ECN POSITION

PROPOSAL FOR A FERTILISING PRODUCT REGULATION

ECN Position Paper on the Proposal for a Fertilising Product Regulation

The European Compost Network ECN welcomes the proposal of the 'Fertilising Products Regulation" as part of the Circular Economy Package, released by the EU Commission on 17 March 2016, by including recycled biowaste and other secondary raw materials in the scope of the Regulation and laying down rules for making them available as CE fertilising products on the harmonised EU market.

Those harmonised measures and rules will boost recycling of nutrients and organic matter with the beneficial effect on the replacement of primary raw materials and peat used in agriculture, horticulture or landscaping. The standards also guarantee a high level of quality and safety, and hereby, when CE marked as a fertilising product, will find more easily access to the internal EU market.

Additionally the conversion of organic waste materials into valued fertilising CE products contributes to a better implementation of the waste hierarchy within the meaning of the Directive 2008/98/EC, by improved biowaste recyling. As a consequence, compliant products from biowaste sources, that fulfill all requirements of the Fertilisers Regulation, cease being waste in the meaning of the Directive 2008/98/EC. This means simplification on legislative level.

ECN additionally supports the "Optional Harmonisation", which may allow Member States to keep existing national fertilisers regulations in place. In this way unnecessary market disruptions are avoided, and other fertilising products without CE marking can remain available on national and local markets.

ECN generally agrees with the goals and scope set out in the proposal for a Fertilising Products Regulation. In particular, we welcome that many process and product requirements set in the JRC Report "End-of-waste criteria for biodegradable waste subjected to biological treatment (compost & digestates): technical proposal" (2014), were picked up. Some aspects are missing or haven`t been considered in an appropriate way, in so far further improvements are necessary.

More clarification is needed with regards to input materials used for producing compost/digestate materials falling within the scope of the end-of-waste criteria as well as the CE marked fertilising products.

The quality assurance procedure (quality management) as an integral part of the end-of-waste criteria, has been built into the conformity assessment procedure (Module D1) for compost and digestate for most of the technical part. This is good because from a quality and safety point of view, quality assurance of the entire production process is indeed the most designated procedure. Nevertheless, the Fertilising Products Regulation demands the intervention of a notifying authority or a national accreditation body referring to (EC) No 765/2008 to carry out third-party tasks under this Regulation. This is a crucial issue.

The ECN-QAS Quality system as a standardised quality management system for compost and digestate products is widely supported beside the national standards. National Quality Assurance Organisations can benchmark their system with the ECN-QAS after proving conformity, and hereby grant ECN-QAS certificates for compost and digestate to individual production plants. This harmonisation initiative (ECN-QAS Manual) was launched already back in 2009 for compost and in 2014 for digestate. In the new setup for the harmonised Fertilising Products Regulation, these recognised quality assurance systems (QAS) don't structurally fit with the proposed conformity assessment procedures. Accreditation of third party certification bodies is required, whereas the working structure of some National Quality Assurance

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Organisations is not adopted for working in this manner. Moreover, accreditation means extra costs, that will have to be carried by the production plants, in surplus of their already existing certification costs. The certification of compost and digestate products under CE mark may be less suitable for primary producers, but all the more for the commercial fertilising companies that already produce CE fertilisers with mineral and in the future recycled organic materials as a component. This change in setup will affect most of the well –established QA systems for compost and digestate in the EU Member States. For structural, economic and administrative reason the existing national QAS will not be subjected to the required accreditation system, certainly not in countries where the production is only meant for local markets. We believe that there is a well-grounded need for further discussion to figure out whether the existing national QA systems could remain in place and whether the ECN-QAS could work as an umbrella organisation with/without accreditation but based on acknowledged bodies.

In former statements of ECN we repeatedly called for similar requirements on heavy metal thresholds for all "Product Function Categories" in the proposal of the Fertilising Products Regulation. Despite we see a difference between organic fertiliser, organic soil improver and growing media, apparently due to possible higher concentrations of Cd in native, unprocessed bark materials.

