

**Regulation laying down indicative criteria to facilitate demonstration of the fulfilment of requirements for the classification of production waste as a by-product and not as waste**

**THE MINISTER FOR THE ENVIRONMENT  
AND LAND AND SEA PROTECTION**

- HAVING REGARD TO** Article 17(3) of Law No 400 of 23 August 1988;
- HAVING REGARD TO** Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives and, in particular, Article 5;
- HAVING REGARD TO** the Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste, June 2012;
- HAVING REGARD TO** Legislative Decree No 152 of 3 April 2006 laying down “*Environmental standards*” and, in particular, Articles 184-bis and 185(1)(c) and (f);
- HAVING CONSIDERED** that the by-product system contributes to the dissociation of economic growth from waste production in that it favours technological innovation for the recycling of production waste during production or in a subsequent production cycle, limits waste production and reduces the consumption of virgin raw materials;
- HAVING CONSIDERED** that the use of by-products cannot disregard a specific regulatory and administrative framework, with particular reference to the procedures under which manufacturers and users are able to demonstrate that the conditions referred to in Article 184-bis(1) of Legislative Decree No 152 of 3 April 2006 have been met;
- HAVING DECIDED** to establish criteria, in accordance with Article 184-bis(2) of the Legislative Decree of 3 April 2006, under which specific types of substances or objects may be considered as by-products and not as waste and certain procedures whereby the holder can demonstrate that the conditions referred to in aforementioned Article 184-bis(1) have been met;
- HAVING REGARD TO** the notification referred to in Directive (EU) 2015/1535 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification);
- HAVING HEARD** the opinion of the Council of State, expressed during the consultation session for legal acts at Hearing No 3650 of 28

December 2015;

**HAVING  
REGARD TO**

the communication to the Presidency of the Council of Ministers made under note 0002974/GAB of 8 June 2016 pursuant to Article 17(3) of Law No 400 of 23 August 1988;

**ADOPTS  
the following regulation:**

**PART I  
GENERAL PROVISIONS**

**Article 1**

*Purpose and objectives*

1. In order to favour and facilitate the use of substances and objects deriving from a production process and which comply with specific criteria as by-products, and to ensure greater uniformity in the interpretation and application of the definition of waste, this decree lays down specific procedures under which the holder may demonstrate that the general conditions referred to in Article 184-bis of Legislative Decree No 152 of 3 April 2006 have been met.
2. The requirements and conditions established for excluding production waste from the field of application of the waste regulation are assessed and ascertained based on the specific set of circumstances and are satisfied in all phases of waste management, from manufacturing through to use in the same process or in a subsequent process.
3. Without prejudice to the general provisions laid down in this decree and compliance with the use and quality requirements provided in the relevant industry regulations, the annexes contain a list of the main rules governing the use of production waste divided into specific categories, along with a number of procedures and activities that may constitute normal industrial practices under the conditions set forth in Article 6.

**Article 2**

*Definitions*

1. Notwithstanding the definitions contained in the national and community regulations in force, for the purpose of this decree, the following definitions shall apply:
  - a) Product means any material or substance that is deliberately obtained through a production process or as a result of a technical selection. In many cases, one or more primary products may be identified;
  - b) Production waste (hereinafter “*waste*”) means any material or substance that is not deliberately produced through a production process and which may or may not be waste;

c) By-product means production waste that does not constitute waste in accordance with Article 184-bis of Legislative Decree No 152 of 3 April 2006.

### **Article 3**

#### ***Area of application***

1. This decree applies to production waste as defined in Article 2(1)(b), and does not apply to:

- a) Products as defined in Article 2(1)(a);
- b) Substances and materials not included under the waste system in accordance with Article 185 of Legislative Decree No 152 of 3 April 2006;
- c) Waste deriving from consumption activities.

2. The above is notwithstanding any special provisions adopted for the management of specific types and categories of waste, including standards regarding the management of earth and rock from excavation.

