

Welcome ESNI Policy working group

Systemic → Nutri2Cycle → ReNu2Cycle

Policy on Bio-Based Fertilisers - BBF

ESNI 2023 Brussels, 20th September 2023
Nutri2Cycle and ReNu2Cycle

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- **FPR - Fertilising products regulation:** aims to include organic and waste-derived materials in EU fertilising products
- **EU funded research** on nutrient recycling: technologies, safety, effectivity, *regulations and policy*



Contents

I Legislative acts

REGULATIONS

- ★ Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003 ⁽¹⁾ 1

- ★ Regulation (EU) 2019/1010 of the European Parliament and of the Council of 5 June 2019 on the alignment of reporting obligations in the field of legislation related to the environment, and amending Regulations (EC) No 166/2006 and (EU) No 995/2010 of the European Parliament and of the Council, Directives 2002/49/EC, 2004/35/EC, 2007/2/EC, 2009/147/EC and 2010/63/EU of the European Parliament and of the Council, Council Regulations (EC) No 338/97 and (EC) No 2173/2005, and Council Directive 86/278/EEC ⁽¹⁾ 115

⁽¹⁾ Text with EEA relevance.

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

Fertilising Products Regulation (Regulation EU/2019/1009)

Opening up the internal EU market for BBF

Criteria on:

- quality (nutrient, organic matter, NV)
- safety (contaminants, pathogens)
- labelling
- conformity

Applies from 16 July 2022

CMC 1: Substances and mixtures, primary

CMC 2: Simple plant parts or extracts

CMC 3: Compost

CMC 4: Energy crop digestate

CMC 5: Other digestate

CMC 6: Food industry by-products

CMC 7: Micro-organisms

CMC 8: Nutrient polymer

CMC 9: Other polymers

CMC 10: Products derived from animal by-products

CMC 11: By-products

Component material categories

CMC criteria:

- Input materials and processes

where relevant:

- Sanitation requirements
- Additional thresholds for contaminants
- REACH

Applies from 16 July 2022



JRC SCIENCE FOR POLICY REPORT

Technical proposals for selected new fertilising materials under the Fertilising Products Regulation (Regulation (EU) 2019/1009)

Process and quality criteria, and assessment of environmental and market impacts for precipitated phosphate salts & derivatives, thermal oxidation materials & derivatives and pyrolysis & gasification materials

Huygens D, Saveyn HGM, Tonini D, Eder P, Delgado Sancho L

2019



STRUBIAS proposal

Including **struvite**, **biochar** and **ashes** as components for production of EU fertilising products

- Criteria on P_2O_5 , OM and contaminants, process conditions and quality control, input streams
- Applies from: 16 July 2022

CMC 12: Precipitated phosphate salts or derivatives

CMC 13: Thermal oxidation materials or derivatives

CMC 14: Pyrolysis or gasification materials

JRC SCIENCE FOR POLICY REPORT

Technical proposals for by-products and high purity materials as component materials for EU Fertilising Products

Huygens, D & Saveyn, HGM

2022



By-products and high purity materials

- Including by-products (CMC 11) and high purity waste-derived products (CMC15) as components for production of EU fertilising products
- Criteria on nutrients, contaminants, process conditions and quality control, input streams
- Applies from: 16 July 2022 (CMC 11) and pending (CMC 15)

CMC 15: High purity materials

Challenges on nutrient recycling



Waste status of the CMC materials

- Waste-derived CMC materials remain waste
→ administrative, logistic and financial burden
- De facto: Fertiliser plant becomes a waste-processing plant.
- Conformity assessment module D1 functioning not *efficiently*

→ **Certification system for CMC**

Material definitions unclear

Biowaste (*WFD art 3.4*) as input for compost and digestate (CMC 3 and 5)

- “ means biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises *and comparable waste from food processing plants* ”
 - When is residue material ‘comparable’? Important for agrifood industry by-products and residues.
 - How to qualify if not bio-waste?
- **Unambiguous definition and / or FAQ document**
- **Definitions broad enough to allow innovations**

