CN10

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara

APPROVAL AND OPERATION OF COMPOSTING PLANTS TRANSFORMING ANIMAL BY-PRODUCTS AND DERIVED PRODUCTS IN IRELAND

GOVERNING EU AND NATIONAL LEGISLATION:

The European Union (Animal By-Products) Regulation 2014 (S.I. No. 187 of 2014) and in accordance with Regulation (EC) No. 1069 of 2009 and Regulation (EU) No. 142 of 2011.

Issued 8th May 2014
Milk & Meat Hygiene/ABP/TSE Division

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Conditions for approval and operation of composting plants transforming animal by-products and derived products in Ireland

CONTENTS **PAGE**

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CONTENTS **PAGE**

GLOSSARY OF TERMS

A

'**Animal By-Products**' (**ABP**) means entire bodies or parts of animals, products of animal origin or other products obtained from animals, which are not intended for human consumption, including oocytes, embryos and semen.

'Authorised alternative transformation parameters' means transformation parameters that were authorised by DAFM on foot of the applicant demonstrating that such parameters ensure adequate reduction of biological risk by way of validation in accordance with the requirements laid down in EU legislation (Section 2, Chapter III, Annex V of Commission Regulation 142/2011).

B

'Batch' means a unit of production produced in a single Plant using uniform production parameters, such as the origin of the materials, or a number of such units, when produced in continuous order in a single Plant and stored together as a shipping unit.

'Business end user' means a person who uses, will use or intends to use, compost on land, as part of their business operations, e.g. farmer, landscaper gardener, horticulturist etc

C

'Category 3 material' includes;

(a) carcases and parts of animals slaughtered or, in the case of game, bodies or parts of animals killed, and which are fit for human consumption in accordance with Community legislation, but are not intended for human consumption for commercial reasons;

(b) carcases and the following parts originating either from animals that have been slaughtered in a slaughterhouse and were considered fit for slaughter for human consumption following an ante-mortem inspection or bodies and the following parts of animals from game killed for human consumption in accordance with Community legislation:

(i) carcases or bodies and parts of animals which are rejected as unfit for human consumption in accordance with Community legislation, but which did not show any signs of disease communicable to humans or animals;

(ii) heads of poultry;

(iii) hides and skins, including trimmings and splitting thereof, horns and feet, including the phalanges and the carpus and metacarpus bones, tarsus and metatarsus bones, of:

- animals, other than ruminants requiring TSE testing, and
- ruminants which have been tested with a negative result in accordance with Article 6(1) of Regulation (EC) No 999/2001;

(iv) pig bristles;

(v) feathers;

(c) animal by-products from poultry and lagomorphs slaughtered on the farm as referred to in Article 1(3)(d) of Regulation (EC) No 853/ 2004, which did not show any signs of disease communicable to humans or animals;

(d) blood of animals which did not show any signs of disease communicable through blood to humans or animals obtained from the following animals that have been slaughtered in a slaughterhouse after having been considered fit for slaughter for human consumption following an ante-mortem inspection in accordance with Community legislation:

- animals other than ruminants requiring TSE testing, and
- ruminants which have been tested with a negative result in accordance with Article 6(1) of Regulation (EC) No 999/2001;

(e) animal by-products arising from the production of products intended for human consumption, including degreased bones, greaves and centrifuge or separator sludge from milk transforming to specified transformation standard;

(f) 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 packaging defects or other defects from which no risk to public or animal health arise;

(g) petfood and feedingstuffs of animal origin, or feedingstuffs containing animal by-products or derived products, which are no longer intended for feeding for commercial reasons or due to problems of manufacturing or packaging defects or other defects from which no risk to public or animal health arises;

(h) blood, placenta, wool, feathers, hair, horns, hoof cuts and raw milk originating from live animals that did not show any signs of disease communicable through that product to humans or animals;

(i) aquatic animals, and parts of such animals, except sea mammals, which did not show any signs of disease communicable to humans or animals;

(j) animal by-products from aquatic animals originating from establishments or plants manufacturing products for human consumption;

(k) the following material originating from animals which did not show any signs of disease communicable through that material to humans or animals:

(i) shells from shellfish with soft tissue or flesh;

(ii) the following originating from terrestrial animals:

- hatchery by-products,
- eggs,
- egg by-products, including egg shells,

(iii) day-old chicks killed for commercial reasons;

(l) aquatic and terrestrial invertebrates other than species pathogenic to humans or animals;

(m) animals and parts thereof of the zoological orders of Rodentia and Lagomorpha, except

Category 1 material as referred to in Article 8(a)(iii), (iv) and (v) and Category 2 material as referred to in Article 9(a) to (g)of Regulation (EC) No. 1069/2009;

(n) hides and skins, hooves, feathers, wool, horns, hair and fur originating from dead animals that did not show any signs of disease communicable through that product to humans or animals, other than those referred to in point (b) of Article 10 of Regulation (EC) No. 1069/2009;

(o) adipose tissue from animals which did not show any signs of disease communicable through that material to humans or animals, which were slaughtered in a slaughterhouse and which were considered fit for slaughter for human consumption following an ante-mortem inspection in accordance with Community legislation;

(p) catering waste other than catering waste from means of transport operating internationally which is Category 1 material.

Catering waste' means all waste food including used cooking oil originating in restaurants, catering facilities and kitchens, including central kitchens and household kitchens.

'Compost' means;

- In the case of plants required to pasteurize feedstock, material resulting from the pasteurisation of feedstock
- In the case of plants not required to pasteurize feedstock, material resulting from the transformation of feedstock

'**Composting plant'** means a plant in which animal by-products or derived products are at least part of the material, which is submitted to biological degradation under aerobic conditions. It shall include the site on which the Plant is located, all services and facilities used in any way thereon, for, or in connection with the Plant and any buildings erected, located, or to be erected and located on the site, all of which are confined within a defined perimeter boundary, hereinafter referred to as a 'Plant'.

"Composting reactor" means the composting vessel in which pasteurisation takes place in plants required to pasteurize their feedstock.

D

'DAFM' means the Department of Agriculture, Food and the Marine;

'Derived products' means products obtained from one or more treatments, transformations or steps of processing of animal by-products;

'Digestive tract content' means the contents of the digestive tract of mammals and ratites, separated from the digestive tract;

E

'End user' means a person who uses, will use or intends to use, compost on land;

'**Establishment**' or '**plant**' means any place where any operation involving the handling of animal by-products or derived products is carried out, other than a fishing vessel;

'EU' means the European Union.

'EU transformation parameters' means **all** the material within the composting reactor must be simultaneously held at 70 °C or above for 60 **continuous** minutes. The particle size of the ABP material must be reduced to 12 mm or less before entering the composting reactor.

"External MDM" means Category 2 manure, Category 2 digestive tract content, Category 2 milk, milk-based products and colostrum, Category 3 milk, milk-based products, colostrum and colostrum-based products that does not fall under the definition of 'own ABP'.

F

'**Feedstock**' means any material including ABP material and non-ABP material, which is transformed in a composting Plant;

'Fishmeal' means processed animal protein (PAP) derived from aquatic animals, except sea mammals.

