

ESPP comments to DG GROW **on the FAQ proposals to the FEG of 22-23 November 2021**

Annex I

Q2.1 – concerning impurities in CMCs 2-9

We suggest to modify “**high significant** level of plastics in CMC2. The current wording suggests that plastics are tolerable in CMC2 at non-trace levels. Our understanding of the discussions at the FEG 22-3 November was that, on the contrary, inputs such as garden and park waste, susceptible to contain significant plastic impurities, would not be acceptable in CMC2. This is coherent in that the plastics deteriorate the agronomic value.

Q2.2 – concerning “waste” in CMC2

We welcome the clarification that wastes and by-products are not excluded from CMC2, in order to avoid excluding materials such as tree bark generated in forestry timber harvesting/production, which might be classified as a waste in one MS, a by-product in another and a product in third.

For clarity, we suggest to add to the **question title** “Can be waste or by-product”. This is included in the text, but for clarity (including in the FAQ table of contents) should be added to the question title.

However, we understand the concern expressed by EBA that materials such as **park and garden “green wastes” should not be included**. This could be achieved by indicating in the FAQ that inputs are not allowed (in CMC2) if materials other than plant materials can be reasonably expected to be present, and by specifically citing as an example (of this exclusion) green waste collected from parks and/or gardens, which is (because of its origin) susceptible to contain foreign objects such as litter, discarded growing media or pots from gardeners, etc. This would be coherent with the FAQ on contaminants (in non REACH materials) in that the presence of plastic or other litter in collected green wastes could impact agronomic value and safety.

We suggest also to add the example of **plant materials collected from nature and which have waste status, e.g. floating plants removed from a canal, algae filtered from eutrophic waters, seaweed collected to ‘clean’ beaches for tourism**. The FAQ could indicate that such plant materials, subject to the mechanical processing specifications of CMC2, could be considered CMC2 despite having regulatory waste status (depending on national regulation) if they are expected because of harvesting conditions and process to contain negligible contaminants (that is, not significant contamination with litter, plastics, floating debris)

An alternative approach, which would perhaps offer more long-term legal certainty, would be to amend the text of Annex II CMC2 to specify that if CMC2 does contain any plant material classified as waste (or which has been waste and achieved National End-of-Waste) then it should be subject to Conformity Assessment D1. This would respect the spirit of the Recital (29) of the FPR amendment Delegated Regulation (EU) 2021/1768 of 23 June 2021 which says “*It is appropriate to apply a strict conformity assessment procedure whenever an EU fertilising product contains component materials deriving from waste, irrespective of its PFC*”. Whereas, at present, it is our understanding that this Recital does not have legal force for CMC2.

We note that this FAQ should be cross-referenced to the existing FAQ 8.12 (seaweeds), cf. ESPP email of 13/1/2020. This existing FAQ indicates that “*Seaweed and seaweed extracts may fall under the scope of CMC 2 ... In case the seaweed used for the alkaline extraction is a waste, then the extract is also a waste (unless it has got national End-of-Waste status) and thus it is excluded from the scope of*

CMC 1.” To ensure coherence, this should be clarified to note that seaweed with “waste” status (e.g. collected during beach cleaning, depending on national classification status) could be included in CMC2 only under the conditions indicated above (no expected foreign matter).

Q2.4 – definitions of “sludges”

We do not understand why COM appears to suggest that the definition in the Sludge Directive is not “transferable” to the FPR. We would suggest that the definition in the Sludge Directive defines “sewage sludge” and that this definition could be considered applicable as such to the FPR – but for sewage sludge only, not for industrial or dredging sludge. Maybe this is not deliberate and the wording should be revised.

In the discussion of ‘Industrial sludge’, it is indicated “*covers the residual sludge from sewage plants treating industrial waste water ...*”. The word ‘sewage’ should here be deleted. ‘Sewage’ is generally defined (to our understanding) to mean wastewater which is transported in “sewers” (that is wastewater transport pipes, generally installed by municipalities), whereas industrial sludge will (generally) result from treatment at the industrial site, that is not transported by sewer. Removing the word “sewage” here will also reduce confusion between municipal and industrial sludge.

The explanation concerning the rejected amendment is not clear. It can be currently read as suggesting that COM unilaterally rejected Parliament’s voted amendment. Maybe it should say “was rejected in co-decision” ?