### **Article 4**

#### **General conditions**

1. In accordance with Article 184-bis of Legislative Decree No 152 of 3 April 2006, the waste referred to in Article 2(1)(b) constitutes by-products and not waste where the manufacturer is able to demonstrate that it has not been produced voluntarily and as a primary objective of the production cycle and is intended for use in the cycle or in a subsequent process by the manufacturer or by third parties. In this respect, during each phase of waste management, evidence must be given that all of the following conditions are met:

- a) The substance or object originates from a production process, of which it forms an integral part, and the primary purpose of which is not the production of such substance or object;
- b) The substance or object is verified to be used during the course of that process or in a subsequent process of production or use by the manufacturer or by third parties;
- c) The substance or object can be used directly, with no further processing over and above normal industrial practice;
- d) Its further use is legal, i.e. the substance or object satisfies for such specific use all the relevant requirements applicable to the products and the protection of health and the environment and will not result in an overall negative impact on the environment or human health.

2. The following articles indicate several procedures for demonstrating the existence of the circumstances referred to in point 1, notwithstanding the possibility of demonstrating, by any means and procedures and with reference to substances and objects different from those specified in this decree or which satisfy different criteria, that a substance or object deriving from a production cycle is not waste, but a by-product. The foregoing is notwithstanding the obligation to comply with the use and quality requirements set forth in the applicable industry regulations.

3. The manufacturer and the user of the by-product shall be registered, without expense, in an appropriate public register established through their local Chambers of Commerce, in accordance with Article 10(1).

4. Entities which adopt the provisions of this decree shall keep the documentation indicated for the specific cases referred to in the following articles for a period of three years, ensuring it remains available for inspection by the supervisory authority.

## **Article 5**

### ***Certainty of use***

1. In accordance with Article 4(1)(b), the requirement of certainty of use is to be demonstrated from the moment the waste is produced through to the moment it is used. In such respect, the manufacturer and the holder shall ensure, within their respective areas of responsibility, the organisation and continuity of a management system, including the phases of storage and transportation, which, in terms of time and procedures, ensures the effective identification and use of the by-product. Until the moment of use of the by-product, its storage and transportation shall be carried out in compliance with the provisions of Article 8. The above is notwithstanding the application of the rules on waste management where it is ascertained, in consideration of the procedures for the storage or management of materials or substances, that there is an intention to dispose of or they are being or have been disposed of.

2. Notwithstanding the ascertainment of specific de facto circumstances, to be assessed case-by-case, certainty of use is demonstrated by analysis of the organisational procedures of the production cycle, the characteristics of or the documentation concerning the activities from which the materials used derive and the target process, assessing in particular the consistency between the type, quantity and quality of the waste to be used and its intended use.

3. The certainty of use of the waste in a production cycle other than that from which it derives implies that the activity or facility in which the waste is to be used is identified or identifiable at the time the waste is produced.

4. In accordance with point 3, the element of proof lies in the existence of relations or contractual commitments between the producer of the waste, any intermediaries and its users, from which information is taken regarding the technical characteristics of the by-products, the relevant procedures for use and the conditions of transfer which must be advantageous and ensure the production of a financial or other benefit.

5. In the absence of the documentation referred to in point 4, the requirement of certainty of use and the intention to not dispose of waste is fulfilled by the provision of a technical data sheet containing the information indicated in Annex 1, allowing for identification of the by-products intended for use and of their technical specifications, as well as the relevant industry or type of facilities in which they may be used. The technical data sheet shall also establish appropriate time frames and procedures for the storage and movement of by-products, from the production of the waste through to its use in the target process. In case of substantial changes to the by-product production or target process such as to require changes to the accompanying information, a new technical data sheet must be provided.

6. Technical data sheets are to be numbered, endorsed and managed following the procedures established in the regulations on VAT records. All requirements concerning the keeping of data sheets shall be considered correctly fulfilled where they are produced on A4 paper and properly endorsed and numbered. Data sheets are to be endorsed by the local Chambers of Commerce, without charge.

### **Article 6**

#### ***Direct use with no further processing over and above normal industrial practice***

1. In accordance with Article 4(1)(c), the processes and operations necessary to render the environmental characteristics of the substance or object suitable to satisfy, for the specific use, all the relevant requirements regarding the products and the protection of health and the environment and to not lead to overall negative impacts on the environment do not constitute normal industrial practice, except where they are carried out in the same production cycle, in accordance with point 2.