About the criteria "minimum nutrient content" for classification of product function categories, only the values expressed on dry matter basis are relevant, not the proposed values expressed on fresh matter of the fertilising products. However, the declaration of the nutrient content could be made on fresh matter basis, as proposed. Furthermore, ECN proposes that the criterion "Organic Carbon" should be replaced by "Organic Matter", as it is derived as such in the recognised analysis methods. The tolerance rules for labelling PFC 3 (Organic Soil improvers) have to be questioned critically.

The criteria "Escherichia coli / Enteroccaceae" should be deleted as limit value for the product function categories "Organic fertiliser", "Organic soil improver" and "Growing media".

A main issue concerns the reference to the (EC) No 1069/2009: fertilising products should be allowed to reach the endpoint in the manufacturing chain beyond which they are no longer subject to the requirements of the ABPR. ECN welcomes the initiative from DG GROW discussing this most relevant issue for an approval of the conditions (temperature/time profiles etc.) set in the proposal of the Fertilising Products Regulation with DG SANTE. Questions arise, if either ABP treatment parameters are predominant over the proposed time/temperature profiles proposed in the new Fertilising Product Regulation or not? Is the possibility for validation of other temperature/time profiles, that have shown equal effect than 1h / 70°C still in place? How should commercial catering be treated in a harmonized system; still according to the standards set in the ABP Regulation normally? Legal certainty is required otherwise most compost and digestate products produced from treated source separated biowaste from households, which are regulated by national exemption from ABP, would never reach a fertilising product status in the future!

Specific remarks on the legislative proposals COM (2016) 157 final

In addition to the general points outlined above, we suggest the following amendments to some of the proposed issues.

In Explantory memorandum, 1.19 - Context of the proposal
Delete and add: "*a better sustainable resource management.*"

The text reads than

1.19 "*It would also contribute to a better implementation of the waste hierarchy, ~~by minimising landfilling or energy recovery of bio-wastes, and hence to solving related waste management problems~~ a better sustainable resource management.*"".

Justification: The intention of EU-FR is not to solve "waste related management problems", but to boost a resource efficient use of organic and other secondary raw materials as high quality fertilising products. Important is the fact that with the new EU FR specific criteria for fertilising products from defined, clean and separate collected waste streams – like biowaste from households- are set, were a new level playing field is build up and the waste regime for such products ends.

In Article 2, 1 – Definition of "fertilising products"
Add: "*...by adding products to soil for the purpose of maintaining , improving or protecting the physical, chemical properties , the structure and the biological activity of soils,"*

The definition then reads as follows:

(1) "fertilising products"

> means a substance, mixture, microorganism or any other material, applied or intended to be applied, either on its own or mixed with another material, on plants or their rhizosphere for the purpose of providing plants with nutrient or improving their nutrition efficiency *and by adding products to soil for the purpose of maintaining, improving or protecting the physical, chemical properties, the structure and the biological activity of soils;.*

Justification*:* It is necessary to involve the purpose of organic soil improver regarding to maintenance or enhance soil fertility within the definition of fertilising products. Referring to recital (2), too.

The definition in Annex 1 for soil improver (PFC 3):

"*Soil improver shall be a CE marked fertilising product*" aimed at being added to soil for the purpose of maintaining, improving or protecting the physical or chemical properties, the structure or biological activity of the soil.

In Article 3 "Free movement"
"Member States shall not impede the making available on the market of CE marked fertilising products which comply with this Regulation."

ECN remark and question:
This means bringing on the market of CE marked fertilising products. Does this also include the use of the fertilising product? This is not clear. This article settles that a member state cannot obstruct free trade. But

can the competent authority of a member state (or competent region) obstruct the application of certain fertilising products? There is no clear answer.