To summarise, we suggest to conclude that “Sewage sludge” is as defined in the Sewage Directive and that “Industrial” and “Dredging” sludges are respectively residual sludge from treatment of wastewater treatment at any industry or other processing plant (other than sewage treatment works), or any material from dredging.

Annex II

Q1.1 – concerning nutrients of “solely biological origin”

We suggest to add, as an example, ammonium salts recovered from digestate, and to specify whether or not this can be considered to be covered by “solely of biological origin”.

In this case, it can be considered that the ammonia has been formed by living organisms (by bacteria in the digester which metabolise organic nitrogen compounds in biological materials input into the digester).

The ammonia therefore appears to be covered by the last phrase of the current draft FAQ: “A metabolite produced by a micro-organism ...”.

However, it has been broken down to a simple chemical substance (NH₄) where the link with the organism is lost, and is presumably therefore NOT be considered to be covered by “solely of biological origin” under the currently worded FAQ.

Q1.2 – phosphorus solubility

We suggest to specifically reference to Annex III, Part II, (PFC Fertiliser) point 4(b).

Q2.1 – blue-green algae

The phrase “It is nevertheless possible to cover certain extracts ...” should be clarified. We suggest to specify “in CMC1” and to delete “certain” because any extract can be covered by CMC1 if it meets the general CMC1 requirements of non-waste, non-by-product and REACH registration.

More fundamentally, see the discussion below of plant materials in CMC1.

New question – plant materials in CMC1

The proposed FAQ answer 2.1 suggests that blue-green algae are excluded from CMC1, unless processed to e.g. an extract. If this is correct, then any unprocessed plant material is also excluded from CMC1.

We believe that this was probably the intention of the Commission and/or the co-regulators, at least at some stage of the FRP preparation, because otherwise CMC2 would have no *raison d'être*, nor would CMC7.

We suggest that this be clarified and justified in a specific FAQ, separate from the blue-green algae FAQ.

It is our understanding that COM considers that all living or dead organisms as such, parts thereof as such, or mechanically processed, are excluded from CMC1. We suggest that this can be justified as follows:

- CMC1 point 1 specifies that CMC1 includes only “substances and mixtures”. No material can thus be included in CMC1 if it is not a substance or mixture.
- The definitions of “substances” and “mixtures” for the FPR are taken to be those of REACH. REACH defines substances and mixtures in art. 3.1 and 3.2 (definitions)
- The ECHA REACH Guidance Document for application of Annex V specifies that “*whole living or unprocessed dead organisms (e.g. yeast (see Attachment 2), freeze-dried bacteria) or parts thereof (e.g. body parts, blood, branches, leaves, flowers etc.) are not considered as substances, preparations or articles in the sense of REACH and are therefore outside of the scope of REACH.*” (<https://echa.europa.eu/guidance-documents/guidance-on-reach> “Guidance for Annex V” version 1.1 November 2012, page 19) and details which processes are taken into account. We suggest to refer to this specific text and link in the FAQ.

We suggest to add that, for the purposes of the FPR CMC1 the following (non exhaustive list of examples) are not considered as dead organisms or parts thereof and are therefore potentially eligible for CMC1, subject to the specifications of CMC1, in particular the exclusions point 1 and the REACH registration obligation:

- Chemical extracts from plants or micro-organisms – see the ECHA REACH guidance document above discussion of yeast (excluded from CMC1) and yeast extract (potentially eligible for CMC1)
- Materials and chemicals contained in or derived from petroleum or other materials of biological origin which are fossilized or embedded in geological formations.

Q. 3.2 – declaration of nutrients in biostimulants

The answer “NO” should be modified to “NO – except for P and N in specific cases, see below”.

FAQ already published online <https://ec.europa.eu/docsroom/documents/46391>

i) Q1.5 FPR and Organic Farming Regulation

This FAQ needs updating. The FAQ currently indicates that Annex I of 889/2008 refers to 2003/2003. This has now been updated by 2021/1165 which refers to 2019/1009.

ii) Q1.7 FPR and Nitrates Directive

The current FAQ is very clear in stating that the FPR does not modify implementation of Nitrates Directive rules.

However, it would be useful to include some indication as to how the purchaser of an EU Fertilising Product can ensure respect of the Nitrates Directive.

As we understand it, in many fields covered by Nitrates Directive Action Plans, the farmer must respect both of two different N application limits (as well as other specific local Action Plan rules on timing of application, etc)

- A maximum total N application rate (maybe 250 kgN/ha, depending on local rules, crop etc)
- As part of this total, a maximum 170 kgN/ha for all nitrogen originating from manure or processed manure

It would be helpful in this FAQ 7.1 to specify where are specified in Annex III Labelling information on total N and on manure-origin N, and to the Labelling Guidance document paragraphs which detail these.

iii) Q7.1 What is the function of an EU fertilising product?