2. In any case, the activities and operations which constitute an integral part of the waste production cycle do fall under normal industrial practice, even if planned and carried out for the specific purpose of rendering the environmental or health characteristics of the substance or object suitable to allow for and favour, for the specific use, all the relevant requirements regarding the products and the protection of health and the environment and do not lead to overall negative impacts on the environment.

### **Article 7**

#### ***Use and environmental quality requirements***

1. In accordance with Article 4(1)(d), the technical data sheet referred to in Article 5(5) contains, inter alia, necessary information for verifying the characteristics of waste and its compliance with respect to the target process and intended use.

2. Where a by-product is transferred, its compliance with respect to the indications given in the technical data sheet is subject to the provision of a signed statement using the form given in Annex 1. In case of substantial changes to the by-product production or target process such as to require changes to the information given, a new declaration of conformity must be signed.

## **PART II**

### **WASTE MANAGEMENT**

### **Article 8**

#### ***Storage and movement***

1. In order to ensure certainty of use in accordance with Article 5, the by-product, until it is actually used, shall be stored and moved in compliance with the specific technical regulations, where available, and with the rules on good practice, avoiding accidental spillage and contamination of environmental media and in such a way as to prevent and minimise the formation of emissions into the air and the spread of odours.

2. During the storage and transportation of by-products, the following must be guaranteed:

- a) The separation of the by-products from waste, products or objects, or substances with different physico-chemical properties or different intended uses;
- b) The adoption of precautions to avoid the onset of any environmental or health-related issues, as well as combustion or the formation of hazardous or explosive mixtures;
- c) The adoption of precautions to avoid alteration of the physico-chemical properties of the by-product or other issues that could be detrimental to its subsequent use;
- d) The congruity of management time frames and procedures in view of the specificities and properties of the by-product based on the indications given in the data sheet.

3. Following the drafting of the technical data sheet and the signing of the declaration of conformity, storage and transportation may be carried out, including with the accumulation of by-products derived from multiple facilities or activities, provided that they have the same properties and the requirements which guarantee their use in accordance with this decree are not altered.

4. The responsibility of the manufacturer or of the licensee in relation to the management of the by-product is limited to the phases preceding its delivery to the user or to an intermediary. Where it is used by the manufacturer itself, the manufacturer retains responsibility for the management of the by-product during its use.

## **Article 9**

### ***Checks and inspections***

1. Notwithstanding the duties of supervision and control established by the rules in force, the competent authorities shall carry out the necessary checks, inspections and sampling to ascertain compliance with the provisions of this decree.

## **PART III**

### ***FINAL PROVISIONS***

## **Article 10**

### ***Supply and demand exchange platform***

1. For the purposes referred to in Article 4(3), and to favour the exchange and transfer of by-products, the competent regional chambers of commerce shall create a list in which producers and users of by-products may be registered free of charge.

2. The list shall include, in addition to the general and contact information for the registered entities, indication of the type of the by-products being registered.

3. The list referred to in this article shall be published and available in a specific section of the chamber of commerce website or on another website that it indicates.

## **Article 11**

### ***Final provisions***

1. This decree and any subsequent decrees adopted in accordance with Article 1 are to be communicated to the European Commission in accordance with Article 40 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives and with Directive (EU) 2015/1535 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.
2. The annexes constitute an integral part of this regulation.

This decree, bearing the State seal, shall be included in the official collection of legal acts of the Italian Republic. All interested parties shall be bound to observe and ensure observance of this decree.

## ANNEX 1

### TECHNICAL DATA SHEET AND DECLARATION OF CONFORMITY

(provided in accordance with Article 47 of Presidential Decree No 445 of 28 December 2000)

The technical data sheet and declaration of conformity referred to in Articles 5 and 7 of this decree must contain the following information:

#### Reference number

#### Issue date

#### Manufacturer details

- Company name – Tax ID/VAT No;
- Address of registered office and operating site

#### Production facility

- Address
- Authorisation/Issuing entity Issue date
- Description and characteristics of the production process
- Indication of the materials resulting from the production process (products, waste and residues)

#### By-product information

- Type and characteristics of the by-product and its production procedures
- Conformity of the by-product with its intended use

#### Intended use of the by-product

- Type of activity or facilities suitable for use of the waste
- Target facility or activity
- Details of any intermediaries

#### Storage and movement time frames and procedures

- By-product collection and storage procedures
- Details of the place and characteristics of the storage facility and any intermediate facilities
- Maximum period of storage between production and final use
- Transport procedures

#### Management system organisation and continuity

- Description of the management time frames and procedures to ensure identification and effective use of the by-product.