In Article 4, Nr. 2 "Product requirements"

"*For any aspects not covered by Annex I or II, CE marked fertilising products shall meet the requirement that their use, as specified in the use instructions, does not lead to food or feed of plant origin becoming unsafe within the meaning of Articles 14 and 15 of Regulation (EC) No 178/2002, respectively.*"

ECN remark and question:

How can the compost/digestate producers fulfil these requirements of safety of food and feed within the (EC) No 178/2002? What measures are necessary and how can the producers cover these additional responsibilities and burden of proof?

In Article 18 – "End-of-waste status"

We propose to add as follows specifications for compost and digestates:

"*A CE marked fertilising product w**hich exists of or contains compost (CMC 3) or digestates other than energy crops (CMC 5) ceases to be waste** and obtains a product status according to conditions laid down in Article 6(1) of Directive 2008/98/EC at the same time, if the compost and digestates:*

- **have undergone a recycling operation of aerobic composting or anaerobic digestion with approved input material according to this Regulation and with defined treatment process and**
- **comply with all requirements and specific criteria for the component categories (CMC 3 and CMC 5), addressed product function categories and related conformity assessment procedures laid down in this Regulation and its annexes.**

At the moment of compliance with all requirements of this Regulation these compost (CMC 3) and digestate (CMC 5) products are no longer waste and are outside of the scope of the Directive 2008/98/EC.

In case other input materials, other treatment and other essential and specific requirements than those referred to in this Regulation are used, the resulting compost and digestate products can only be used for national markets.

Amendments of the criteria set in the Annexes of this regulation referring to compost (CMC 3) and digestate (CMC 5) can only be adopted in accordance with the regulatory procedure with scrutinity referred to in Article 39 a of Directive 2008/98/EC."

Justification: More clarification is needed due to the interface with the waste regulation and existing national product status of fertilising products from the same biowaste input materials. Referring to Article 6 (d) in the Waste Framework Directive only in the case where no criteria have been set on EU level based on paragraph 1 and 2 of article 6, Member States can decide wether certain waste has ceased to be waste. As consequences compost produced from biowaste, which doesn´t fulfil all requirements of the annexes of the EU Fertilising Products Regulation and doesn`t reach the CE mark, cannot be declared as a "national product" based on "national end of waste"-status.

Question: Should it be possible -in spite of the Article 6 (d) requirements in the WFD-, to set or continue national end-of-waste / national product-status for compost and digestates produced from the same input materials which are listed and approved in the EU Fertilising Products Regulation?

In Article 20-28 - Notification- Notifying authorities - Notified bodies - Requirements relating to notified bodies

ECN supports a quality assurance system – based on ECN-QAS- for compost and digestates, which is referred to in the JRC-report for end-of-waste of biodegradable waste (2014), as an equivalent for the proposed pathway for conformity assessment. This structure should be kept if legally procurable within the requested CE- QA procedure. If an accreditation system would be set compulsory for existing national QA-schemes, the organisations with less organisational and personnel level as well as those with less members would encounter difficulties to comply with these huge requirements.

Remark: ECN sees an "urgent need for discussing" the many open questions resulting from the well working and acknowledged QA-systems on national levels and proposes to implement ECN-QAS as an "umbrella - QA-body". We welcome the spoken out option of the EU COM for organising a workshop on this topic.

In Article 45 - "Amendments to Regulation (EC) No 1069/2009"

ECN asks for more legal certainty in the wording; delete "*may*" and add "*shall*"

In Regulation (EC) No 1069/2009, Article 5 is amended as follows:

(1) In paragraph 2, the first subparagraph is replaced by the following:

*'For derived products referred to in Articles 32, 35 and 36 which no longer pose any significant risk to public or animal health, an end point in the manufacturing chain ~~may~~ **shall** be determined, beyond which they are no longer subject to the "requirements of this Regulation.'*

Justification: Due to the relevance of these requirements it is necessary to add a more specific legal phrasing to these issues. If no endpoint in the production chain is determined, compost materials have to fulfil the requirements of pasteurisation (12mm particle size, 70°C, 1 h), what is not feasible for the composting process. Currently for some member states exceptions from ABP Regulation exits for treating biowaste from households, which coincide to the temperature/time profiles in the Fertilising Products Regulation, largely. It needs to be certain which legislation is predominant (ABPR or Fertilising Products Regulation). In the same time, the question is raised whether the option for validation of the treatment process as foreseen in EU 142/2011, Annex V, Chapter III, Section 2 remains possible. Are the time/temperature profiles in the new Fertilising Products Regulation compliant and acknowledged to the requirements set in the ABP Regulation?

