digestates, manure offgases, etc.

In particular, you write "As regards the suggested criteria for considering processed manure as mineral fertilizer, the JRC found that, although featuring very good characteristics, the products obtained from available technologies were not fully comparable to a chemical fertilizer in most cases."

We fully support your statement as regards the RENURE criteria. We fully agree that most RENURE materials (that is, organic-carbon-rich manure-derived materials) should in NVZs remain subject to specific management and use constraints (additional to those applicable to mineral fertilisers). We note that RENURE suggests that these should be fixed regionally for each NVZ by each Member State and should cover "timing and application rates ..., good agro-environmental practices ...ammonium emissions on field ... and emissions to air resulting from storage" (see ESPP's summary of the published RENURE criteria in ESPP eNews n°047 and ESPP input to the SafeManure discussions in 2019).

However, our letter does not address such RENURE materials. Our letter concerns only recycled "mineral fertiliser" products which are comparable to chemical fertilisers.



### 2) Nitrates Directive and additional risks of nitrate losses

You write "Many recycled materials feature higher ammonia emissions, so they cannot be used without precautions in NVZs" and "It is therefore essential to ensure that no additional risk in terms of nutrient pollution into air, soil or water is posed by the use of processed manure".

ESPP fully supports the objective of ensuring no additional risk of nutrient losses or ammonia emissions in NVZs.

These issues may concern various materials covered by RENURE materials but not recovered "mineral fertilisers" (FPR definition), which have <1% organic carbon and are comparable to virgin mineral fertilisers.

#### 3) Constraints to placing on the market and resulting obstacle to the nutrient circular economy

As you remind, the Nitrates Directive results in different treatment for manure-derived nitrogen fertilisers in NVZs only (not outside NVZs), and does not prevent use in NVZs (only limits, in these areas, to 170 kgN/ha). However, this means that any product considered to be manure "*even in a processed form*" must be labelled as such and/or some other traceability system put into place to ensure differential use in NVZs, even if the product is placed on the EU market as an EC-label fertiliser (or if placed on a national market under national fertiliser regulation, in a Member State where only part of the territory is NVZ).

This places such products at a disadvantage on the market, compared to the same product recovered from e.g. municipal sewage or from food industry wastewater, and also compared to the same product manufactured from primary materials.

For example:

- Struvite precipitated from digestate could obtain the EU-label under the Fertilising Products Regulation if the digester is treating a varying mixture of crop by-products, food waste, cat 2 abattoir wastewater and manure (subject to FPR and ABP criteria), but the struvite would have to be placed on the market with a specific label and traceability "*processed manure*" in periods where some manure was going into the digestor (not in periods when only non-manure inputs were being processed in the digester).
- For ammonia solution recovered from manure digestate (as above) sold on the commodity chemical market, each lorry leaving the recovery site would have to carry a label and traceability in case the ammonia was reprocessed in the chemical industry to a fertiliser.

The same fertiliser products (struvite, ammonia solution) produced from mineral phosphate rock or Haber Bosch ammonia would not have such constraints. The recycled nutrient products would thus face an uphill playing field compared to the same virgin primary nutrient products.

#### 4) Need for clarification on when products cease to be considered "manure in a recovered form"

Are the following considered to be "manure ... in a processed form"?

- Ammonia sulphate recovered from offgas from manure storage or from air-cleaning from livestock stables (CMC15 under the EU Fertilising Products Regulation)? These are not considered to be Animal By-Products (confirmed by DG SANTE see <u>here</u>) because gases are excluded from the ABP Regulation. But are they "manure … in a processed form" ?
- Biomass resulting from use of manure as a liquid feed substrate to grow algae or duckweed (*Lemna*)? Or biomass when manure is used as a solid soil substrate to grow reeds or willow trees? Or biomass crops when manure is applied as fertiliser to the soil?
- Residuals with fertiliser value when biomass grown with manure as input, as above, is processed to produce biofuels? Or phosphate and nitrogen salts recovered from wastewater treatment at a biorefinery processing biomass produced using manure as a substrate, as above?



The current absence of clarity concerning what is and is not "manure in a processed form" leads to uncertainty for operators and for national regulators. This is an obstacle to investment in nutrient recycling.

For these reasons, we would like to request the Commission engage a process to define guidance concerning what is and what is not considered to be "manure in a processed form".

This is not related to the RENURE proposals to allow use of certain manures and processed manures under Nitrates Directive rules with regionally-specified conditions.

We would suggest that the following classes of material could be identified as not considered as "manure in a processed form":

- FPR definition "mineral fertilisers" (<1% organic carbon)
- Biomass grown using manure or processed manure as substrate or as fertiliser
- Materials recovered from manure or manure processing offgas, stable offgas

We hope that you will find these clarifications and proposals constructive, and would be happy to discuss them directly with your concerned services.

Yours sincerely

Ludwig Hermann, President.