M

'**Manure**' means any excrement and/or urine of farmed animals other than farmed fish, with or without litter

"MDM" means

- Category 2 manure;
- Category 2 digestive tract content;
- Category 2 milk, colostrum and milk based products;
- Category 3 milk, and milk-based products and colostrum and colostrum-based products.

N

'National transformation parameters' means all the material within the composting reactor must be simultaneously held at 60 °C or above for each of two **continuous** 48-hour periods. The particle size of the ABP material must be reduced to 400 mm or less before entering the composting reactor and the material must be thoroughly mixed between the two 48 hour periods.

O

'Operator' means the natural or legal persons having an animal by-product or derived product under their actual control, including carriers, traders and users.

'**Organic fertilisers**' and 's**oil improvers (OF/SI)'** means materials of animal origin used to maintain or improve plant nutrition and the physical and chemical properties and biological activity of soils, either separately or together; they may include manure, non-mineralised guano, digestive tract content, compost and digestion residues.

Own ABP' means manure, colostrum and/or milk derived from a single epidemiological unit and which is derived from animals on the same holding as the composting plant. However other scenarios may be considered on a case-by-case basis.

P

'Pasteurisation' means the transformation of feedstock using the EU, national or DAFM authorised alternative transformation parameters.

'Placing on the market' means any operation the purpose of which is to sell animal by-products, or derived products to a third party in the Community or any other form of supply against payment or free of charge to such a third party or storage with a view to supply to such a third party;

'Pre-requisite programmes' are defined as procedures that control the operations within a Plant with a view to the production of a safe product.

'Processed animal protein' (PAP) means animal protein derived entirely from Category 3 material, which have been treated in accordance with Section 1 of Chapter II of Annex X of Regulation (EU) No. 142 of 2011 (including blood meal and fishmeal) so as to render them suitable for direct use as feed material or for any other use in feedingstuffs, including petfood, or for use in organic fertilisers or soil improvers; however, it does not include blood products, milk, milk-based products, milk-derived products, colostrum, colostrums products, centrifuge or separator sludge, gelatine, hydrolysed proteins and dicalcium phosphate, eggs and egg- products, including eggshells, tricalcium phosphate and collagen.

'Processed Category 3 material' means processed Category 3 material other than PAP that has been produced using Methods 1-5 and Method 7 in the case of ABPs derived from animals other than aquatic animals and Methods 1-7 in the case of ABPs derived from aquatic animals. Regulation (EU) No. 142 of 2011, Annex IV, Chapter II.

T

Transformation: means biological degradation under aerobic conditions and includes all steps in a composting plant up to and including maturation.

SECTION 1

GENERAL REQUIREMENTS INCLUDING ABP FEEDSTOCKS

1.1 APPROVALS

- A plant may not accept or transform Animal By-Products (ABP) or derived products unless the Department of Agriculture, Food and the Marine (DAFM) has issued the plant with a conditional or full approval in accordance with Regulation (EC) No. 1069/2009.

- The operator must comply with all relevant requirements listed in the European Union Animal By-Products Regulations (S.I. No 187 of 2014) and EU legislation (Regulation (EC) No. 1069/2009 and Regulation (EU) No. 142/2011).

- ABP may not be accepted from any agricultural holding or other premises restricted under the Animal Health and Welfare Act 2013 without specific authorisation by DAFM.

- In certain situations, e.g. in the event of a Class A Disease outbreak, DAFM may restrict the movement of ABP to and/or from the plant under relevant national legislation and/or may require additional controls and measures to be implemented in the Plant.

- The operator must notify DAFM immediately if significant changes are proposed in plant activities, plant personnel or if the plant ceases to handle ABP.

1.2 ABP FEEDSTOCK

- Plants approved by DAFM may handle ABP and non-ABP materials. The quantities of ABP and non-ABP materials may be restricted in plants that are not pasteurising feedstocks. This restriction will be detailed in the conditions attached to the plant's approval.

- The list of ABP and derived products, which may be handled at composting plants in Ireland include the following.

  - The following **Category 2** materials:

    a) manure;
    b) digestive tract content;
    c) milk and milk-based products;
    d) colostrum;
    e) eggs and egg-based products;
    f) material originating from aquatic animals.

  - **Category 3** material.

- The following **derived products**:

  a) processed animal protein (PAP) from DAFM authorised premises;
  b) fishmeal from DAFM authorised premises;
  c) ABP feedstocks that have undergone pasteurisation at another DAFM approved plant;
  d) processed Category 3 material from DAFM authorised premises.

- The actual list of materials that any plant can handle will depend primarily on the transformation parameters in use at the plant and will be detailed in the conditions attached to the plant's approval.

- A plant may only accept those ABP or derived products detailed in the conditions attached to the plant's approval.

- Plants located on farms may not accept and handle PAP, fishmeal and/or processed Category 3 material.

- Waste or any other material not directly used in the plant cannot be accepted or stored at the plant unless otherwise agreed by DAFM.

SECTION 2

STRUCTURAL AND EQUIPMENT REQUIREMENTS

2.1 ALL PLANTS

2.1.1 Fencing and separation

- The plant must be physically separated from all other premises including the farm premises in the case of plants on farms, and surrounded on all sides by a permanent and effective 1.8 metre animal-proof close-meshed fence, with a 1.8 metre lockable gate at the entrance to the plant.
- Additional entrances/exits anywhere from a plant to surrounding land/premises are not permitted unless otherwise agreed by DAFM.
- Fencing and gates must be adequately maintained.
- In the event that the:

  a) plant is located on, or adjacent to premises or land where farmed animals are kept or have access;

  b) plant transforms ABP other than MDM;

  and

  c) compost is not stored in a fully enclosed building/container

  a double fencing system with a minimum of two metres between each fence is required. The outside fence must be of a permanent nature and be stock proof. Such fencing must comprise of sheep wire with a single strand of barbed wire on top as a minimum, or equivalent. In addition, the fencing must be effective against the farming stock types kept in adjacent fields.

- In addition:

  a) if the plant is located on, or adjacent to premises or land where farmed animals are kept or have access;

  and

  b) uses ABP other than ‘own ABP’

  there must be no access to the plant from the place where farmed animals are kept.

- The access route from the public road to the plant must be laid out in a manner that ensures no contact between farmed animals and the access route, for example by means of stock–proof fencing, impenetrable ditch, river/drain which cannot be traversed etc. Where stock proof fencing is used, this must comprise of sheep wire with a single strand of barbed wire on top as a minimum, or equivalent. In plants located on or adjacent to premises or land where farmed animals are kept, the access route must not pass through farm-yards or areas where animals, animal feed and or animal bedding are housed or stored.

- Assessment of other equivalent separation and biosecurity measures shall be made on a risk basis for individual plants. This may include transformation of ABP using the EU or National transformation parameters before reaching the plant. In other words, in cases where the only ABP that are handled at the plant are ABP that are pasteurised before reaching the plant, the fencing requirements listed above may not be required. Such situations will be assessed on a case-by-case basis.

2.1.2 Waste-water

- Adequate measures must be taken to contain any leachate or wastewater generated thus avoiding risk to public or animal health.