**Place and date (dd/mm/yyyy)**

**Signature**

**Declaration of conformity**

- Exact and unequivocal name of the by-product
- Type and description of the by-product
- Details of the type of activity or facilities suitable for use of the waste
- Any regulatory references governing the characteristics of use of the by-product
- Declaration that the waste is compliant with the technical data sheet
- Place and date (dd/mm/yyyy)
- Signature

## **ANNEX 2**

### **Waste biomass intended for use in the production of energy**

1. This annex refers to waste biomass intended for use in the production of biogas and waste biomass intended for use in the production of energy through combustion.
2. In relation to the biomasses referred to in point 1, sections 1 and 2 provide a list of the main rules governing their use and a number of procedures and activities that may constitute normal industrial practices under the conditions provided for in Article 6(1) and (2).
3. For the purpose of this annex, waste biomass means biomass formed from waste, as defined in Article 2(1)(b).

## Section 1

**Waste biomass intended for use  
in the production of biogas in power plants**

Waste	Reference legislations	Operations and activities
<p><b>1. Animal by-products not intended for human consumption</b> - <b>Regulation (EC) No 1069/2009</b></p> <ul style="list-style-type: none"> <li>• Classified under Category 3 (with the specifications for use provided for in that regulation and in Regulation (EU) No 142/2011):</li> <li>- carcasses and parts of slaughtered animals not intended for human consumption for commercial reasons;</li> <li>- products of animal origin, or foodstuffs containing products of animal origin, which are no longer intended for human consumption for commercial reasons or due to problems of manufacturing or defects from which no risk to public or animal health arise;</li> <li>- animal by-products arising from the production of products intended for human consumption, including degreased bones, greaves and centrifuge or separator sludge from milk processing;</li> <li>- blood that did not show any signs of disease communicable to humans or animals;</li> <li>- adipose tissue from animals which did not show any signs of disease communicable to humans or animals;</li> </ul>	<p><b>Regulation (EC) No 1069/2009 and implementing legislation</b></p>	<p>washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration, sedimentation and clarification, physical/mechanical disintegration</p>
<ul style="list-style-type: none"> <li>- by-products from aquatic animals;</li> <li>• Classified under Category 2 (with the specifications for use provided for in that regulation and in Regulation (EU) No 142/2011):</li> </ul>	<p><b>Regulation (EC) No 1069/2009 and implementing legislation</b></p>	<p>washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration,</p>

<ul style="list-style-type: none"> <li>- manure (animal excrement and/or urine, non-mineralised guano, etc.);</li> <li>- digestive tract and its contents;</li> <li>- meat-and-bone meal;</li> <li>- animal by-products collected during the treatment of waste water required by implementing rules adopted under point (c) of the first paragraph of Article 27:</li> <li>- from establishments or plants processing Category 2 material; or</li> <li>- from slaughterhouses other than those covered by Article 8(e);</li> <li>• All by-products classified under Category 1 and listed in Article 8 of Regulation (EC) No 1069/2009 (with the specifications for use provided for in that regulation and in Regulation (EU) No 142/2011)</li> </ul>		<p style="text-align: center;">sedimentation and clarification, physical/mechanical disintegration</p>
<p><b>2. By-products derived from agricultural activity, breeding, green space management and forestry activities</b></p> <ul style="list-style-type: none"> <li>• livestock sewage;</li> </ul>	<p style="text-align: center;"><b>Regulation (EC) No 1069/2009 and implementing legislation</b></p>	<p style="text-align: center;">natural fermentation, centrifuging, dehydration, sedimentation and clarification</p>
<ul style="list-style-type: none"> <li>• straw;</li> <li>• chaff;</li> <li>• stalks;</li> <li>• hay and shavings for bedding;</li> <li>• field waste from farms;</li> <li>• by-products derived from explanting;</li> <li>• by-products derived from the processing of forest products;</li> <li>• by-products derived from forest management;</li> <li>• pruning, twigs and debris from the maintenance of public and private green space.</li> </ul>		<p style="text-align: center;">washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration, physical/mechanical disintegration</p>

