Guidelines for the Manufacture of Raw Pet Food in the UK

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These guidelines are not intended as a substitute for the legislation, nor are they intended as an auditable standard and there is no requirement for companies to be audited against them.

CONTENTS

INTRODUCTION

With growth in popularity of raw pet food in recent years and a growing number of UK manufacturers and UK Pet Food members producing raw pet food, this document was brought together as a sector specific guideline for UK Pet Food members summarising regulatory requirements and proposing methods of best practice in an accessible easy-to-use format. Intended as an extension of the "FEDIAF Guide to Good Practice for the Manufacture of Safe Pet Food" the guideline is to be read alongside and not as a replacement. This guideline recognises that due to the minimal treatment of raw pet food additional recommendations to those that exist for processed pet food are necessary to ensure its safe manufacture.

Much of the regulatory requirements originate from the European Animal By-Products Regulations; the basic principles are contained within **EU Regulation 1069/2009/EC** and the technical details and implementation requirements within **EU Regulation 142/2011/EU**. In the UK Animal By-Products Regulations are enforced through domestic regulations such as the Animal By-Products (Enforcement) (England) Regulations 2013 in England and the Animal By –Products (Enforcement) (Scotland) Regulations 2013.

On exit from the European Union (EU), the UK retained EU legislation in its domestic legislation. Therefore, the references to EU legislation provided in the Guidelines remain correct for as long as that retained legislation applies in the UK. The Guidelines will be updated as necessary when UK legislation is amended in future.

In addition, following exit from the EU, rules on imports from the EU (incl Northern Ireland) to GB are changing in line with those which currently apply to exports from other third countries. The most significant changes in relation to this Guidance will start to apply from January 2022 and from July 2022. These include the requirement for electronic pre-notification of imports (from January 2022), the replacement of commercial documents by export health certificates and the requirement for products to enter GB via a Border Control Post (from July 2022). Further detail can also be found at Importing or moving live animals, animal products and high risk food and feed not of animal origin - GOV.UK (www.gov.uk)

It is expected that the retained Animal By-Products Regulations will be amended from time to time, therefore members should seek the latest information from the UK Pet Food secretariat. It is also important that pet food manufacturers comply with all relevant legislation, including the requirements the Feed Hygiene Regulation 183/2005 as well as the EU legislation are enforced in England, Scotland, Wales and Northern Ireland by separate domestic legislation on the Animal Feed Regulations.

UK Pet Food members should be aware that some of the advice is based on Defra guidance applicable to England only, if a manufacturing site is located outside England, clarification should be obtained from the relevant devolved enforcement agency in the UK.

Additional documents and guidelines pertaining to the manufacture of safe pet food are also referred to where appropriate and a list of useful references can be found at the end of this document. The recommendations are intended to ensure 'best practice' and have been developed with the combined efforts of pet food manufacturers, UK Pet Food, Defra and APHA, and FSA.

To aid in clear differentiation between compulsory regulatory requirements and recommendations for best practice, the following colour coding will be applied:

Information adjacent to a **green** bar describes regulatory **"musts"**

Information adjacent to a **red** bar describes regulatory **"must nots"**

Information adjacent to a **yellow** bar describes "**recommendations"**

Information in a **blue** box provides **additional points** of interest

OBJECTIVES

There are a number of objectives for these sector specific guidelines:

- ✓ Improve safety, hygiene and nutrition of raw pet food made in the UK
- ✓ Summarise sector-specific regulatory requirements for raw pet food production
- ✓ Describe recommendations to achieve 'best practice' in raw pet food production
- ✓ Improve ease of compliance with EU regulation for current and emerging raw pet food manufacturers
- ✓ Liaise with regulators and enforcement bodies (Defra, APHA, FSA, FSS, Scottish Government and local authorities) to combine expertise and develop recommendations to maintain and raise standards

SCOPE

It is intended that these guidelines should be of assistance to UK Pet Food members manufacturing raw pet food in the UK.

These guidelines are not intended to be a fully comprehensive guide to raw pet food manufacture as some sections have been summarised in order to remain accessible and manageable. Where possible, references to sources of further information will be made.