Annex I Product Function Categories (PFC) for CE marked fertilising products

PFC 1(A) Organic fertiliser – 2. Heavy metal contents- / 4. Hygienic parameters

"2. Contaminants must not be present in the CE marked fertilising product by more than the following quantities:

- Cadmium (Cd) 1,5 mg/kg dry matter,
- Hexavalent chromium (Cr VI) 2 mg/kg dry matter*,
- Mercury (Hg) 1 mg/kg dry matter,
- Nickel (Ni) 50 mg/kg dry matter,
- Lead (Pb) 120 mg/kg dry matter, and
- Biuret ($C_2H_5N_3O_2$) 12 g/kg dry matter"

Add* Not for CMC 3 and CMC 5

"*4. ~~None of the two following types of bacteria shall be present in the CE marked fertilising product in a concentration of more than 1000 CFU/g fresh mass –~~*

- ~~*Escherichia coli, or*~~
- ~~*Enterococcaceae*~~.

In general heavy metal limit values should be equal to all the different product function categories. Exceptions should only be allowed, if native contaminated bark is applied as an input (in that case, 3 ppm Cd can be accepted).

The parameter Cr VI is not existent in compost and digestates, therefore ECN proposes to delete it as a compulsory criteria for compost and digestate in the component material categories CMC 3 and CMC 5.

We propose to delete the hygienic parameter "Escheria coli or Enterococceae". It makes no sense to measure and regulate such a parameter in end products of biological treatment of organic materials. These are applicable in the ABPR mainly as a process parameter to cross-check the effectiveness of the sanitation step of the treatment but gives no information in finalised products due to the fact that in natural occurring circumstances, E coli or Enterococcus is subject to regrowth, which is a natural process without influencing the product quality.

Justification: In comparison the Cd- limit in the category "Organic soil improver" is twice as high compared to "Organic fertilisers". As a consequence compost or digestate from the same origin, but due to differences in nutrient content subdivided into different PFC's, would be regulated differently. An exception should only be set for bark materials (3 instead of 1,5 mg/kg dry matter). There is no scientific rationale to make a differentiation with respect to their classification as organic fertiliser or organic soil improver. The application rates due to the individual nutrient levels usually vary within very narrow margins for both categories.

Escherichia coli/ Entercoccaceae should be deleted as limit for the final product. Reference to apply EU Regulation (EU) Nr. 142/2011 from 25. February 2011 (implementing ABP-REG (EC) Nr. 1069/2009), Annex V, Chapter II, Section 3.

For the final product assessment the adequate parameter for hygiene aspects is Salmonella.

Question: How could "geogenic deposits" be considered within in the Fertilising Products Regulation, when greenwaste from such typical and well -known areas in Italy, Germany etc. are composted and intended to be marked as a CE-labelled soil improver? Could a legal exception in Article 6 of the WFD be set, that produced composts from these greenwastes materials can be declared as national fertilising products for regional use?

Cross-reference to liming material (PFC 2) with a maximum Nickel (Ni) 90ppm dry matter, 200 lead (Pb) and in growing media Ni 100pp and Pb 150pp?

PFC 1(A)(I) Solid Organic fertiliser

ECN calls in general for defining minimum nutrient contents on dry matter (d.m.) basis instead of fresh matter (f.m.). We propose therefore to change the percentage by mass in "dry matter". ECN ascertains that compost from biowaste, given the strict nutrient requirements for organic fertilisers, will fall under the category "Organic soil improver" and will in most cases fail to reach the status of a "Solid Organic fertiliser".

