Revision of the EU Fertilisers Regulation (underway): opportunities and issues of a new legal framework

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EU Fertiliser Regulation: documents

- Summary of proposed Regulation, in ESPP’s SCOPE Newsletter n° 120

- Complete EU Commission proposed text March 2016

- ESPP comments on proposal, May 2016
- ESPP proposals for criteria for struvite, biochars, ashes
- Other updates and other regulatory information (e.g. REACH and recovered substances)
  [http://www.phosphorusplatform.eu/regulatory](http://www.phosphorusplatform.eu/regulatory)

- All stakeholder comments published by EU

- Decision process status and amendment proposals and reports:
Ambitious and positive objectives

**Circular economy**
- Open EU market to recycled nutrients and recycled organic carbon
- Facilitate sale of recycling technologies across Europe

**Enable innovation**
- Replace limitative list of products with open criteria which do not specify process
- More rapid adaptation to new technologies (*but only if Parliament & Council do not remove possibility for Commission to modify Annex II – list of CMCs*)

**Regulatory coherence**
- New Fertiliser Regulation provides End-of-Waste status
- Coherence with REACH, Animal By-Products Regulation

**Environmental and health safety**
- Ensure that products placed on EU market are safe:
  - limits for contaminants, pathogens
  - blending safety (explosive risk)
Current status

• Proposed text published March 2016 (EU Commission)
• Council (Member States) discussion underway → now is time to talk to your national government
• EU Parliament discussion starting:
  Commissions
  - IMCO (lead) = internal market
  - AGRI = agriculture
  - ENVI = environment
    → 17 rapporteurs and shadow rapporteurs of whom zero from Nordic countries
• Finalisation and publication ... 2018 ?
A completely new regulatory framework

Current EU Fertiliser Regulation 2003/2003:
• Limitative list of specified mineral fertiliser chemicals

Proposed revision
• Covers organic and mineral fertilisers, soil improvers, growing media, liming materials, biostimulants, ...
• No list of chemical fertilisers replaced by quality criteria (PFCs): nutrient content, contaminants
• For waste-or by-product- derived products: list of eligible recovered materials (CFCs)
• Inclusion in FRs gives End-of-Waste status
How it will work?

- **Single market:**
  a product validated under the new FR ("EU fertiliser") can be placed on the market in any EU country

- **National fertilisers:**
  Member States will continue to be able to authorise ‘national fertilisers’ – but such products will turn back into a waste if exported to another Member State (unless that State applies Mutual Recognition?)

Example: France will be able to maintain (in France) its current End-of-Waste criteria for composts (which allow use of sewage biosolids)
**How it will work?**

To be placed on the EU market, a product must:

1) **Be on the limitative list of specified CMCs** (component category material, Annex II)
2) **Comply with criteria for a PFC** (product function category, Annex I)
3) **Comply with labelling requirements** (Annex III)
4) **Comply with monitoring obligations** (Annex IV)
   - note: this has significant cost implications
What are the CMCs?

Component Category Materials, Annex II

• Current CMC list is:
  - virgin materials (not containing or derived from wastes or by-products)
  - composts – with specified input materials, processing criteria
  - digestates – with specified input materials, processing criteria
  - mechanically processed plant materials
  - some food industry by-products – but currently only lime, sugar molasses, vinasse
  - certain animal by-products (ABPs) - but list is empty
    subject to respecting ABP Regulation end-points (needs clarification)
  - certain micro-organisms, nutrient polymers, additives ...

• Discussion is already underway to add new CMCs
  - addition to Annex II after adoption of the new Regulation
  - STRUBIAS JRC work group: struvite, biochars, ashes
  - others maybe later
What are the PFCs?

Product Function Categories, Annex I

- Fertilisers:
  - organic, organo-mineral, inorganic
  - solid or liquid
- Soil improvers
  - organic, inorganic
- Growing media
- Liming materials, Additives, Biostimulants
- Blends (of the above)

For each PFC, quality and safety criteria are specified

- Nutrient content
- Organic carbon content
- Contaminant limits
Political issues

Cadmium

- Commission proposal (initial text):
  - 60 mg Cd/kgP$_2$O$_5$ on publication, reducing to 20 mg Cd/kgP$_2$O$_5$ after 12 years

Consumer safety and confidence in recycled fertilisers

- Sewage sludge excluded (not in input materials lists for composts and digestates)
- Pathogens – Council Presidency propose to add additional pathogen testing beyond ABP Regulation requirements → cost to recyclers