Material definitions unclear

Sludge (*Sewage sludge Dir art 2.a*) excluded from compost and digestate (CMC 3 and 5)

- (i) residual sludge from sewage plants treating domestic or urban waste waters and from *other sewage plants treating waste waters of a composition similar to domestic and urban waste waters*;
 - (ii) residual sludge from septic tanks and other similar installations for the treatment of sewage;
 - (iii) *residual sludge from sewage plants other than those referred to in (i) and (ii)*;
- Does this include sludge from other types of waste water treatment (food processing)?
 - Would this include raw process sludge from food processing industry (flotation or settling)?

→ **Unambiguous definition of sludge, sewage sludge, and or FAQ document**

Animal By-Products - ABP

EU 2023/ 1605 NEW

- Compost, digestate and ashes from ABP (cat 2 and 3) can be used as CMC 3-5 or 13 if reached end-point
- Other ABP end-point products, including processes manure, can be allowed as CMC 10 products (in prep)
- No timeline for CMC 12 (struvite) and CMC 14 (biochar) derived from ABP.

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	REGULATIONS	
	* Commission Delegated Regulation (EU) 2023/1605 of 22 May 2023 supplementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council as regards the determination of end points in the manufacturing chain of certain organic fertilisers and soil improvers ⁽¹⁾	1

Legal status of ABP end-point products?

- **Ashes derived from ABP cat 2 and 3:** now considered waste in most countries, not ABP.
→ How will ABP end-point affect this?
- ‘Establishments or plants’ **need approval as fertiliser plant for manufacturing of organic fertiliser or soil improvers (art 24.1.f)**. However, compost and digestate plants are approved for transformation of ABP and or derived products into biogas or compost 24.1.g.
→ New approvals from authorities needed?
- **Compost and digestate from cat 2 and 3 material:** all cat 2 and 3 materials?
- Wording and cross-referencing with other pieces of legislation is confusing and unclear.
- → **FAQ document is urgently needed.**

Definitions differ

ABP-R: Organic fertilisers

3.22. 'organic fertiliser' and 'soil improver' means materials of animal origin used to maintain or improve plant nutrition and the physical and chemical properties and biological activities of soils, either separately or together; they may include manure, non-mineralised guano, digestive tract content, compost and digestion residues;

FPR:

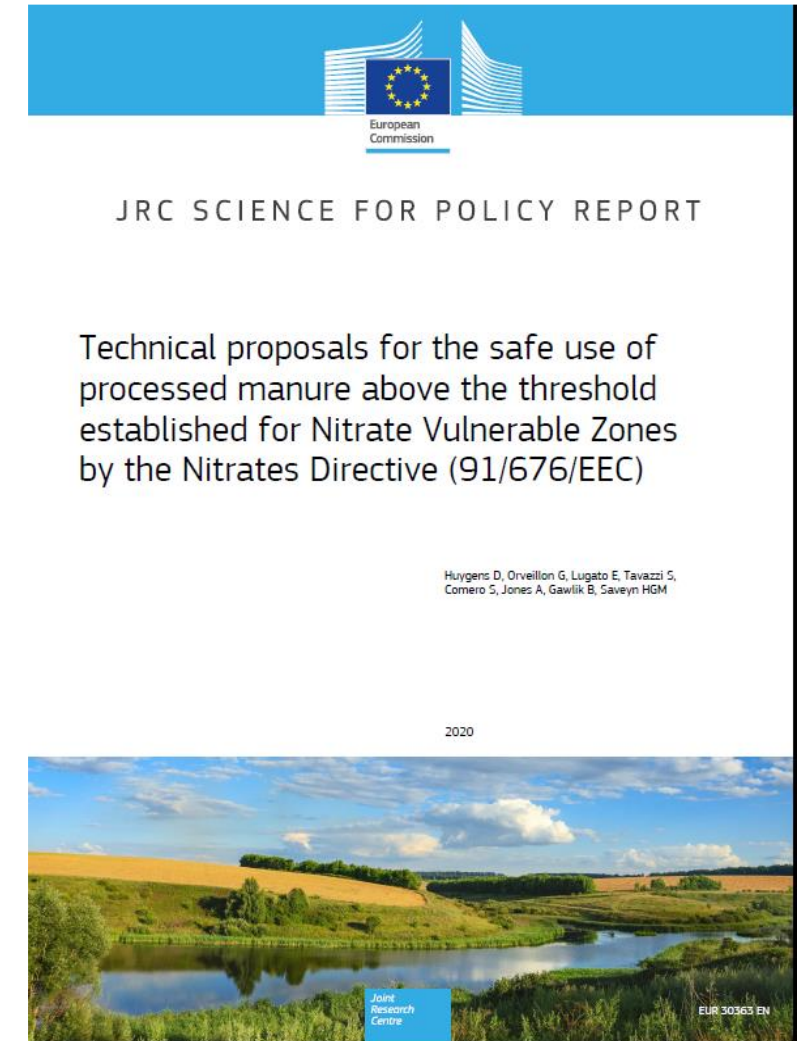
Organic fertiliser is a product the function of which is to provide nutrients to plants or mushrooms, and which contains organic carbon and nutrients of solely biological origin.