ECN proposes to replace the criterion "organic carbon" with "organic matter". The proposed criteria "*Organic matter content 15% in dry matter*" – as it is set in the JRC report (2014) should be maintained.

1. A solid organic fertiliser shall contain 40% or more dry matter by mass.

2. The CE marked fertilising product shall contain at least one of the following declared nutrients in the minimum quantities stated:

- *2,5% by **dry** mass of total nitrogen (N),*
- *2% by **dry** mass of total phosphorus pentoxide (P_2O_5), or*
- *2% by **dry** mass of total potassium oxide (K_2O).*

*3. ~~**Organic carbon (C)**~~ **Organic matter content** shall be present in the CE marked fertilising product by at least 15% by dry mass.*

Justification: For reason of better comparability of requirements and better classification of fertilising products in the different product function categories, the drymatter-basis is indispensable. The declaration of the nutrients in the marked products remains in fresh matter.

The Organic matter content should be >/= 15% d.m. as it is set in the JRC report of End-of-Waste (2014) and in the ECN-QAS. In addition it is necessary to refer to the analytical methods used in combination with the declared parameter (Example: analytic method used for determination loss of ignition by temperature of 550° C or 450°C?).

In PFC 3(A) Organic soil improver

Add and delete:

"*An organic soil improver shall consist exclusively of material of solely biological origin, ~~excluding material which is **fossilized** or~~ **embedded in geological formations**~~.~~*

2. Contaminants must not be present in the CE marked fertilising product by more than the following quantities:

- *Cadmium (Cd) 1,5mg/kg dry matter– **exception bark material** (3 mg/kg dry matter)*
- *~~Hexavalent chromium (Cr VI) 2 mg/kg dry matter,~~*
- *Mercury (Hg) 1 mg/kg dry matter,*
- *Nickel (Ni) 50 mg/kg dry matter and*
- *Lead (Pb) 120 mg/kg dry matter*

When the CE marked fertilising product contains an animal by-product as defined in Regulation (EC) No 1069/2009

(a) Salmonella spp. shall be absent in a 25 g sample of the CE marked fertilising product.

~~(b) None of the two following types of bacteria shall be present in the CE marked fertilising product in a concentration of more than 1000 CFU/g fresh mass :~~

- *~~Escherichia coli, or~~*
- *~~Enterococcaceae~~.*

~~This shall be demonstrated by measuring the presence of at least one of those two types of bacteria~~.

4. The CE marked fertilising product shall contain 40% or more dry matter.

*5. Organic Carbon (C) shall be present in the CE marked fertilising products by at least ~~**7,5 % by mass**~~ **15% Organic matter in d.m**."*

Justification: The exclusion of "fossilized or embedded in geological formations" needs more clarification with regards to the addressed material. In the case of peat – as fossil material- no longer a compost/peat mixture could be declared as an "Organic soil improver".

Cd-limit value, hygienic parameter and organic matter-content with reference to justification mentioned for "Solid Organic fertiliser". Discussion about exception to organic materials from "geogenic contaminated soils" as well.

Question: Can organic material growing and arising from soils with geogenic deposits be used as input material for soil improver or organic fertiliser with CE-mark or only on national markets?

In PFC 4 Growing media

Add and delete:

"2. Contaminants must not be present in the CE marked fertilising product by more than the following quantities:

- *Cadmium (Cd) ~~3~~ 1,5mg/kg dry matter,* ***3,0 ppm – excemption bark material***
- ~~*Hexavalent chromium (Cr VI) 2 mg/kg dry matter,*~~
- *Mercury (Hg) 1 mg/kg dry matter,*
- *Nickel (Ni) 50 mg/kg dry matter,and*
- *Lead (Pb) 120 mg/kg dry matter*

~~b) None of the two following types of bacteria shall be present in the CE marked fertilising product in a concentration of more than 1000 CFU/g fresh mass :~~

- ~~*Escherichia coli, or*~~
- ~~*Enterococcaceae.*~~

Justification: as described for organic soil improvers and organic fertilisers

Annex II Component Material Categories

Prelimimary remark:

Add and delete:

"*The component materials* ***and*** ~~***, or***~~ *the input materials used to produce them, shall not contain one of the substances for which maximum limit values indicated in Annex I of this Regulation* **are** ***exceeded***

~~*in such quantities as to jeopardise the CE marked fertilising product's compliance with one of the applicable requirements of that Annex.*~~

Justification: Asking for more clarity. In order to avoid misuse of input material with higher contents of contaminants regarding to "dilution-effects", it has to be announced clearly, that only input materials can be used, which fulfil all the thresholds for contaminants set in Annex I.