<p><b>3. By-products derived from food and agro-industrial activities</b></p> <ul style="list-style-type: none"> <li>• by-products from the transformation of tomato (skins, out-sized fruits, etc.);</li> <li>• by-products from the transformation of olives (pomace, de-oiled olive pomace, vegetation water);</li> <li>• by-products from the transformation of grapes (marc, stalks, etc.);</li> <li>• by-products from the transformation of fruit (preparation, peeling, coring, citrus pulp, pear crushing, apple, peach, hazelnut, shells, etc.);</li> <li>• by-products from the transformation of miscellaneous vegetables (preparation, peeling, packaging, etc.);</li> <li>• by-products from the transformation of sugar beet (stillage, molasses, used dried beet pulp, fresh pulp, silage pulp, etc.);</li> <li>• by-products from the processing of paddy rice (middlings, chaff, husk, etc.);</li> <li>• by-products from the processing of cereals (middlings, bran, grit, gluten, starch, broken seeds, etc.);</li> <li>• by-products from the processing of fruit and oilseeds (maize germ oilcake, linseed, pips, etc.);</li> <li>• seaweed oilcake;</li> <li>• by-products of the baking, pasta and confectionery industry (scraps of pasta, biscuits, other baked goods, etc.);</li> <li>• by-products of coffee roasting;</li> <li>• by-products from the processing of beer.</li> </ul>		<p>washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration, physical/mechanical disintegration</p>
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<p><b>4. By-products derived from industrial activities</b></p>		
<ul style="list-style-type: none"> <li>• by-products of the processing of wood for the manufacture of furniture and related components limited to untreated wood.</li> </ul>		<p>drying, insufflation of air, refining, shredding, physical/mechanical disintegration</p>
<ul style="list-style-type: none"> <li>• by-products of the processing of sugar through fermentation;</li> <li>• by-products of the production and processing of sugar from non-food biomass.</li> </ul>		<p>washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration, physical/mechanical disintegration</p>
<ul style="list-style-type: none"> <li>• by-products of the processing or refining of vegetable oils.</li> </ul>		<p>washing, drying, insufflation of air, refining, shredding, homogenisation, natural fermentation, centrifuging, dehydration, physical/mechanical disintegration</p>

## Section 2

### Waste biomass intended for use in the production of energy through combustion

#### Part A

1. The waste biomass identified in this section may be classified as by-products for the production of energy through combustion where the requirements and conditions provided for by-products in Part Four of Legislative Decree No 152 of 2006, as well as the requirements and conditions provided for in Part Five of the same decree, are met.
2. In accordance with the legislation in effect as of the date of entry into force of this decree, only the waste biomass referred to in Annex X to Part Five of Legislative Decree No 152 of 2006 and in Article 2-bis of Decree-Law No 171 of 2008 may be used for the production of energy through combustion, notwithstanding any future provisions expressly governing the use of waste biomass as fuel. Where they are intended for the production of energy through combustion, the materials referred to in Article 185 of Legislative Decree No 152 of 2006 are in any case subject to the waste system where they are not envisaged in the provisions indicated in this point.
3. The use of the waste biomass referred to in point 2 for the production of energy through combustion is also subject to the limits and prohibitions imposed by the community regulations regarding health and those imposed, in the cases permitted by law, by regional planning regulations and acts and by the combustion plant authorisation.
4. The operations and activities identified in the tables may constitute normal industrial practices under the conditions provided for in Article 6. In any case, only those operations which fall under the categories of activity set forth in relation to biomass by the regulations referred to in point 2 may be carried out.
5. This section does not apply to the use of waste biomass intended for use in the production of biogas.

