Position Paper on the Fertiliser Regulation

Summary

EurEau welcomes the revision of the Fertiliser Regulation in the European Commission’s Circular Economy Package. This opens the door to using recovered phosphorus from sewage sludge as a component in fertiliser products. However, in the text proposed by the European Commission, there is no room for sewage sludge as a source of recyclable nutrients. In the light of this, EurEau asks for the following changes in the proposed regulation:

~ The quality criteria for fertilising products should describe the final product without limiting the input material. Sewage sludge should be removed from the exclusion list for input materials for composts and digestates.

~ CE-fertiliser rules should be imposed on production lines rather than an entire plant, providing traceability on the origin of the input materials used in each line. Separate storage of input materials must be guaranteed.

~ The regulation should not set strict technical requirements but provide requirements to define the quality of the end-product. Alternatively, legislation should allow treatment methods to be validated nationally.

Finally, EurEau strongly encourages the use of delegated acts in order to extend the list of Component Material Categories (CMCs) in the proposed Fertiliser Regulation and calls for a better defined timescale for the inclusion of additional CMCs on struvite, biochar and ash-based products. Additionally, just as the requirements for blending green gas with biogas already exist, requirements to blend recovered phosphorous with mined fertilisers would be a strong incentive for the use of recovered phosphorus.
1. First deliverable of the Circular Economy Package

EurEau welcomes the decision to revise the Fertiliser Regulation in the Circular Economy Package. Doing this opens the door to using recovered phosphorus from sewage sludge as a component of fertiliser products. Phosphorus is one of the essential nutrients for plants, animals and humans and is therefore crucial for all life on the planet. The limited availability of phosphate rock as well as Europe’s high dependency on imports made it part of the revised list of Critical Raw Materials in May 2014¹. Several Member States have already taken steps to encourage a more sustainable use of phosphorus while supporting its recycling. The proposed Fertiliser Regulation, by opening its scope to organic fertilisers, is going in the same direction.

2. Only the final product quality matters

In the European Commission’s proposed text there is no room for sewage sludge to play its role in the recycling of nutrients. Even more so, the criteria for the component material categories (CMC) n°3 (compost) and n°5 (digestates other than energy crop digestate) explicitly exclude sewage sludge as input material.

As a result of the Sewage Sludge Directive and REACH, the quality of sewage sludge has improved constantly. Results from long term measurements show that concentrations of hazardous metals in sewage sludge have drastically decreased. Similar trends can be seen with other substances indicating that regulating the control of hazardous substances at source is successful. Moreover, strict national legislation together with market pressure have led to a situation where we have a wide variety of high quality soil improvers and fertilisers which use sewage sludge as a raw material. In many cases, the quality of the sewage sludge already achieves the technical parameters listed in the annex of the proposed Fertiliser Regulation. Excluding all sewage sludge severely limits the possibility of recycling an important source of nutrients and organic matter. The progress in innovation and source control to meet these technical parameters will further improve sewage sludge quality. Moreover, excluding sewage sludge from input material for compost and digestate sends a negative signal towards the utilisation of sewage sludge and can seriously harm sustainable recycling practises by deteriorating the image of the fertilisers where sewage sludge is used as a raw material today.

EurEau calls for criteria that describe the quality of the final product without limiting the input material from which it originates. EurEau also calls for the removal of sewage sludge from the exclusion list for input material for compost and digestate.

¹ COM(2014) 297 final: On the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative.
3. Facilitate the extension of the CMC list

In the Commission’s proposal, there is no mention of recycled phosphorus such as struvite or ash-based products. However, the European Commission mandated the Joint Research Centre to work on the criteria to introduce new CMC for these products. It is clear that there is a will to enlarge the scope of CMCs. EurEau is very supportive of the possibility to add new CMCs, especially when it comes to products that can be extracted from sewage sludge or waste water to recover the valuable nutrients. With numerous research projects underway, the possibility of adding new products to the Fertiliser Regulation should be maintained and flexible mechanisms to allow for this should be put in place. This process has to be based on scientific evidence of fertiliser quality and safety and also to be easy to implement.

**EurEau strongly encourages the use of delegated acts in order to extend the list of CMCs in the proposed Fertiliser Regulation and calls for a better defined timescale for the inclusion of additional CMCs on struvite, biochar and ash-based products.**

4. Facilitate the coexistence of CE and non-CE production sites

In the proposed Fertiliser Regulation, it is explained in CMC 3 and 5, paragraph 2, that **the composting (and the anaerobic digestion) shall take place in a plant:**

- which only processes input materials referred to in paragraph 1 (of the CMC 3 and 5 descriptions), and
- where physical contacts between input and output materials shall be avoided, including during storage.