- The operator has a responsibility to ensure that waste water is treated in accordance with relevant Community environmental legislation. See Trader Notice 02/2011 which can be found on the DAFM website by using the following link: http://www.agriculture.gov.ie/agri-foodindustry/animalbyproducts/animalbyproducts-tradernotices/

- Leachate and wastewater may be used in the compost process, although in the case of plants pasteurising ABP, the leachate or wastewater may **not** be added during or post pasteurisation.

- In the case of plants located on or adjacent to farms, leachate and waste water generated within a plant must be handled in a system which is separate from the farm waste-water treatment system.

2.1.3 Buildings

- The plant must have a fully enclosed building/s for the delivery of ABP with the following exceptions, subject to compliance with environmental rules;

  - Liquid feedstocks may be received into fully enclosed tanks that are not within the reception building but that are located in a designated area, provided the feedstocks are delivered into those tanks by means of closed pipes or an equivalent system and the feedstock is pumped from those tanks into the transformation building again using closed pipes or an equivalent system.

  - Manure, other than poultry manure, may be received in a designated area that is not required to be enclosed.

    In such cases, the designated areas must be designed in such a way as to allow easy and adequate cleaning and disinfection of the delivery area and delivery vehicle and to allow collection and containment of any spillages as well as all waste-water generated.

- Other types of unloading systems may be considered on a case-by-case basis provided they achieve an equivalent effect in terms of biosecurity.

- The plant must also have a fully enclosed building for the transformation of ABP, up to and including the pasteurisation stage in the case of plants required to pasteurise feedstocks, up to and including the maturation stage in plants not required to pasteurise feedstocks.

- In the case of on-farm plants, manure derived from animals on the same farm as the composting plant is located, should where possible, be transported by pipeline from the place where the manure is stored on the farm to the plant in order to avoid disease risks associated with vehicles returning from the plant to the farm. Where this is not possible, thorough cleaning and disinfection of the manure/milk delivery vehicles must take place before returning to the farm. Assessment of other equivalent delivery methods shall be made on a risk basis for individual plants.

- The walls and floors of the reception/transformation building/s must be smooth and capable of being cleaned and disinfected.

- Floors must be designed and laid in such a way to ensure adequate drainage of fluids and ease of cleaning and disinfection.

- The plant must have personnel changing and washing facilities.

- The plant must have adequate boot washes and footbaths at least located at all entrances/exits to the reception, composting, and storage buildings.

- Office facilities must be available at or adjacent to the plant and must not be within a dwelling house.

2.1.4 Vehicle cleaning area

- The plant must have a designated vehicle/container cleaning area, which must be located indoors within the feedstock reception building, or externally in close proximity to the feedstock reception building exit door. This designated area must contain facilities for the cleaning and disinfection of wheels. These facilities may either be a wheel-wash, or a power washer. In general disinfectants must be used although saturated steam cleaning may be used as an alternative.

2.1.5 Vermin control

- Preventive measures must be taken against birds, rodents, insects and other vermin. A fully documented pest-control programme, which must include a bait map and bait-servicing schedule, shall be implemented throughout the whole plant. Bait points must be visibly and clearly numbered.

2.2 PLANTS PASTEURISING FEEDSTOCK

2.2.1 Plant layout

- The plant must be separated into distinct 'clean' (green) and 'dirty' (red) areas and operate on a simple one-way flow basis i.e. feedstock material moves from the dirty area to the clean area. All feedstock material must enter the plant via the red area.

- In plants, which are transforming feedstocks using the National transformation parameters, an intermediate (amber) area may exist between the dirty and clean areas, where material is mixed prior to the onset of the second 48-hour period. This intermediate area must be separated from both the clean and dirty areas and must be on the clean side of the plant. Strict procedures must be in place to avoid cross-contamination of compost in this area.

2.2.2 Wastewater

- Drainage must be constructed in such a way as to ensure that there is no possibility of contamination of compost with leachate or wastewater.

2.2.3 Compost storage area

- The compost storage area must be located so as to ensure that no cross-contamination occurs from unpasteurised material, leachate or wastewater.

2.2.4 Buildings

- The plant must have effective footbaths between clean and dirty areas.

- In a plant where feedstock is taken in and pasteurised in the same building as where compost is stored, a wall or some such substantial physical barrier must physically separate the red and green areas.

2.2.5 Pasteurisation equipment

- The plant must be equipped with a closed composting reactor/s which have been validated (unless otherwise agreed by DAFM), and that cannot be by-passed.

- Where the National transformation parameter is used, the material must be mixed thoroughly between the two stages. The second stage should take place in a separate composting reactor. However, systems involving one composting reactor will be considered provided the operator has a system that will ensure that the material is thoroughly mixed between the two stages and can be verified by DAFM.

- The plant must have an adequate safety system to prevent insufficient heating. In the majority of cases this will be an aeration system, either passive or active aeration (mechanical agitation or forced aeration), which can be manipulated to ensure the specific transformation parameters are met. It may include a heating system in the walls.

- The composting reactor must be equipped with sufficient temperature probes to provide evidence that all the material is kept above the minimum temperature for the required period of time. Probes must be tamperproof.

- The plant must be equipped with recording equipment that will allow a live, real-time thermograph to be produced from the temperature probe readings. The recording system and the thermographs produced must be tamperproof.

- The plant must have equipment (e.g. macerators, shredders etc.) capable of reducing the particle size of the feedstock to the required size prior to entering the composting reactor. The following exceptions will be permitted:

  - plants handling MDM only;

  - plants using the National transformation parameters who can demonstrate to DAFM that particle sizing equipment is not required.

  Other exceptions may be permitted by DAFM on a case by case basis.

- The plant must have equipment (e.g. screens, trommels, in-line sieves, manual grids, mixing wagons with fixed size outlet apertures etc) capable of verifying compliance with the particle size requirements. In the case of plants using the EU transformation parameters, in-line particle verification equipment is required through which all the feedstock must pass. The following exceptions to the requirement for verification equipment will be permitted:

  - plants handling MDM only.

- Other types of composting reactors may be considered provided they are managed in such a way that all the material in the system achieves the required time and temperature parameters, including, where appropriate, continuous monitoring of the parameters.

2.2.6 Machinery

- Measures must be taken to prevent the re-contamination of material that has been pasteurised via machinery, vehicles and equipment. Ideally, separate machinery, vehicles and equipment should be used in the clean and dirty areas. However, where in the event the operator decides to use shared machinery/equipment/vehicles, there must be thorough and effective cleaning and disinfection of same before movement between areas and this must be recorded.