Waste	Reference legislations	Operations and activities
Plant material produced from exclusively mechanical processing, washing with water or drying of non-specific agricultural crops.	Annex X, part II, section 4(b) of Part Five of Legislative Decree No 152/2006.	Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.

Waste	Reference legislations	Operations and activities
Plant material produced from forestry operations, forestry maintenance and pruning.	Annex X, part II, section 4(c) of Part Five of Legislative Decree No 152/2006.	Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.

Waste	Reference legislations	Operations and activities
Plant material produced from exclusively mechanical processing and treatment with air, steam or water, including superheated, of virgin wood consisting of bark, sawdust, chips, shavings and virgin wood logs, virgin wood granulates and waste, virgin cork granulates and waste, and logs, not contaminated by pollutants	Annex X, part II, section 4(d) of Part Five of Legislative Decree No 152/2006.	Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.

Waste	Reference legislations	Operations and activities
<p>Plant material produced from exclusively mechanical processing, washing with water or drying of agricultural products</p>	<p>Annex X, part II, section 4(e) of Part Five of Legislative Decree No 152/2006.</p> <p>For marc and their components, such as skins, seeds and stems, Article 2-bis of Decree-Law No 171/2008 also applies.</p>	<p>Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, clarification by physical treatment, sedimentation, mixing, washing, separation, sieving, dehydration and, for used marc and their components, distillation.</p>

Waste	Reference legislations	Operations and activities
<p>De-oiled olive pomace</p>	<p>Annex X, part II, section 4(f) of Part Five of Legislative Decree No 152/2006.</p>	<p>Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, clarification, sedimentation, mixing, washing, separation, sieving, dehydration.</p> <p>Treatment with n-hexane and subsequent heat treatment.</p>

Waste	Reference legislations	Operations and activities
Black liquor obtained in paper mills from wood leaching operations	Annex X, part II, section 4(g) of Part Five of Legislative Decree No 152/2006.	Evaporation to increase solid waste.

Waste	Reference legislations	Operations and activities
Poultry manure	Article 2-bis of Decree-Law No 171/2008. Regulation (EU) No 592/2014.	Physical processes, such as: shredding, drying, thickening, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.

### Part B

1. This section contains, pursuant to Article 184-bis(1)(d) of Legislative Decree No 152 of 2006, a table for verifying whether a material found in the list in table 1.A of Annex 1 to the Decree of the Ministry of Development of 6 July 2012 (materials subject to incentivisation where used in biomass or biogas plants) is also included in the list in Section 4 of Part II of Annex X to Part Five of Legislative Decree No 152 of 2006 or in Article 2-bis of Decree-Law No 171 of 2008.

Materials from table 1.A of Annex 1 to the Decree of 6 July 2012	Correspondence with the list of fuels from Annex X to Part Five of Legislative Decree No 152/2006
<p><b>1. Animal by-products not intended for human consumption - Regulation (EC) No 1069/2009</b></p> <ul style="list-style-type: none"> <li>Classified under Category 3 (with the</li> </ul>	<i>Materials not listed in Annex X</i>

<p>specifications for use provided for in that regulation and in Regulation (EC) No 142/2011):</p> <ul style="list-style-type: none"> <li>- carcasses and parts of slaughtered animals not intended for human consumption for commercial reasons;</li> <li>- products of animal origin, or foodstuffs containing products of animal origin, which are no longer intended for human consumption for commercial reasons or due to problems of manufacturing or defects from which no risk to public or animal health arise;</li> <li>- animal by-products arising from the production of products intended for human consumption, including degreased bones, greaves and centrifuge or separator sludge from milk processing;</li> <li>- blood that did not show any signs of disease communicable to humans or animals;</li> <li>- adipose tissue from animals which did not show any signs of disease communicable to humans or animals;</li> <li>- cooking and service industry waste;</li> <li>- by-products from aquatic animals;</li> <li>• Classified under Category 2 (with the specifications for use provided for in that regulation and in Regulation (EU) No 142/2011): <ul style="list-style-type: none"> <li>- manure (animal excrement and/or urine, non-mineralised guano, etc.);</li> <li>- digestive tract and its contents;</li> <li>- meat-and-bone meal;</li> <li>- animal by-products collected during the treatment of waste water required by implementing rules adopted under point (c) of the first paragraph of Article 27: <ul style="list-style-type: none"> <li>- from establishments or plants processing Category 2 material; or</li> <li>- from slaughterhouses other than those covered by Article 8(e);</li> </ul> </li> </ul> </li> <li>• All by-products classified under Category 1 and listed in Article 8 of Regulation (EC) No 1069/2009 (with the specifications for use provided for in that regulation and in Regulation (EU) No 142/2011)</li> </ul>	
<p><b>2. By-products derived from agricultural activity, breeding, green space management and forestry activities</b></p>	

