

Biodegradable Waste subject to biological treatment (compost/digestate)

Input material criteria

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Eligibility of input materials and Scope

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Introduction

- **Issue:** a clear majority of TWG experts advised against the inclusion of contentious input materials, such as sewage sludge or the organic fraction from mechanical treatment of MSW
- **Main used arguments:**
 - Market confidence is at risk by introduction of MBT and sewage sludge compost/digestate materials
 - Most MBT and sewage sludge based compost/digestate materials do not meet proposed EoW criteria and hence are not ready for the EU market
 - Pollutant levels in MBT and sewage sludge materials are generally higher than for materials from source separated input, hence composting/digestion may be used to dispose of polluted streams
 - Some additives on the positive list are not needed to improve process performance and/or environmental performance

Assessment

- Market confidence is at risk by introduction of MBT and sewage sludge materials
 - Experts indicate that historical events have shown that market confidence can be damaged by inclusion of materials with low (perceived) quality
 - Acceptance of MBT and sewage sludge materials clearly varies across Member States, from very negative to positive
 - Hence any proposal should enable optimal development of EU and national markets for different compost/digestate types
- Most MBT and sewage sludge materials do not meet proposed EoW criteria and hence are not ready for the EU market
 - Introduction of MBT and sewage sludge materials in scope of EU EoW criteria will mean that >90 % of these materials will not be able to meet criteria at present and be excluded from product status
 - This may lead to severe disruption of existing national markets
 - Revised proposal should allow technologies to be maintained and to further develop at national level pending possible future revision

Assessment

- Pollutant levels in MBT and sewage sludge materials are generally higher than for materials from source separated input, hence composting/digestion may be used to dispose of polluted streams
 - Based on the limited existing data, this statement seems only partially true (e.g. yes for many heavy metals, no for PAH₁₆)
 - Strict product quality requirements can minimize deliberate dilution of polluted streams
- Some additives on the positive list are not needed to improve process performance and/or environmental performance
 - Allowed additives should be re-examined and reduced to those that are necessary to improve process performance and/or environmental performance, others should be added after obtaining EoW status.

	As	Cd	Cr	Pb	Hg	Co	Se	Be	Bi	Br	Cu	Fe	Mn	Ni	Mo	Sb	Sn	Ti	Zn	
Cr																				
Cr																				
Cr																				
Hg																				
Hg																				
Cr																				
Cr																				
PAH ₁₆																				
TC																				

Summary and proposed modification

- **Summary:** an updated proposal should take into account the different market situations across MS for different materials and safeguard an EU level playing field with regard to environmental and human health protection for materials for which the EU market viability is widely accepted
- **Proposed modification:**
 - Proposed scope reduction: the scope determines the allowed input materials
 - Proposed definition of scope: *compost and digestate materials obtained through a waste treatment process exclusively using non-contaminated materials from the separate collection of biowaste as well as biodegradable residues from agriculture, aquaculture, forestry, fishery and horticulture.*

Summary and proposed modification (2)

- **Proposed modification:**

- Excluded from the scope are:

- the organic fraction from mixed waste separated through mechanical, physical, chemical, biological and/or manual treatment
 - sludges other than those falling under the scope of allowed materials
 - possibly contaminated material
 - material collected from sites with elevated risk of pollution through atmospheric deposition, irrigation, leaching or other pathways
 - non-biodegradable materials
 - biodegradable material containing non-biodegradable fractions
 - materials containing any ingredients that might negatively affect the composting/digestion process

Summary and proposed modification (3)

- **Proposed modification:**

- The current exclusion of a material from the allowable input material list excludes it from the current scope. This should allow national end-of-waste systems for non-scope materials to co-exist at present with the EU-wide end-of-waste framework pending future revision.
- Only additives are allowed that are needed to improve the process performance and/or environmental performance of the composting/digestion process (up to 15% of feedstock). Any additive that can be added after obtaining EoW status should be added at that point.