Referring to PAH16-requirement for input materials for compost and digestate according to CMC 3 (compost) Nr. 1(e) and CMC5 (digestates) Nr. 1(e).

In CMC 3: Compost – Input material

ECN calls for a defined, acceptable input list with detailed information for producing compost and digestates in the Fertilising Products Regulation in order to give legal certainties for CE marked products. As a guidance,

waste codes should/could give an added value (although not binding). In the ECN QAS approved input materials are provided in a definite list, together with the waste code, waste type, specification of permitted materials and remarks. A guidance document should contain more detailed clarification on the types and origin of source separated organic waste that is eligible as feedstock. This should be based on the input list provided as Table 14 in the JRC report on End of Waste Criteria for Biodegradable Waste.

"A CE marked fertilising product may contain compost obtained through aerobic composting of exclusively one or more of the following input materials:

(a) *Bio-waste within the meaning of Directive 2008/98/EC resulting from separate bio-waste collection at source;* **with reference to a guiding document containing types and origin of source separated organic waste that is eligible as feedstock, based on , Tab 14, JRC report on End of Waste Criteria for Biodegradable Waste.** ***Waste code should be listed additionally.***

For source separated municipal biowaste from households and similar entities an own waste code should be introduced in the EU List of Waste. DG GROW should send a respective request to DG ENV.

(b) *(b) Animal by-products of categories 2 and 3 according to Regulation (EC) No 1069/2009;*

(c) *(c) Living or dead organisms or parts thereof, which are unprocessed or processed only by manual, mechanical or gravitational means, by dissolution in water, by flotation, by extraction with water, by steam distillation or by heating solely to remove water, or which are extracted from air by any means, except*

the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment,

- *sewage sludge,* ***industrial sludge****(?) or dredging sludge, and*
- *animal by-products of category 1 according to Regulation (EC) No 1069/2009;"*

Justification: More clarity and legal certainties about approved input materials (=input list) are necessary. Furthermore the question arises, what kind of materials are covered as *"industrial sludges"?* Are residues from the agro-food industry inside these scope referring to the biowaste definition in the Waste Framework Directive or have they to be assessed as" industrial sludges" and therefore outside these scope? Many sludges from the agro-food industry e.g. from fruit processing, dairy / cheese production, biobased economy… are a completely clean organic material and fit for treatment. This should not be excluded.

Bags for source-separated household waste shall be biodegradable (consisting of paper or biodegradable plastics according to EN13432 or EN 14995).

Remark: A Waste code for source separated municipal biowaste (from households and similar entities) should be introduced in the EU List of Waste. DG GROW should send a respective request to DG ENV.

In CMC 3, 1. (d): Compost – Additives -

Add and amend specification according to measures described in the JRC report:

"*the total concentration of all additives does not exceed 5% of the total input material weight."*

Prior authorization by the competent authorities is required wherever the total concentration of all

additives used exceeds 5% and maximum of 15% of the input material weight, in the case natural soil materials is included as additive. In that case, all additives and their respective concentrations shall be labelled on the product. The limit values for all contaminants according to Annex I of this Regulation have to be met by all additives – just as for natural soil material.

Justification: The limitation of typical composting additives such as clay minerals, lime or stone dust, at 5 % (m/m) is common practice and fully justified. But it is a an old and well documented practice to add natural clay soils up to approximately 15% by weight into the feedstock mix in order to promote the formation of stable clay-humus complexes already at an early stage of composting process. Soil also helps to absorb odorous liquids and reduce NH_3 emissions. It supports to level peak temperatures (> 65°/70°C) by reducing the biological reactivity of the biomass during the thermophile composting stage.