COPA COGECA concerns about costs to farmers

- Cadmium limits will push up fertiliser price?
- Recycled fertilisers entering market will push up price of mineral fertilisers?
- Recycled fertilisers on market will make more difficult manure disposal (Nitrates Directive spreading limits)
ESPP proposals

Traceability

• ESPP proposes to add that the Commission should develop within 3 years traceability and labelling for any product susceptible to contain organics (= not if incinerated) from
  - sewage sludge
  - manures
  - household food wastes derived organics

• Refer to art. 6(5) - 6(7) and ‘Whereas’ (29) which require to specify “batch or serial number ...” but which target only market surveillance

• Could be coherent with Annex IV Conformity Assessment

• No contradiction to internal market / CE mark
ESPP proposals

Wording changes

• Clarify text, avoid ambiguities, ensure operability
  - clarify definition of “mechanically processed”
  - ambiguity between processed plant parts / food industry by-products
  - specify that one CMC can be used as input to another CMC (not only blending)
  - avoid “double sanitisation” of manure
    (before input, in composting or anaerobic digestion process)

• Positive definition of “inorganic” (or “mineral”) fertiliser
  - maximum organic carbon content

• Criteria under which new CMCs can be added (art. 42.1)
  - “significant trade”, contaminant limits should apply to the CMC (after specified production process) not to input materials
Adding new CMCs

**STRUBIAS**

- ESPP proposed to the Commission to already engage definition of “CMC criteria”, during the Fertiliser Regulation regulatory process, for
  - recovered struvite
  - biochars
  - ashes
- Expert Group established by DG GROW *(STRUBIAS, ESPP is member)* to support development by JRC of:
  - impact assessment: market? agronomic value ?
  - criteria: input materials, process specifications, product quality, contaminants
- Work underway
- Data request from JRC on these products:
  - deadline 15\textsuperscript{th} November 2016 - send to JRC-IPTS-FERTILISERS@ec.europa.eu
Ashes as a possible new CMC

Currently being discussed in STRUBIAS JRC working group

• Meat and Bone Meal Ash, chicken manure combustion ash:
  - are good fertiliser products if processed appropriately:
    plant available P, & K, low contaminants
  - hundreds of thousand tonnes already sold as fertilisers
    → a new CMC could cover these specific ashes?

• Sewage sludge incineration ash is generally not a good fertiliser
  - P is not plant available, significant heavy metal contaminants
  - but can be a good input material to a variety of processes which convert to
    fertiliser and remove contaminants
  - not sensible to have a CMC for each such process
    → define a CMC which accepts such ash as input material
    and specifies that contaminants must be removed
    (dilution is banned by art. 7(4) of the Waste Framework Directive)

Send data to JRC by 15/11/2016 at:  JRC-IPTS-FERTILISERS@ec.europa.eu
**Struvite as a possible new CMC**

*Currently being discussed in STRUBIAS JRC working group*

- Would be precedent of material susceptible to contain organics from sewage
  - pharmaceuticals, pathogens
- Classification (PFC) as “inorganic” (“mineral”) fertiliser
  - will depend on organic carbon content
- Need for data to support JRC impact assessment:
  - market
  - contaminants
  - fertiliser value

*Send data to JRC by 15/11/2016 at: JRC-IPTS-FERTILISERS@ec.europa.eu*
Adding new CMCs

Other possible new CMCs to request?

- Recovered “mineral” nitrogen fertilisers
  - ammonium salts from ammonia gas stripping
  - mineral concentrates (from reverse osmosis / membrane separation)
- Other inorganic phosphate precipitates
  - such as K-struvite, brushite ...
- Dried / pelletised animal manures (see also CMC11 animal by products)
- Products derived from sewage biosolids
- Paper industry pulps and sludges
- Drinking water treatment calcium carbonate

ESPP also working on proposal for list of acceptable Animal By-Products (CFC11) and sanitisation / process conditions
ESPP: a coalition in action

- **ESPP brings together industry, R&D, authorities, stakeholders**
  water & waste industries, mineral and organic fertilisers, chemicals, P-recycling technology suppliers, national & regional governments, knowledge institutes ...

- **Member EU Fertiliser Working Group, STRUBIAS JRC expert group, EIP-AGRI Focus Group on Recycled Nutrients ...**

- **ESPP is proposing, with partner networks:**
  - wording amendments to Fertiliser Regulation
  - list of additional CMC materials (beyond STRUBIAS)
  - table of Animal By-Products for fertiliser inputs (CMC11)
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