SECTION 3

PLANT OPERATIONAL REQUIREMENTS

3.1 ALL PLANTS

- The doors to the reception building must be kept closed at all times other than during feedstock delivery or when other essential tasks require the doors to be open.
- Animals including farmed and pet animals and poultry must not have access to the plant.
- The plant and any vehicles, machinery or equipment used in the plant must be maintained in a hygienic state. In particular contamination of the external environment with ABP must be prevented. In the event of spillage, the material must be removed and cleaning and disinfection must be carried out.
- All parts of the plant must be kept in a clean and hygienic state. Cleaning and hygiene procedures must be established, documented and implemented for all parts of the plant including the reception building, ABP delivery vehicles/receptacles, plant equipment/machinery/vehicles, footbaths, wheel wash and personnel.
- Footbaths and permanent wheel wash facilities using disinfectant must be replenished and changed as required to ensure disinfection efficacy.
- Boot washes, footbaths and hand-washing facilities must be used by operatives.
- All operatives on site must wear plant dedicated clothing and footwear, which is clearly identifiable and is removed before leaving the plant.
- Measures must be taken so as to ensure that vehicles, machinery and/or equipment used in a plant do not present a risk with regard to disease transmission to animals or humans e.g. plant machinery must not be used if handling animal feedingstuffs or bedding material and must not enter any place where animals are kept.

3.1.1 INTAKE

3.1.1.1 Vehicles

- All ABP must be transported in sealed new packaging or in covered leak-proof containers or receptacles.
- Plant own vehicles and containers used by the plant for transporting ABP feedstocks to the plant shall be maintained in a clean condition.

- Plant own re-usable containers used by the plant for the collection of ABP and derived products must be dedicated to the transport of one category of ABP, e.g. Category 2 or Category 3 material. In addition, re-usable containers used to transport ABP to plants using the National transformation parameters must be dedicated to the type of ABP listed in the conditions attached to the plant's approval.

- With the exception of containers transporting catering waste, or manure being delivered from the farm of origin by the farmer, plant containers are required to be labelled with a permanent, visible and legible label on both sides of the container, that includes the haulier registration code, a unique receptacle number and the following words;

  - In the case of Category 3 material other than catering waste; '**Category 3 Material - Not For Human Consumption**'

  - In the case of Category 2 manure and digestive tract content; '**Category 2-Manure**'

  - In the case of Category 2 material other than manure and digestive tract content '**Category 2 Material - Not For Animal Consumption**'

- Composting plant operators using plant dedicated vehicles must register with DAFM as an ABP haulier. Such vehicles must be labelled with a designated haulier registration code. This requirement will apply to delivery vehicles also.

- Vehicles carrying ABP feedstocks other than manure or poultry litter must not enter any place where farmed animals are kept.

- Containers, receptacles and vehicles used for transporting ABP to the plant (both plant own vehicles and other vehicles) must be cleaned, washed and disinfected both internally and externally after each use in the plant's designated vehicle/receptacle cleaning area, with the following exceptions:

  - Vehicles transporting catering waste only. Only the wheels of the vehicle need to be cleaned and disinfected as well as any gross external contamination of the vehicle.

  - Vehicles transporting manure only. Only the exterior and the wheels of the vehicle need to be cleaned and disinfected.

- In the case of manually operated cleaning and disinfection facilities for containers/receptacles/vehicles, the cleaning procedures once completed must be signed off by the haulier.

3.1.1.2 Feedstock acceptance

- It is the responsibility of the operator to ensure that feedstock received at the plant is in compliance with the conditions attached to the plant's approval.

- A feedstock acceptance agreement must be completed by both the plant operator and the feedstock supplier.

- A feedstock acceptance agreement must be completed for each supplier of feedstock, both ABP and non-ABP, to the plant.

- Feedstock acceptance forms must be completed in advance of the supply of feedstock to the plant.

- Feedstock acceptance forms must include, as a minimum, the information contained in the sample feedstock acceptance form in **Appendix 1** on Page 25**.**

- In the event that a supplier changes the feedstock being supplied to the plant or there are any other changes in terms of the supplier e.g. personnel change, then the feedstock acceptance agreement must be updated.

- The operator must carry out documentary checks of commercial documents and intake dockets as well as visual checks of incoming material to ensure compliance with the conditions attached to his/her approval.

3.1.1.3 Commercial documents

- ABP and derived product feedstocks, with the exception of catering waste and manure sourced in the Republic of Ireland, may only be accepted into the plant provided each consignment is accompanied by two copies of a fully completed commercial document in compliance with the template commercial document in **Appendix 2** on Page 26.

- Commercial documents must be completed by the feedstock supplier.

- The plant must retain one copy of the commercial document on the file at the plant. The 2nd copy must be signed, stamped and returned to the feedstock supplier to verify delivery.

- Commercial documents are not required in the case of catering waste, manure and non-ABP feedstocks. In these cases, an intake docket must be completed for each consignment and must be retained on the file at the plant.

3.1.2 TRANSFORMATION

- Transformation of ABP must commence as soon as possible after arrival, preferably within 24 hours.

- ABP feedstocks must be kept in a fully enclosed area until:

  - after pasteurisation in the case of plants required to pasteurise feedstocks;

  - after the final maturation stage in the case of plants not required to pasteurise feedstocks.

- Where PAP, fishmeal or processed Category 3 material is used in the plant, the combined quantity of these products must be:

  - mixed at a rate of no more than 1:5 with other feedstocks when these products are being added prior to transformation commencing;

  or

  - comprise no more than 50% of the weight of the final compost product when these products are being added after transformation.

  The operator must be able to demonstrate by means of a documented procedure how this requirement is met. Records must be maintained to verify compliance with this requirement.

3.1.3. DISPATCH

- Compost may only be used if it has been produced in accordance with legislative requirements and the conditions attached to the plant's approval.

- Compost that does not meet the above requirement may only leave the plant if:

  a) authorised by DAFM;

  and

  b) is destined for disposal.

3.1.3.1 Registration and approval

- In the event that compost is being supplied;

  - to an Organic Fertiliser and Soil Improvers (OF/SI) **manufacturing** premises, the facility must be approved by DAFM in advance of supply;

  - to a premises **handling, mixing, blending or packaging OF/SI,** the facility must be registered by DAFM in advance of supply;

  - to a premises **storing** OF/SI, the facility must be approved by DAFM in advance of supply;

  - to a premises **retailing** OF/SI in bulk or in bags > 50 kg the premises must be registered by DAFM in advance of supply;

  - to a **farmer** who intends to use it on land, which will be used for grazing animals or for the production of feedingstuffs, then the farmer must be registered with DAFM.

- Farmers should be registered before they come to a composting plant to collect compost. In the event the farmer is not registered, then the plant may supply compost to the farmer provided:

  a) the farmer completes an OF/SI end-user registration form at the plant (end-user registration forms can be obtained from Milk & Meat Hygiene/ABP/TSE Division – see full contact details on Page 24,

  and

  b) the composting plant operator sends the registration form within 5 working days of the form being completed to Milk & Meat Hygiene/ABP/TSE Division – see full contact details on Page 24. The composting plant operator must keep a copy of the registration form on a plant file and provide the farmer with the third copy.

3.1.3.2 Commercial documents

- A commercial document must be completed in full by the composting plant operator for each load of compost which leaves the plant with the exception of compost supplied to end users other than business operators within the Republic of Ireland.

- A derogation from this requirement is provided in the case of an end-user receiving several loads of compost in a single day. A single commercial document for the entire consignment is acceptable provided it documents the total quantity of material transported and the number of loads.