In case of natural soil materials without contaminants, the total concentration of all additives including soil materials, does not exceed 15% of the total input material weight.

In CMC 3, 1. (e): Input materials for Compost – PAH16-measurement- and correspond to CMC 5 Other digestates Nr. 1(e)

Clarification of the wording:

*" Any **input** material listed in points (a)-(d) which*

- *has **previously**(?) going for composting or digestion **been composted or digested, and***
- *the contains no more than 6 mg/kg (dry weight) of PAH16"*

Question: It is not clear, if this would impose that all input materials have to be tested for PAH16 or only composted or digested material. Please clarify by improved wording. Referring to Nr. 4 explicit the "compost" material as output materials is addressed to a necessary PAH 16 measurement. In general a limit value for PAH16 is a criterion that can be deleted because the defined input materials from separately collected sources already sufficiently minimise the risk of a possible contamination.

In CMC 3, Nr. 4: Compost – PAH16-measurement- and correspond to CMC 5 Other digestates Nr. 4

Delete PAH16 requirement for compost and digestates:

"*4. The compost shall contain*

~~*(a) No more than 6 mg/kg dry matter of PHA 16*~~

"4. *Neither the solid, nor the liquid part of the digestates shall contain more than 6 mg/kg dry matter of PAH 16."*

Justification: In general a limit value for PAH16 is a criterion that can be deleted because the defined input materials from separately collected sources already sufficiently minimise the risk of a possible contamination.

In CMC 3, 3 Compost – Temperature_/Profile - NEW parameter Seeds and weeds-

Replace:

"*All parts of each batch shall be regularly and thoroughly* ~~***moved***~~ ***turned*** *in order to ensure the correct sanitation and homogeneity of the material 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 day*

Adding parameter:

The compost shall contain

- ***No more than 2 viable weed seeds per litre of compost/digestate***

Justification: In accordance to JRC report for EOW of compost and waste the parameter and ECN-QAS the *"limited content of viable weeds and plant propagules"* should be implemented. The measurement of this parameter is in addition to the complemented temperature-time profile relevant.

In CMC 3, 3 Compost – Impurities

Adding the methodology for determination the impurity content– JRC report refers to dry sieving method.

"4. (b)n no more than 5g/kg dry matter of macroscopic impurities in the form of glass, metal and plastics above 2mm ***(dry sieving method)****.*

Remarks: In general efforts are supported for minimising the impurity content in compost and digestates. The introduction of a single limit value for max. plastic contents (> 2mm) with max. 0,25% d.m. can be supported. Other max. single limits – especially for glass- have to be considered if necessary. How far "visual" measurements of the impurity content could be standardised in a methodology, has to be verified in future, too.

In CMC 5 "Other Digestates than Engergy Crops Digestates", Nr 1. Input Materials

1. A CE marked fertilising product may contain digestate obtained through anaerobic digestion of exclusively one or more of the following input materials: (a) to (d)

Add:

(e) "Energy crops " – plants that have not for any other purpose, including algae , according to CMC 4 Nr. 1 (a).

Question: In practice some Co-fermentation plants are treating different organic input materials, from biowaste, manure up to energy crops with different amounts in there processes. In order to keep this flexibility within the input material management of digestion plants (CMC 5), it should be allowed using energy crop materials –according to CMC 4 Nr. 1(a)?

In CMC 5, Nr. 7 Other digestates - Stability

Add and change:

Oxygen uptake rate:

- *Definition: an indicator of the extent to which biodegradable organic matter is being broken down within a specified time period. The method is not suitable for material with a content of particle sizes > 10 mm exceeding 20%.*
- *Criterion: maximum 50 mmol O_2/kg organic matter/h; or*
- ***Organic acids content of maximum 1500mg/l***

(b) Residual biogas potential:

- *Definition: an indicator of the gas released from a digestate in a 28 day period and measured against the volatile solids contained within the sample. The test is run in triplicate, and the average result is used to*

demonstrate compliance with the requirement. The volatile solids are those solids in a sample of material that are lost on ignition of the dry solids at 550 °C.