livestock sewage	<p><i>Poultry manure: listed in Annex X where and within the limits provided for by Decree-Law 171/2008 except as provided for by Regulation (EU) No 592/2014</i></p> <p><i>Other livestock waste: not listed in Annex X</i></p>
straw	<i>Material listed in Annex X</i>
chaff	<i>Material listed in Annex X</i>
stalks	<i>Material listed in Annex X</i>
hay and shavings for bedding	<i>Materials not listed in Annex X</i>
field waste from farms	<i>Materials listed in Annex X</i>
by-products derived from explanting	<i>Materials listed in Annex X</i>
by-products derived from the processing of forest products;	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, crumbling, centrifugation, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products derived from forest management;	<i>Materials listed in Annex X</i>
pruning, twigs and debris from the maintenance of public and private green space.	<i>Materials listed in Annex X</i>
<b>3. By-products derived from food and agro-industrial activities</b>	
by-products from the transformation of tomato (skins, out-sized fruits, etc.);	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>

<p>by-products from the transformation of olives (pomace, de-oiled olive pomace, vegetation water);</p>	<p><i>De-oiled olive pomace: listed in Annex X</i></p> <p><i>Other by-products from the transformation of olives: listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i></p>
<p>by-products from the transformation of grapes (marc, stalks, etc.);</p>	<p><i>Marc and their components, such as skins, seeds and stems:</i></p> <p><i>listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i></p> <p><i>or</i></p> <p><i>listed in Annex X, including in the form of used marc and their components, where and within the limits provided for by Decree-Law 171/2008</i></p>
<p>by-products from the transformation of fruit (preparation, peeling, coring, citrus pulp, pear crushing, apple, peach, hazelnut, shells, etc.);</p>	<p><i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i></p>
<p>by-products from the transformation of miscellaneous vegetables (preparation, peeling, packaging, etc.);</p>	<p><i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i></p>
<p>by-products from the transformation of sugar beet (stillage, molasses, used dried beet pulp, fresh pulp, silage pulp, etc.);</p>	<p><i>Stillage and molasses: not listed in Annex X</i></p>

	<i>Other by-products from the transformation of sugar beet: listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products from the processing of paddy rice (middlings, chaff, husk, etc.);	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products from the processing of cereals (middlings, bran, grit, gluten, starch, broken seeds, etc.);	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products from the processing of fruit and oilseeds (maize germ oilcake, linseed, pips, etc.);	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
seaweed oilcake;	<i>Material listed in Annex X, if deriving from farming, where it is only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products of the baking, pasta and confectionery industry (scraps of pasta, biscuits, other baked goods, etc.);	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>  <i>Not allowed in all cases where they contain</i>

	<i>materials not listed in Annex X</i>
by-products of coffee roasting;	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products from the processing of beer;	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
<p><b>4. By-products derived from industrial activities</b></p> <ul style="list-style-type: none"> <li>• by-products of the processing of wood for the manufacture of furniture and related components limited to untreated wood.</li> </ul>	<i>Materials listed in Annex X limited to virgin wood subject only to physical treatments that include: shredding, drying, thickening, crumbling, centrifugation, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
<p>by-products of the processing of sugar through fermentation;</p> <p>by-products of the production and processing of sugar from non-food biomass.</p>	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>
by-products of the processing or refining of vegetable oils.	<i>Materials listed in Annex X where they are only subject to physical treatments that include: shredding, drying, thickening, clarification by physical treatment, crumbling, centrifuging, filtration, sedimentation, mixing, washing, separation, sieving, dehydration.</i>