- The commercial document must be assigned a unique identifiable number and must be produced in quadruplicate. The original and a copy travel with the consignment to the consignee; a copy is retained by the haulier and the plant operator. The consignee should stamp and sign the copy and return it to the composting plant operator to verify arrival.

- The commercial document must include the information contained in the sample commercial document in **Appendix 3** on Page 27 as a minimum.

  The commercial document must also contain the following wording: *"Organic fertilisers and soil improvers – no grazing of farmed animals or use of crops as feedingstuffs for at least 21 days post application"*.

  Where the commercial document is supplied to business operators other than farmers, the following alternative wording may be used instead:
  'may not be applied to land to which farmed animals have access'

  The following exception applies; in the case of compost made from MDM only, the additional wording as detailed above is not required on the commercial document,

- In the case of compost being dispatched outside of the Republic of Ireland, the EU commercial document must be used.

These commercial documents are available from Milk & Meat Hygiene/ABP/TSE Division – see full contact details on Page 24.

- Where untransformed ABP is being dispatched from the plant, the commercial document in **Appendix 2** on Page 26 must be used.

3.1.3.3 Vehicles

- Plant vehicles used to transport compost must be maintained in a clean condition.
- Plant vehicles or containers used to transport bulk compost must have a permanent, visible and legible label on both sides of the container, that includes the haulier registration code and a unique receptacle number.
- EU legislation stipulates that in the case of vehicles transporting bulk compost, other than compost made from MDM only, the label must also contain the following wording;

  "Organic fertilisers and soil improvers – no grazing of farmed animals or use of crops as feedingstuffs for at least 21 days post application"

- Plant vehicles or containers used to transport packaged compost are not required to be labelled.

3.1.3.4 Packaging

- Where packages of compost >50 kg, with the exception of those produced from MDM only are supplied, they must have the following label;
  - In the case of compost derived from **Category 2** material or **mixtures** of Category 2 and 3 material; 'Category 2 ***organic fertilisers and soil improvers*** - *no grazing of farmed animals or use of crops as feedingstuffs for at least 21 days post application***"**.
  - In the case of compost derived from **Category 3** material; 'Category 3 ***organic fertilisers and soil improvers*** - *no grazing of farmed animals or use of crops as feedingstuffs for at least 21 days post application***"**.
- Where packages of compost >50 kg, with the exception of those produced from MDM only, are supplied for use other than on farms, the following alternative label may be used;
  'may not be applied to land to which farmed animals have access'
- Packages of compost >50 kg made from MDM only, must be labelled with the category of ABP from which the OF/SI is derived in addition to the wording '*organic fertilisers and soil improvers'.*
- Compost in ready-to-sell packages of <50 kg is not required to be labelled.
- Where the compost is traded to other Member States, the labelling on the vehicle, container or packaging must be indelibly colour-coded for the period of transport at least.

- In the case of compost derived from Category 2 material or mixtures of Category 2 and 3 material, the label must be yellow.

- In the case of compost derived from Category 3 material, the label must be green with a high content of blue

3.2 PLANTS PASTEURISING FEEDSTOCK

- It is the responsibility of the plant operator to ensure that all feedstock accepted into the plant are pasteurised in accordance with the conditions attached to the plant's approval

- The pasteurisation parameters required will depend on:

  - the type of ABP feedstock a plant is handling;

  and

  - whether the compost is being placed on the market in the Republic of Ireland or in the EU.

- The table attached in **Appendix 4** on Pages 28-33 of this document summarises the different transformation parameter options according to the type of feedstock being handled at the plant and the intended end use.

- The composting reactor must be operated on a batch basis unless otherwise specified in the conditions attached to the plant's approval.

- Probes must be placed in the locations as specified in conditions attached to the plant's approval.

- Every batch must be assigned a unique identifiable number that is recorded on the thermograph and on the microbiological results sheet.

- The composting reactor must contain volumes of feedstock similar to the volumes of feedstock used during the validation period.

- Where the National transformation parameters are used the material must be thoroughly mixed between the two stages.

- Installations, as well as equipment used to achieve and monitor pasteurisation (including particle sizing, particle verification and monitoring equipment) must be kept in a good state of repair, and must be checked and maintained on a regular basis, including calibration where appropriate, so as to ensure effective functionality.

- Temperature probes must be calibrated at least once every 12 months by an appropriate, competent independent agency.

- After pasteurisation, compost must be handled and stored in such way as to prevent recontamination. Compost must be stored in the 'clean' area at all times prior to being removed from the plant so as to ensure that no cross-contamination occurs from unpasteurised material, leachate or from waste-water.

- Cleaning and disinfection procedures must also be in place for areas contaminated by material, which has failed to meet the required transformation parameters, has failed microbiological testing or which has become re-contaminated.

- Compost that has been:

  a) derived from the pasteurisation of manure or mixtures of manure with other materials;

  and

  b) is intended to be used for purposes other than direct land-spread in the Republic of Ireland;

  may not be stored outside. It must be stored in a sealed silo, a properly constructed storage shed, and enclosed container or in properly sealed bags.

3.2.1 Particle sizing

- The particle size of the ABP material and non-ABP material must be reduced to the required particle size **before** entering the composting reactor. An exception to this requirement is provided in the case of non-ABP feedstocks used as amendment material to enable aeration of the material (e.g. woodchip).

- After particle size reduction, material must not come in contact with either ABP or non-ABP feedstocks awaiting particle size reduction.

- In the case of plants operating to the National transformation standard, and where in-line particle verification equipment is not used, the operator must carry out representative checks of the particle size of each batch of feedstock before entering the composting reactor.

3.2.2 Temperature checks

- Whilst the material is being transformed at the EU transformation parameters, readings from all temperature probes must be recorded on the live, real-time thermograph at no more than 5-minute intervals.

- Whilst the material is being transformed at the National transformation parameters, readings from all temperature probes must be recorded on the live, real-time thermograph at no more than 30-minute intervals.

- Temperature checks must be carried out by the operator on a regular basis in the composting reactor in areas other than those where the permanent probes are located with a view to verifying that all material is meeting the required temperatures simultaneously.

3.2.3 Time, temperature and particle size non-compliance

- The batch, as well as any in-contact material, must be re-pasteurised. Where there is a particle size non-compliance, the material must be reduced to the particle size before re-pasteurisation. An exception to this rule may be provided by DAFM on a case-by-case basis.

- Any place in the clean area of the plant where a non-compliant batch has been stored must be cleaned and disinfected.

- The operator of the plant must investigate and establish the cause of the failure and document the results.

- The operator of the plant must take appropriate corrective actions to ensure this will not happen again and record the type of corrective action taken.

SECTION 4

MICROBIOLOGICAL TESTING

- Operators should note that compliance with the microbiological standard alone does not mean that compost is suitable for use as an OF/SI. Compost may only be used as an OF/SI if it also meets the transformation parameters where required, and if it complies with all other requirements of the legislation and the conditions attached to the plant's approval.

- A minimum sampling frequency will be specified in the conditions attached to the plant's approval.

- Five representative samples must be taken immediately after the material has been pasteurised. These five samples must be analysed for E.Coli or Enterococcaceae.