→ Coherent definitions in different pieces of legislation

→ FAQ documents

RENURE implementation

- *Any nitrogen containing substance fully or partially derived from livestock manure through processing under controlled conditions” and meeting certain criteria*
- “End-of-manure” status
- RENURE safe to use above 170 kg N limit of the Nitrate Directive (JRC report, data from EU research projects)
- **Implementation of the criteria for RENURE products**
- Green washing? manure is already valued fertiliser.
- Total amount manure produced in surplus areas is set to limit (NL, D).
- We need farmer confidence in legislation!



Legal status ammonium salts

- Ammonium salts from stripping scrubbing manure treatment under scope FPR as CMC 15, may be used in EU fertilisers (DG GROW).
- Not considered as ABP or manure under scope ABP-R (DG-Sante).
- Unclear if ammonium salts from stripping manure and scrubbing of the off-gasses are interpreted as 'manure in processes form' under Nitrate directive (DG ENVIR).
- Ammonium salts are very pure chemicals, cannot be distinguished from synthetic ammonium salts.
- **Joint position from EU research projects on the need for need for transparency from EC, especially from DG ENVIR**

Definitions manure differ

Manure

Nitrate Directive Art 2.g.

'livestock **manure**': means waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, *even in processed form*;

→ **Coherent definitions in different pieces of legislation needed**

Manure

ABP-R art 3.20.

- **Manure** 'means any excrement and/or urine of farmed animals other than farmed fish, with or without litter'
- *Processed manure*: manure treated with one of the sanitation methods mentioned in the Annex IV
- *Manure-derived product*: products obtained from one or more treatments, transformations or steps of processing of manure;

National implementation FPR

- **Late implementation of FPR at national level**
- National authorities not prepared, inconsistent implementation and controls
- No points of info for producers

Most RDF traded at national level

FPR opens EU market, but:

Awareness that most BBF will continue to be traded at national level!!

- For SME the conformity assessment Module D1 not (financially) feasible.
- Not all fertiliser products have EU market perspective
- New products: insufficient data to substantiate request for FPR
- For compost, digestates and most ABP derived products: sanitation following authorised national methods.

Differences between countries

- BBF treated inconsistently in the national legislations
- Criteria WFD on end-of waste status not implemented, inconsistency in interpretation for by-products
- Lack of transparency on regulations in different EU countries.
 - Database on the legislative framework on fertilising products at both the EU and national level
 - Database on the implementation of the WFD at national level

More background on policy views

On the Biorefine Cluster website:

- ReNu2Farm Report 'Legislation on recycling-derived fertilising products: changes, chances and challenges' (2023)
- All outcomes and reports from EU research groups on nutrient recycling
- Policy briefs

- Join the Policy working group of the ESNi nutrient recycling community!

Q&A

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