We suggest to modify the first line to say “Any EU fertilising product ~~may~~ **must** belong to one of the product function categories ...”.

iv) Q7.3 and Q7.6 – Blends / materials belonging to more than one PFC

For clarity we suggest that Q7.3 refers on to Q7.6. Preferably move Q7.6 to immediately after Q7.3 ?

Also Q7.6 should state that a “Blend” is PFC7.

See ESPP comments of 1/12/2020.

v) Q8.2 labelling of % content of CMCs in a product

As already suggested (1/12/2020), we suggest that this FAQ could be misleading at present, in that it seems to suggest (albeit this is not exactly what it says) that there are no obligations whatsoever concerning labelling of which CMCs are present in a final product. We propose to add a phrase something like:

“This is independent from the requirement in Annex III for labelling, point 1(h), which requires to specify and list all ingredients > 5%.”

i) Q8.13 precursors and reactions between materials

As already suggested (20/3/2021), we suggest modifications to the wording of this FAQ:

*For example: Spent sulphuric acid may be a by-product from industry. If it meets all requirements for constituting a by-product according to the WFD (Article 5(1)), it can be directly used as a reactant for the production of a material belonging to CMC 1. In the latter production process, the sulphuric acid chemically reacts with rock phosphate, **and the resulting chemical is** dried and granulated to single super phosphate [Comment: the rock phosphate is not dried and granulated]. The*

sulphuric acid is not directly used as a fertilising product component material [Comment: delete “product” to avoid confusion (even if technically correct as written) because we are talking about a CMC not a PFC at this stage], *so it cannot ~~should not in this case~~* [Comment: possibly some sulphuric acid could be a by-product CMC11. Even if it may be unlikely that anyone should wish to include by-product sulphuric acid directly into a fertiliser (as a CMC11), if it is possible then it should not be written that it is not possible], *be considered as a CMC 11 material. It is used as a precursor to react with another substance (phosphate rock) to produce the single super phosphate which will be part of the final composition of the EU fertilising product. For this reason the single super phosphate, in the example case explained above, is eligible to be considered as a material covered by CMC 1.*

Following the same logic, whenever an ‘additive’ reacts intentionally [Comment: the word “intentionally” should be included here to ensure coherence with the title of this FAQ which refers to “through intentional chemical reaction ...”], *with a substance to produce a new substance* [Comment: if there is a reaction, then there is a “new substance”. Stating this makes clearer that it is this new substance which has to be considered – under CMC criteria and for possible REACH registration], *the additive has to be considered, together with as must the said initial substance* [Comment: “together with” could suggest that this refers to the new substance consisting of additive + initial substance], *as a precursors; in any event, by virtue of the REACH Regulation itself, it needs to be registered under REACH unless exempted or considered a constituent part of the reacted substance.*

[We suggest to delete this last phrase. The FAQ should explain interpretation of the FRP, not of REACH (there are already Guidance Documents for REACH). In this case, we suggest that the phrase as written is inaccurate. It is suggested that REACH registration of the additive is not necessary if it is “unless ... considered a constituent part of the reacted substance”. But if the additive reacts with the original substance, then what results is necessarily a new substance? And also, the additive will still need REACH registration, because it is being manufactured and placed on the market, albeit possibly as an “Intermediate” under REACH. We suggest to delete the phrase which is not necessary, which concerns implementation of REACH and not of the FPR, which is probably inaccurate, and which is possibly confusing: in an FAQ for the FPR this phrase could be read as saying that the additive must be REACH registered “for use as a fertilising product” which is not the case in that it is a precursor and not a CMC.]