  - Four samples must have a bacterial count ≤ 1,000 in 1g.

  - One sample may have a bacterial count up to 5,000 in 1g.

  - In plants handling manure and producing a compost that will be used for purposes other than direct land-spread (EU transformation parameters only), five samples must have a bacterial count ≤ 1,000 in 1g.

- Five representatives samples must be taken in the final compost storage area or upon withdrawal from storage. These five samples must be analysed for Salmonella.

  - All five samples must have a bacterial count of 0 in 25g.

- Tests must be carried out in laboratories that are approved by DAFM to carry out the required test. Lists of approved laboratories may be found in the DAFM website using the attached link;

  http://www.agriculture.gov.ie/media/migration/agri-foodindustry/animalby-products/approvedpremisestransporters/ListofDAFMApprovedLabs171012.pdf

- In large batches, sub-sampling may be necessary to achieve representative sampling.

4.1 Microbiological non-compliance

- The operator must notify DAFM immediately of any failure to meet the required microbiological standards.

- In the case of failure to meet the E-coli or Enterococcaceae standard, the compost as well as any in-contact material must be re-pasteurised.

- In the case of failure to meet the Salmonella standard, the compost as well as any in-contact material must be handled or disposed of, in accordance with DAFM instructions.

- Any place in the clean area of the plant where a non-compliant batch has been stored must be cleaned and disinfected.

- The operator of the plant must investigate and establish the cause of the failure and document the results.

- The operator of the plant must take appropriate corrective actions to ensure this will not happen again and record the type of corrective action taken.

- In response to microbiological failures, the frequency of testing may be increased by DAFM.

SECTION 5

PLANT HACCP PLANS AND PLANT PRPS

- It is the responsibility of the plant operator to ensure a system of checks, based on Hazard Analysis and Critical Control Points (HACCP) principles as well as plant Pre-requisite Programmes (PRPs) are in place, implemented and maintained.

- The HACCP Plan must:
  - Identify any hazards that must be prevented, eliminated or reduced to acceptable levels.
  - Identify the critical control points (CCPs) at the step or steps at which control is essential to prevent or eliminate a hazard or reduce it to acceptable levels.
  - Establish critical limits at CCPs, which separate acceptability from unacceptability, for the prevention, elimination or reduction of identified hazards.
  - Establish and implement effective monitoring procedures at CCPs.
  - Establish corrective actions when monitoring indicates that a CCP is not under control.
  - Establish procedures to verify that the measures outlined in the above points are complete and working effectively. Verification procedures shall be carried out regularly.
  - Establish documents and records to demonstrate the effective application of the above measures.

- Plant PRPs must include the following:

1. **Intake** procedures, including:

   a) acceptable feedstocks;
   b) completion of feedstock acceptance forms;
   c) documentary checks of commercial documents and intake dockets;
   d) physical checks of incoming material;
   e) maintenance of intake log;
   f) procedures for dealing with non-compliant feedstock received;
   g) verification procedures;
   h) record keeping procedures;
   i) batch traceability system.

2. **Pasteurisation** procedures including:

   a) feedstock preparation;
   b) particle sizing including procedures for verifying particle size;
   c) composting reactor filling and composting reactor operation;

d) temperature probe placement;
e) documentary checks of thermograph records;
f) where required, temperature verification checks of material in the composting reactor;
g) procedures for dealing with material that has not met the required transformation parameters;
h) record keeping procedures.

3. **Microbiological Sampling** procedures including;

a) acceptable microbiological levels;
b) clear definition of what constitutes a 'batch' for sampling purposes;
c) sampling frequency;
d) sample taking procedures;
e) sampling locations;
f) procedures to be followed in the event of a microbiological non-compliance;
g) record keeping procedures including sampling log;

4. **Cleaning and hygiene** procedures including:

a) procedures and schedule for the inspection and cleaning of buildings, vehicles, machinery and equipment;
b) procedures and schedule for maintenance and use of wheel washes and foot-baths;
c) personnel hygiene procedures - hand washing facilities, removal of work clothes prior to leaving the premises etc;
d) equipment required;
e) record keeping procedures.

5. Procedures to prevent **re-contamination** via wastewater, leachate, personnel movements, machinery etc and record keeping procedure.

6. **Vermin** and pest control procedures including the bait-servicing schedule, bait map and record keeping procedure.

7. Installation and **equipment** inspection, maintenance and calibration procedures including temperature probes, particle sizing and particle verification equipment.

8. **Dispatch** procedures including:

a) detail of where the compost can be used;
b) maintenance of dispatch log;
c) completion of commercial documents;
d) packaging and labelling procedures;
e) end-user 'registration check' procedures and registration of farmers not already registered.

- Plant HACCP plans must be devised by a nominated staff member. The person who devises the HACCP plan must have attended a recognised HACCP training course.

- Plant personnel must have received training in relation to the procedures relevant to their work activity whether that be PRPs and/or HACCP procedures.

- The operator must ensure that the HACCP plan, PRPs and associated documentation are reviewed and the necessary changes are made when any modification is made to the product, process or any stage of production, transformation, pasteurisation, storage or distribution. In addition, reviews of HACCP plan should be conducted on an annual basis.

SECTION 6

RECORD KEEPING REQUIREMENTS

6.1. GENERAL

- All records required in the context of the ABP Regulations must be retained in the plant's office for a period of 3 years. Records must be made available for inspection by DAFM staff. Records may not be stored in a dwelling house.

6.2. INTAKE

- An intake log must be maintained in date order for all consignments of feedstock (both ABP and non-ABP) delivered to the plant. These records must contain the following information:

  a) date of receipt;
  b) quantity;
  c) description of feedstock;
  d) ABP category in the case of ABP feedstock;
  e) place of origin of the material;
  f) commercial document or intake docket number.

- In addition, in the case of plants using no specific transformation parameters, an annual record of quantities for each different type of feedstock must be maintained, (on a calendar year basis) in order to demonstrate compliance with the restrictions on the quantities of feedstock that may be handled at such plants.

- Commercial documents and intake dockets for all incoming consignments must be filed in date order.

6.3. TRANSFORMATION

- Where PAP, fishmeal or processed Category 3 material is used as feedstock, records must be kept demonstrating that the mixing requirements were met including:

  a) date received;
  b) quantity in kgs or volume in cubic metres used (whichever is relevant);
  c) point in the process at which the derived products were incorporated;
  d) batch number into which the derived products were incorporated, and
  e) date of incorporation.

6.4 PASTEURISATION

- The plant should have a batch traceability system that allows material to be followed from intake to dispatch.

- Pasteurisation records must be maintained in batch number order for all batches **including batches that have failed to meet the required transformation parameters**. The records must include the following information:

  1. the dates of pasteurisation along with the composting reactor number;

  2. records of particle size checks except in cases where in line verification equipment is used. In such cases, records of regular documented checks of the equipment will suffice;

  3. two hard copy thermographs (or electronic thermographs signed and dated using electronic signature and stored in an auditable fashion) for every batch labelled with a unique batch number and signed and dated by the operator of the plant as follows;

     (i) Time/temperature profile of the batch from the time the composting reactor is filled until after the transformation parameters have been achieved;

     (ii) Expanded graph with temperature recordings for all probes at 5 minute (EU transformation parameters) or 30 minute intervals (National transformation parameters) for the pasteurisation period to demonstrate that the temperatures remained above the minimum required for the full period of time;

  4. results of microbiological testing for the batch.