Input material sources	Specification ²
Parks, gardens, cemeteries and other green spaces ¹⁾	<p>Examples: Leaves, grass, branches, fruit, flowers, plants and plant parts</p>
Households ¹⁾	<p>Examples: Bio-waste from households: Fruit and vegetable remainders coffee and tea remainders, food remainders, egg shells, plants and soil attached to plant parts Bags for source-separated household waste shall be biodegradable (consisting of paper or biodegradable plastics according to EN 13432 or EN 14995).</p>
Caterers and restaurants ¹⁾	<p>Examples: Fruit and vegetable remainders, coffee and tea remainders, food remainders, egg shells.</p>
<p>¹⁾ If this category includes animal by-products the Regulation (EC) No 1069/2009 for animal by-products should be followed. ²⁾ Only 'source-separated' input materials; digested or composted materials derived from these materials may be used as well, unless being rejected for not meeting the end-of-waste specifications due to exceeding the limit value for any of the PTEs or PAH. ³⁾ Only if the treatment process is a waste treatment process</p>	

Input material sources	Specification ²
Food and beverage related retail premises ¹⁾	Examples: Bio-waste from markets, food and feed remainders
Food and beverage processing plants ¹⁾	Examples: Food waste, food washing waste, sludge from food and feed processing plants not containing pollutants
Horticulture ¹⁾	Examples: Leaves, grass, branches, fruit, flowers, plants, plant parts bark, weeds, mushrooms, soil attached to plant parts and peat
Forestry ¹⁾	Examples: Bark, wood, wood chips, sawdust
Agriculture ¹⁾	Examples: Straw, harvest remainders, silage, plant material, energy crops ³ and catch crops ³
<p>¹⁾ If this category includes animal by-products the Regulation (EC) No 1069/2009 for animal by-products should be followed.</p> <p>²⁾ Only 'source-separated' input materials; digested or composted materials derived from these materials may be used as well, unless being rejected for not meeting the end-of-waste specifications due to exceeding the limit value for any of the PTEs or PAH.</p> <p>³⁾ Only if the treatment process is a waste treatment process</p>	

Input material sources	Specification ²
Fishery and aquaculture ¹⁾	<p>Examples: Slaughter waste and fodder residues from traditional fisheries and aquaculture industry, crustacean shells and similar residues, seaweed</p>
Animal by-products Category 2	<p>Manure, digestive tract content separated from the digestive tract, milk, milk-based products, colostrum, eggs and egg products which the competent authority does not consider to present a risk for the spread of any serious transmissible disease, following or without prior processing.</p>
Animal by-products Category 3	<p>See the ABP Regulation (EC) No 1069/2009</p>
<p>¹⁾ If this category includes animal by-products the Regulation (EC) No 1069/2009 for animal by-products should be followed. ²⁾ Only 'source-separated' input materials; digested or composted materials derived from these materials may be used as well, unless being rejected for not meeting the end-of-waste specifications due to exceeding the limit value for any of the PTEs or PAH. ³⁾ Only if the treatment process is a waste treatment process</p>	

Input material sources	Specification ²
Additives (up to 15 % of the feedstock) ¹⁾	<p>Only additives that are needed to improve the process performance and/or environmental performance of the composting/digestion process, such as flocculating agents, polymers for dewatering, trace elements to enhance micro-organism functioning, precipitants, enzymes to improve anaerobic biodegradation process, anti-foam agents, complexing agents, macronutrients, emulgators, antiscalants.</p> <p>The used quantity of any additive must be justifiable by its necessity to improve the process performance and/or environmental performance of the composting/digestion process.</p>
<p>¹⁾ If this category includes animal by-products the Regulation (EC) No 1069/2009 for animal by-products should be followed.</p> <p>²⁾ Only ‘source-separated’ input materials; digested or composted materials derived from these materials may be used as well, unless being rejected for not meeting the end-of-waste specifications due to exceeding the limit value for any of the PTEs or PAH.</p> <p>³⁾ Only if the treatment process is a waste treatment process</p>	

Updating the list of input materials

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Introduction

- **Issue:** several TWG experts repeated the request for an update mechanism to the positive list
- **Main used arguments:**
 - EoW criteria should be able to provide for new market introductions of input materials
 - The use of EWC codes may block valuable materials while letting in undesired materials at the same time
 - Materials should be able to appear on both positive lists

Assessment

- EoW criteria should be able to provide for new market introductions of input materials
 - A workable system is needed that is flexible, yet ensures that market confidence is not at risk by the possible introduction of undesired new materials
- The use of EWC codes may block valuable materials while letting in undesired materials at the same time
 - The use of EWC codes for illustration purposes, should be avoided to eliminate possible confusion on eligible materials
- Materials should be able to appear on both positive lists
 - Both composting and digestion should be stimulated equally by allowing the same input materials

Summary and proposed modification

- **Summary:** a flexible, yet robust system is needed to enable the market introduction of desired new input materials
- **Proposed modification:**
 - The new proposal focuses on a clear definition of the scope boundaries, hence eliminating the need for a detailed positive list and update mechanism.
 - The scope of input materials is identical for composting and digestion
 - In line with the proposed generic definition and simplification, EWC codes are no longer needed