Similarly, it is the fertilising product in its final composition that needs to respect all thresholds in relation to macro- or micro- nutrients content or contaminants content relevant to the claimed product function category.

ii) For memory - Q8.14 Animal By-Products

We suggest to leave this FAQ as it is at present. However, for memory, when DG SANTE at last defines ABPs, this FAQ should be modified to explain:

- That the End-Point in some cases is achieved by the CMC processing (raw manure can be used as input to CMC3 or CMC5 if the composting or digestion process ensures the ABP End-Point), whereas ABPs used as such in an FPR (CMC10) must have already achieved the End-Point
- The EU Fertilising Product label, along with the relevant ABP End-Point, modifies traceability requirements. The following is our understanding: Under ABPR, a material having reached an ABPR-defined OFSI ABP End-Point can be used as a fertiliser (if authorised under national fertiliser legislation), according to any specific limitations indicated for this material in the ABP OFSI (e.g. not on grazing land just before grazing ...) BUT this material remains subject to ABPR “traceability”. Under FPR (in the hypothetical future, if the SAME processing conditions are validated as an FPR End-Point by EFSA and the ABPR is correspondingly modified and the FPR Annex II is also modified to include it) then the same material can be used WITHOUT the ABPR limitations and WITHOUT any traceability.

Note also, in the first bullet point, it should be specified digestate only under CMC5 (not CMC4).

New questions to add to FAQ

iii) POPs Regulation

As discussed at the FEG, we suggest to add an FAQ clarifying the link between the FRP and the POP Directive.

iv) Digestate post-processing amendment

We also request to prepare already an FAQ to clarify post-processing of digestates, to accompany the proposed amendment to the text of CMCs 4 and 5. This FAQ could provide a non-exhaustive list of examples of known and used processes, specifying which are considered to be included or not included.

v) Other post-digester additives

Also concerning digestates, we suggest to add a separate FAQ concerning “additives” used downstream of the digester, covering such additives which are used otherwise than in “post-processing” as defined in the currently proposed amendment. This would include additives with similar functions to those used in mineral fertilisers, e.g. granulation aids, stabilisers, pH adjustment). This FAQ should clarify that such post-additives are not covered by (1d) digestion additives which applies to additives dosed UPSTREAM of the digester and refer to the general FAQ on additives (in particular, noting the REACH registration obligation).

It is important to also clarify and explain to operators how the use of an additive fits with the procedural train CMC -> EU-product (conformity assessment, waste status ...) if an additive is added for post-processing at the digester site and the final fertilising product is then produced at another side: digestate solid fraction = CMC, granulation aid additive = CMC, granulated digestate = a mixture of two CMCs (transported as “waste” if inputs to the digester were “waste”) then mixed with mineral nutrients (CMC1) and plant fibres (CMC2) to produce an organo-mineral fertiliser (PFC). The conformity assessment would then have to verify both the final production site and the digester site

vi) pH modification

In particular, additives to modify pH are used in digestates, and it should be indicated that these are considered as additives, not as a chemical modification of the digestate, referring to Q 7.7 “What are the obligations of a blender under the FPR?”

vii) Micro-algae in CMC2

There seems to be misunderstanding with some stakeholders as to whether “micro-algae” are allowed in CMC2.

We suggest to specify that both macro- and micro-algae are allowed in CMC2 (except cyanobacteria).

The status of bacteria and archaeae under CMC2 is not clear. For bacteria, this could become significant with the development of microbial protein and microbial production of other food, feed, biofuel or chemicals materials. After extraction of the desired material, the remaining microbial biomass could become a fertilising product component.

viii) pasteurisation and similar

Operators have asked us whether digestate can be pasteurised. To our understanding, this is not covered by the current proposed amendment on digestate post-processing, in that pasteurisation

does not “separate” or “remove” any material, but does chemically modify certain parts of the digestate (kills pathogens present).

On the other hand, pasteurisation is designed to not significantly modify the overall chemical characteristics: pasteurised milk vs. UHT sterilised milk.

Other comparable “non destructive” sterilisation techniques may also be relevant for some materials, e.g. UV or microwave treatment.

This question may also be relevant for CMC2 (elimination of plant diseases or invasive plant species) or composts CMC3 or certain CMC6 materials.

This question is also relevant for CMC12 (Precipitated phosphate salts and derivatives), where sterilisation of input materials (before precipitation) is permitted (up to 275°C by the last line of §1) and derivatives are permitted (§4). However, the definition of “derivates” appears to exclude pasteurisation, because pasteurisation does not react the precipitated phosphate salt with “materials referred to in sub-point 1(f)”.

If possible, we believe that it would therefore be useful to add an FAQ specifying that low-temperature sterilisation, using methods intended to not significantly modify the chemical nature of the material, are authorised for all CMCs, citing as examples: pasteurisation, UV, micro-wave ...

ix) FPR and End-of-Waste status

We repeatedly have questions about the End-of-Waste status of CMCs. We suggest that it would be useful to have an FAQ which clarifies how and when the FPR gives EU End-of-Waste status. This has been widely explained by COM at conferences etc and is clearly set out in COM slides used at such events, but (unless we are mistaken) no FAQ specifically addresses this.