- Maintenance records and records of checks on installations and equipment used to achieve and monitor pasteurisation (including particle sizing, particle verification and monitoring equipment) must be kept.

6.5. DISPATCH

- A Dispatch log must be maintained in date order for each consignment of compost that leaves the plant. These records must contain the following information:

  a) date of dispatch;
  b) quantity;
  c) commercial document number where required;
  d) name and address of recipient and their DAFM approval or registration number where relevant.

- Commercial documents must be filed in date order.

- Copies of OF/SI end-user registration forms must be filed in date order.

6.6. HACCP AND PLANT PRE-REQUISITE PROGRAMMES

- The operator of the plant must maintain records relating to all aspects of the HACCP programme and the PRPs.

  In addition to the records required under intake, transformation and dispatch described above, these records must include:

  - feedstock acceptance forms for each supplier of feedstock to the plant;
  - plant checks on intake;
  - plant checks on pasteurisation- records must be kept of temperature checks carried out by the operator on a regular basis in the composting reactor in areas other than those where the permanent probes are located with a view to verifying that all material is meeting the required transformation parameters;
  - cleaning and disinfection records, e.g. plant, vehicles/container, footbaths, wheel wash and areas contaminated by material which has failed to meet the required transformation parameters, has failed to meet the microbiological standard or which has become re-contaminated;
  - a Sampling log detailing the date samples were taken, the batch number and the date submitted to the laboratory;
  - action taken to address non-compliances;
  - calibration records and installation and equipment maintenance records;
  - bait map and bait point-servicing records.

- Records must be completed by the person carrying out the particular activity and signed and dated at the time the activity was completed.

CONTACT DETAILS

For Further Information contact:

Department of Agriculture, Food and the Marine,
Milk and Meat Hygiene/ABP/TSE Division,
(Animal By-Products Section),
Grattan House,
Grattan Business Centre,
Dublin Road, Portlaoise, Co. Laois
R32 RY6V

Phone Number: 0761 064440

Fax Number: 057-8664958

Email Address: AnimalByProducts@agriculture.gov.ie

APPENDIX 1

Sample feedstock acceptance form

A FEEDSTOCK ACCEPTANCE FORM MUST INCLUDE THE FOLLOWING INFORMATION:

1. **Name and address of composting Plant.**

2. **Name, address and telephone number of feedstock supplier.**

3. **List of Animal By-Product (ABP) feedstocks permitted in the plant and definitions (as detailed in Regulation (EC) No. 1069 of 2009) where appropriate, e.g. catering waste which means....., etc.**

4. **Detailed description of each feedstock to be supplied (both ABP and non-ABP). (In the case of ABP feedstocks, the type and category of ABP must be specified).**

5. **Estimated quantity (tonnes) of each type of feedstock to be supplied to the plant per annum.**

6. **Statement of conformity e.g. Feedstock supplied to the above named plant will only contain:**
   ***ABP as detailed in point 4 above**
   ***Non- ABP as detailed in point 4 above**
   *** a combination of non-ABP and ABP as detailed in point 4 above**
   (*delete as appropriate).

7. **Signature of person signing on behalf of feedstock supplier and date. Capacity of person signing on behalf of feedstock supplier (must be a person in senior management).**

8. **Composting Plant management signature and date.**

APPENDIX 2

Template commercial document

Company Logo/Name	**SAMPLE COMMERCIAL DOCUMENT** Commercial Document for the transportation within Ireland of animal by-products and derived products not intended for human consumption in accordance with Regulation (EC) No 1069/2009	Serial Number

1 **Consignor** (sender's name and address in full and, if appropriate, approval number of the plant of origin) …… ……	**2** **Consignee** (receiver's name and address in full and, if appropriate, approval number of the plant of destination) …… ……
3 **Carrier, means of transport** 3.1 Carrier (haulier's name and address in full) …… …… …… 3.2 Registration number of vehicle:……	**4** **Quantity/Identification of consignment** 4.1 Weight of ABP's (kgs) **or** number of ABP's (e.g. 3 heads)…… 4.2 Date of despatch:…… 4.3 Container Number (if applicable):…… 4.4 Number of seals (if applicable):……

5 **DESCRIPTION OF THE ANIMAL BY-PRODUCTS OR DERIVED PRODUCTS**

5.1 The category of animal by-products or derived products, **(TICK AS APPROPRIATE)**:

- ○ Category 1 Material - '**For Disposal Only**'
- ○ Category 2 Material - '**Not For Animal Consumption'**
- ○ Manure and Digestive Tract Content - **'Manure'**
- ○ Category 3 Material - '**Not For Human Consumption'**

5.2 The description of animal by-products or derived products e.g. rendered fats, processed animal protein, etc:

……

5.3 In the case of category 3 material or derived products destined for use as feed, the species from which it was derived:

……

5.4 In the case of animal by-products for use as raw petfood or in feed for fur animals, please state where the animal by-products are derived from, **(DELETE AS APPROPRIATE):**

a) Parts of slaughtered animals fit for human consumption according to Article 10a of Reg. 1069/2009

b) Parts of slaughtered animals unfit for human consumption according to Article 10(b)(i) of Reg. 1069/2009

In the case of (a) or (b), please specify nature and method of treatment:……

5.5 In the case of Category 1 material, dispatched from a Category 1 or Category 2 Intermediate Plant, please supply the following details:

	Yes	No
Is material eligible for the subsidy for TSE testing?	○	○
Does the skip/container contain BSE positive water?	○	○

6 **Declaration by the Consignor.** I, the consignor, declare that the information provided by me in sections 1 to 5 is correct and that the consignment is being transported in accordance with the requirements of Regulation (EC) No 1069/2009

_____ on _____

(signature) *(date)*

7 **Declaration by the Carrier.** I, the carrier, declare that I have collected the material described above and that it is being transported to the consignee, at section 2 above, in accordance with the requirements of Regulation (EC) No 1069/2009

_____ on _____

(signature) *(date)*

8 **Declaration by the Consignee.** I confirm that I have received the materials described at 4 and 5 above.