- *Criterion: maximum **0,45 l biogas /g volatile** solids. (?)*

Justification: Measuring the organic acid content is a well practice method by BGK-Quality assurance scheme in Germany. It is also set as an third option for stability testing for digestates in the JRC report.

In Annex II Part 3 – Tolerances - Soil improver

Add the analytic methods refer to tolerances for parameter which have to be declared.

For organic soil improver and solid organic fertilisers the same tolerances for the declaration of Nitrogen (N), Potassium (K_2O) and Phosphorus (P_2O_5) should be set. Regarding to the parameters "granulometry" the +/- 10% seems too low as well as no analytical methods is referred to. A tolerance value for the parameter "C/N-ratio" has to be checked as well as for the declared quantity.

Additionally it should be possible by declaring the "quantity" of soil improvers filled in bags based on "volume", too - as it is regulated for growing media.

The tolerances of 25% for the quantity during in the distribution chain has to be specified with regards to the maximum valid for an maximum time line (6 months – max. 12 months) and not "at any time" in the distribution chain.

In Annex IV Conformity assessment procedure

D1 Quality assurance of the process - Nr. 2 Technical Documentation

Delete:

e) ~~"results of design calculations made, examinations carried out, etc.,"~~

Justification: It is not clear, what kind of materials are referred to. Therefore we propose to delete it.

D1 Quality assurance of the process - Nr. 5.1.1.1 Quality Assurance System - Personnel

Remark: It must be taken into account that also smaller facilities, still producing high-end products for the market consists only of the owner (manufacturer) and e.g. one co-worker / employee. Therefore the requirements for the quality system must not be too demanding as regards the separation and specification of tasks and responsibilities within the implementation and operation of the QS! This refers e.g. to senior management and the member of the organisation's management which is often combined in one person only.

Internal audit (self audit of the manufacturer) - reference to the requirements of 5.1.5. Those requirements cannot be implemented in the described way in such small scale facilities, because they run mainly by the manufacturer himself.

D1 Quality assurance of the process - Nr. 6.3.2 Surveillance under the responsibility of the notified body

Clarify, time of audits and "*sampling of compost and digestates product materials*" by the notified body, referring to sampling frequency given paragraph 5.1.3. (f).

"For compost belonging to component materials category (CMC 3) and digestates (CMC 5) – as defined in Annex II, the notified body shall take output material samples during each audit, and the audits shall be carried out with the following frequency:

(a) During the notified body `s first year of surveillance of the plant in question: The same frequency as the sampling frequency indicated in the table included in paragraph 5.1.3.1 (f)
(b) During the following years of surveillance: Half the sampling frequency indicated in the table included in paragraph 5.1.3.1 (f)

Justification: Clarification is needed, if once a year an external audit is proposed with in parallel sampling taking of the output material by the notified body in the requested frequency. Otherwise an overloaded procedure emerges.

About ECN

The European Compost Network (ECN) is the leading European membership organisation promoting sustainable recycling practices by composting and anaerobic digestion of organic resources and guarding over the quality and safe use of the recovered organic fertilisers/soil improvers.

The European Compost Network is a membership organisation with 72 members from 27 European Countries. Members include all European biowaste organisations and their operating plants, research, policy making, consultants and authorities. ECN represents 22 bio-waste organisations (compost and digestate quality assurance organisations) from 14 European Countries and two from abroad, 23 companies producing bio-based products (organic fertilisers, soil improvers, growing media and, biodegradable plastics), 10 non-governmental organisation of environmental protection organisations, 10 academic (research) institutes in environmental, agricultural and natural sciences and 3 environmental agencies.

Via the member organisations, ECN represents more than 3000 experts and plant operators with more than 30 million tonnes of biological waste treatment capacity.