The FAQ should explain (to our understanding)

- That being conform to CMC criteria does not give Eu EoW status – this is only achieved after conformity to one or more PFC criteria and appropriate labelling and Conformity Assessment
- During the transport of a CMC material to a site where it is made into an EU Fertilising Product, this material is still a waste similarly during storage at the recipient site, and the recipient site must have appropriate local permitting to take in waste.
- Nonetheless, the CMC material may obtain national EoW status

x) Bio-refinery secondary outputs

We have stakeholder questions concerning the possibility to use in production of EU Fertilising Products the secondary outputs of “bio-refineries”. See ESPP email of 27_1_2021.

It is our understanding, that if the biorefinery is using only mechanical processing of plant materials (e.g. pressing of orange juice or olive oil), then the output material would be CMC2. But only if the pressing is “cold” – if heat is used for a second extraction then this would exclude from CMC2?

Such biorefinery secondary outputs are often sent to anaerobic digestion or composting. As above, it seems that if the biorefinery uses only cold-pressing, then the secondary output material would be eligible for CMC3-1c or CMC5-1c. But again, not if heat is used for a second extraction.

Is it also correct to understand that materials such as sugar production molasses or fermentation vinasse or distillers grains (CMC1) are currently excluded from use as inputs in CMC3 and CMC5?

xi) Precipitated phosphates from separately collected urine

Where urine is separately collected, then phosphates are precipitated, are these covered by CMC12 art. 1(a) “*wastewaters and sewage sludge from municipal wastewater treatment plants*” ? Collection via pipes from separate toilets and urinals in a building or group of buildings direct to the unit where the urine is processed and struvite is recovered, or to a storage tank then transported to the processing unit. Examples include the Dutch Ministry of Infrastructure and Environment building.

FAQ on CMC15

The following question is important to resolve if possible BEFORE adoption of the CMC15 criteria text, because it may lead to modify the CMC15 wording.

CMC15 (2)a specifies “The high purity material shall be recovered from waste generated from: (a) a production process that uses as input materials substances and mixtures ...”. **It is important to here clarify the meaning of “recovered”**. We propose the example of “spent sulphuric acid” used to attack phosphate rock to produce a mineral fertiliser such as TSP, already discussed in FAQ Q 8.13.

	Process phase	Comments	Contaminant criteria
Phase 1	Spent phosphoric acid is generated from a “a production process that uses as input materials substances and mixtures ...”, e.g. from an oil refinery, metal processing, ...	If the spent acid is classified as a “By-Product”, then it can be used as pre-cursor under CMC1. Note that, according to the definition of a By-Product in the Waste Framework Directive, if the spent acid is “certain” to be used “directly without any further processing other than normal industrial practice” as an input for production of TSP then it should be classified as a By-Product. This classification is however the decision of the Member State. The discussion below concerns the case where the spent acid is classified as a “Waste”	Contaminant criteria are not applicable to the processed spent acid, because it is not used as such in the fertilising product (it is a precursor). The PFC contaminant criteria apply to the final fertilising product (TSP).
Phase 2	The spent acid is processed (concentrated, purified ...) by either the producer, by the fertiliser TSP manufacturer or by a third-party	This processing corresponds to the first sub-category of “recovery” (preparing for re-use) as defined in the 2012 Guidance to the Waste Framework Directive , §1.4.5	
Phase 3	The processed spent acid is used by the fertiliser manufacturer to product TSP, by reacting with phosphate rock and other chemicals; or spent acid classified as “waste” by a Member State is used directly without processing.	This phase 3 processing corresponds to the second sub-category of “recovery” (recycling) as defined above. Because this is a “recycling” operation, it is also a recovery operation, by art. 3(17) of the Waste Framework Directive (see §1.4.6 of the Guidance). Because this phase 3 processing (or phase 2 plus phase 3) are a “recovery” operation, the resulting TSP corresponds to the wording of CMC15 (2)a “material shall be <u>recovered</u> from waste generated from ...”	The resulting TSP must respect the CMC15 criteria: - (1) is a mineral salt - (3) $C_{org} < 0.5\%$ - (4) $PAH_{16} < 6 \text{ mg/kg}$ - (5) chromium and thallium limits applicable to the final fertilising product containing the TSP - etc.