_____ on _____

(signature) *(date)*

APPENDIX 3

Sample compost dispatch commercial document

Company Logo/Name	**SAMPLE COMPOST/DIGESTATE DISPATCH COMMERCIAL DOCUMENT** *Commercial Document for the transportation within Ireland of animal by-products and derived products not intended for human consumption in accordance with Regulation (EC) No 1069/2009*	Serial Number

1 **Consignor** (sender's name and address in full and approval number of the plant of origin) …… …… ……	**2** **Consignee** (receiver's name and address in full and, if appropriate, approval/registration number of the plant of destination) …… …… ……
3 **Carrier, means of transport** 3.1 Carrier (haulier's name and address in full) …… …… …… 3.2 Registration number of vehicle:……	**4** **Quantity/Identification of consignment** 4.1 Weight of ABP's (kgs) **or** number of ABP's (e.g. 3 x 1 tonne bags)…… 4.2 Date of dispatch:…… 4.3 Container/Receptacle Number (registration/approval number):……

5 DESCRIPTION OF THE ANIMAL BY-PRODUCTS OR DERIVED PRODUCTS

5.1 The category/categories of animal by-products or derived products from which the compost/ digestate was produced, **(TICK AS APPROPRIATE)**:

- ○ Category 2 Material - '**Not For Animal Consumption**'
- ○ Manure and Digestive Tract Content - **'Manure'**
- ○ Category 3 Material - '**Not For Human Consumption**'

5.2 The description of animal by-products or derived products e.g. 'Organic fertilisers and soil improver- *compost/digestate' (*delete as appropriate)

……

5.3 The transformation parameter/s used, e.g. no transformation parameter, national transformation parameter, EU transformation parameter

……

6 **Declaration by the Consignor.** I, the consignor, declare that the information provided by me in sections 1 to 5 is correct and that the consignment is being transported in accordance with the requirements of Regulation (EC) No 1069/2009

_____ on _____

(signature) *(date)*

7 **Declaration by the Carrier.** I, the carrier, declare that I have collected the material described above and that it is being transported to the consignee, at section 2 above, in accordance with the requirements of Regulation (EC) No 1069/2009

_____ on _____

(signature) *(date)*

8 **Declaration by the Consignee.** I confirm that I have received the materials described at 4 and 5 above.

_____ on _____

(signature) *(date)*

Organic fertilisers and soil improvers - no grazing of farmed animals or use of crops as feedingstuffs for at least 21 days post application <u>OR</u> 'may not be applied to land to which farmed animals have access' (Ref section 3.1.3.2)

APPENDIX 4

Transformation Parameters

Transformation parameters	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks *N.B Plants located on farms may not accept and handle PAP, fishmeal and/or processed Category 3 material.*	Specific conditions and Compost end-use

EU transformation parameters	1	• 70°C
		• 60 minutes
		• Particle size ≤ 12 mm
			• **Category 2** feedstocks:
			  ○ Manure;
			  ○ Digestive tract content;
			  ○ Milk and milk-based products;
			  ○ Colostrum
			  ○ Eggs and egg-based products
			  ○ Material originating from aquatic animals
			• **Category 3** feedstocks as defined in the glossary.
			• **Derived product** feedstocks:
			  ○ PAP;
			  ○ Fishmeal
			  ○ Processed Category 3 material as defined in the glossary
			  ○ Material that has been pasteurised in another DAFM approved plant
			• **Non-ABP** feedstock
				Can be supplied for use in the EU and in the Republic of Ireland (RoI).

APPENDIX 4

Transformation Parameters

Transformation parameters	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks *N.B Plants located on farms may not accept and handle PAP, fishmeal and/or processed Category 3 material.*	Specific conditions and Compost end-use
National transformation parameters	2	• 60°C • 48 hours twice • Particle size ≤ 400 mm	• **Category 3 catering waste;** ○ by itself, or ○ mixed with ▪ Category 2 manure, ▪ Category 2 digestive tract content, ▪ Category 2 milk, milk-based products and colostrums, eggs and egg based products ▪ Category 3 milk, milk-based products, colostrum and colostrum- based products, eggs and egg-based products. **Non-ABP feedstock**	Can only be supplied for use in the RoI.

APPENDIX 4

Transformation Parameters

Transformation parameters	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks	Specific conditions and Compost end-use
No specific transformation parameters	3	• None required	• **Own ABP** as defined in the glossary • **Derived product** feedstocks: ○ PAP; ○ Fishmeal ○ Processed Category 3 material as defined in the glossary ○ Material that has been pasteurised in another DAFM approved plant • **Non-ABP** feedstocks The plant may also accept up to 5000tpa of the following ABP; • **External MDM** as follows; ○ Category 2 manure, ○ Category 2 digestive tract content, ○ Category 2 milk, milk-based products and colostrum ○ Category 3 milk, milk-based products, colostrum and colostrum-based products. In the case of 'external manure', this may come from one source herd only.	1. Operators of type 3 plants may only accept external manure from a farm that is free of BVD, TB, Johne's Disease and Salmonella. Operators will be required to put a system in place to verify compliance with this requirement. 2. Operators will be required to put a system in place that allows DAFM to verify that not more than 5000 tpa of external MDM is handled at the plant on an annual basis (calendar year). 3. The farm from which the external manure is sourced may be changed only at the start of a new calendar year and must be notified to Milk & Meat Hygiene/ABP/TSE Division, Portlaoise. 4. Operators will be required to communicate clearly in writing to the operator receiving compost, that the compost is unprocessed with associated risks.

APPENDIX 4

Transformation Parameters

Transformation parameters	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks	Specific conditions and Compost end-use
No specific transformation parameters	3			5. The compost may only be supplied for direct land-spread in the Republic of Ireland. - if the only manure handled is pig manure; no additional restrictions will apply. -if the plant is handling poultry manure; no additional restrictions will apply; however it is recommended that the DAFM Guidance Note in relation to the Use of Poultry Manure as an Organic Fertilizer is followed. -if the plant is handling cattle manure, the compost may only be spread either on the farms that supplied the manure or on arable land. 6. The commercial document which accompanies compost dispatched from the plant must contain the information detailed in points 4 and 5 above.

APPENDIX 4

Transformation Parameters

Transformation parameter	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks	Specific conditions and Compost end-use
No specific transformation parameters	4	• None required	• **Derived product** feedstocks: ○ PAP; ○ Fishmeal ○ Processed Category 3 material as defined in the glossary ○ Material that has been pasteurised in another DAFM approved plant • **Non-ABP** feedstocks	Can be supplied for use in the EU and in the RoI

APPENDIX 4

Transformation Parameters

Transformation parameter	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks	Specific conditions and Compost end-use

Alternative transformation parameters	5	• Will be set by the validation process	• **Category 2** feedstocks:
			  ○ Manure;
			  ○ Digestive tract content;
			  ○ Milk and milk-based products;
			  ○ Colostrum
			  ○ Eggs and egg products
			  ○ Material originating from aquatic animals
			• **Category 3** feedstocks as defined in the glossary.
			• **Derived product** feedstocks:
			  ○ PAP;
			  ○ Fishmeal
			  ○ Processed Category 3 material as defined in the glossary
			  ○ Material that has been pasteurised in another DAFM approved plant
			• **Non-ABP** feedstock
				Can be supplied for use in the EU and in the RoI.

APPENDIX 4

Transformation Parameters

Transformation parameter	Plant Type	Time/ Temp/ Particle size	List of potential feedstocks	Specific conditions and Compost end-use
No specific transformation parameters	8	• None required	• Category 3 catering waste • Non-ABP material mixed with Category 3 catering waste	All ABP/digestate must be dispatched directly to: • an authorised incinerator • an authorised co-incinerator • an authorised landfill or an authorised combustion plant for use as a fuel for combustion