For EurEau members, this provision creates a strong risk that current facilities producing compost and digestate from sewage sludge based on national legislation will switch to only CE-fertilisers. This would create a sudden and large disruption to existing markets by refusing to use sewage sludge. Combined treatment plants where various organic waste materials are co-treated are locally important and recognised as sound solutions, especially in sparsely populated areas. Some plants have already separated treatment lines according to the input material used.

**EurEau members advocate for CE-fertiliser rules to be imposed on production lines rather than entire plants, providing traceability on the origin of the input materials used in each line. Separate storage of input materials must be guaranteed.**
5. Harmonise the technical specifications taking account of national peculiarities

The annex of the proposed Fertiliser Regulation includes a description of CMC 3, paragraph 3, it is stated: "The aerobic composting shall consist in controlled decomposition of biodegradable materials, which is predominantly aerobic and which allows the development of temperatures suitable for thermophilic bacteria as a result of biologically produced heat. All parts of each batch shall be regularly and thoroughly moved in order to ensure the correct sanitation and homogeneity of the material. During the composting process, all parts of each batch shall have one of the following temperature-time profiles:

- 65°C or more for at least 5 days,
- 60°C or more for at least 7 days, or
- 55°C or more for at least 14 days."

Furthermore, in the annex with the description of CMC 5, paragraph 3, it is stated: "The anaerobic digestion shall constitute of controlled decomposition of biodegradable materials, which is predominantly anaerobic and at temperatures suitable for mesophilic or thermophilic bacteria. All parts of each batch shall be regularly and thoroughly moved in order to ensure the correct sanitation and homogeneity of the material. During the digestion process, all parts of each batch shall have one of the following temperature-time profiles:

(a) Thermophilic anaerobic digestion at 55°C during at least 24h and a hydraulic retention time of at least 20 days;
(b) Thermophilic anaerobic digestion at 55°C with a treatment process including a pasteurisation step (70°C – 1h);
(c) Thermophilic anaerobic digestion at 55°C followed by composting in
- 65°C or more for at least 5 days,
- 60°C or more for at least 7 days, or
- 55°C or more for at least 14 days;
(d) Mesophilic anaerobic digestion at 37-40°C with a treatment process including a pasteurisation step (70°C – 1h); or
(e) Mesophilic anaerobic digestion at 37-40°C followed by composting in
- 65°C or more for at least 5 days,
- 60°C or more for at least 7 days, or
- 55°C or more for at least 14 days."

Some of these conditions are difficult to meet, especially in cold climatic zones, and the same quality requirements could be achieved with sufficient storage periods at lower temperatures. EurEau members advocate for a
regulation that does not set strict technical process requirements but provides requirements to define the quality of the end-product. Alternatively, legislation should allow treatment methods to be nationally validated.

Quality requirements

Biuret is not normally analysed in compost and digestates. EurEau does not recognise the need to add limitations to biuret in the Fertiliser Regulation. Furthermore we are not in favour of the wording “must not be present” as even extremely low concentrations would be forbidden in this case. This would not be an appropriate approach.

Limit values for the resistant parasites such as eggs of Ascaris spp. and Toxocara spp. are not common in the EU legislation for organic fertilisers. Also the JRC proposal for compost and digestate end-of-waste criteria proposes quality criteria only to E-coli and Salmonella spp. EurEau does not support adding the resistant parasites to the Fertiliser Regulation as these are criteria with very limited use at the moment.

6. Facilitate the development of recycling markets

Currently, phosphorus recovery from waste water or sewage sludge is often not economically viable and requires upfront investments. Market opportunities for recycled phosphates are essential with a view to closing the loop. The legislative framework should promote the development of cost-efficient and optimal solutions by stimulating demand for recycled phosphorus over phosphate rocks. Incentives for phosphorus recovery would focus actions on the most promising and cost-effective solutions. At the moment it is not clear what raw materials or processes are best suited.

Regulation on blending would be a strong incentive for the use of recovered phosphorus. Just as requirements for blending green gas with biogas already exist, there could also be requirements of blending recovered phosphorous with mined fertilisers.

About EurEau

EurEau is the voice of Europe’s water sector. We represent drinking and waste water service providers from 29 countries in Europe, from both the private and the public sectors. Our members are the national associations of water services in Europe. At EurEau, we bring national water professionals together to agree European water industry positions regarding the management of water quality, resource efficiency and access to water for Europe’s citizens and businesses. The
EurEau secretariat is based in Brussels, from where we coordinate the work of around 200 experts from member organisations and utilities and advocate common positions with EU decision makers.

Our members are fully committed to the continuous supply of clean water and its safe return into the water cycle. We have a role in raising awareness of threats to the water environment. With a direct employment of around 500,000 people, the European water sector makes a significant contribution to the European economy.