The process of raw pet food manufacture will be summarised across the following seven chapters:

1. Basic Regulation and Plant Approval
2. Plant Design and Maintenance
3. Sourcing Raw Materials
4. Handling Raw Materials
5. Production
6. HACCP and Traceability
7. Protecting Public and Animal Health

GLOSSARY

Additives *Reg (EC) 1831/2003 Art 17*	Feed additives are substances that are not normally consumed as feed itself but are added to feed intentionally for various purposes, such as preservation, nutritional and sensory functions. Permitted and approved additives for use in pet food are listed in the European Union Register of Feed Additives, in accordance with Article 17 of Regulation (EC) No 1831/2003.
Animal by-products (ABPs) *Reg (EC) 1069/2009 Art 3*	Entire bodies or parts of animals, products of animal origin or other products obtained from animals, which are not intended for human consumption
APHA	Animal and Plant Health Agency – an executive agency sponsored by Defra, the Welsh Government and Scottish Government who work to safeguard animal and plant health for the benefit of people, the environment and the economy and regulate compliance with the Animal By-products regulations in England, Wales and Scotland. The equivalent authority in NI is DAERA.
Batch Number *Reg (EC) 767/2009 Art 3*	The maximum batch size consists of one product from one line produced in one day (best practice: 24-hour period) using uniform production parameters (there is no minimum batch size). A batch number can be numeric or alphanumeric and in some cases the best before date may be used if this is day specific.
Category 1 ABP *Reg (EC) 1069/2009 Art 8*	All materials which must be treated and disposed of by incineration or processed in a Category 1 processing plant. E.g. TSE suspected ABPs, SRM, carcasses of lab and zoo animals. These materials are stained blue.
Category 2 ABP *Reg (EC) 1069/2009 Art 9*	Materials which must be either disposed of by incineration or processed in a Category 2 processing plant and the subsequent material can only be used for specified purposes. Such materials include animals rejected from abattoirs due to infectious diseases, fallen stock, or contaminated with manure, digestive tract content etc.
Category 3 ABP *Reg (EC) 1069/2009 Art 10*	Materials which are derived from animals slaughtered under veterinary supervision. ONLY animal materials referred to in Art 10(a) and (b)(i) and (ii) are permitted for use in the manufacture of raw pet food
CCP	Critical Control Point – A step in a HACCP plan at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level
Chilled *Reg (EC) 68/2013 Annex, Part B as amended by 2017/1017*	Lowering the temperature below ambient but above freezing point to aid preservation. A maximum of 7°C is recommended as set out in Commission Regulation 142/2011
Daily ration *Reg (EC) 1831/2003 Art 2*	Average total quantity of feeding stuffs required daily to satisfy all the needs of an individual of a given species. 'Complete' pet food must be sufficient for a daily ration for the intended species
DEFRA (Defra)	Department for Environment, Food & Rural Affairs – UK government department responsible for safeguarding the natural environment, supporting food and farming industry and sustaining the rural economy. Although Defra only works directly in England, it works closely with the devolved administrations in Wales, Scotland and Northern Ireland
FeBO *Reg (EC) 183/2005 Art 3*	Feed Business Operator – Natural or legal persons responsible for ensuring that the requirements of feed law are met within the feed business under their control
FEDIAF	The European Pet Food Industry Federation (Fédération Européene De l'industrie des ailments pour Animaux Familiers) – represents the pet food industry in 18 European countries before EU institutions

FSA	Food Standards Agency - non-ministerial government department responsible for protecting public health in relation to food and feed in England, Wales and Northern Ireland.
FSS	Food Standards Scotland is the public sector food body for Scotland. FSS established by the Food (Scotland) Act 2015 is a non-ministerial office, part of the Scottish Administration, alongside, but separate from, the Scottish Government.
GMO	Genetically modified organism
GMP	'Good Manufacturing Practice' – system for ensuring products are consistently produced and controlled according to quality standards
HACCP	Hazard Analysis and Critical Control Points is a technique that identifies, evaluates and controls hazards significant for feed safety
Hazard	A biological, chemical or physical agent in, or condition of, feed with the potential to cause an adverse health effect
OPRP	Operational Prerequisite Program – A basic condition or activity necessary to maintain a hygienic environment which has been identified by hazard analysis as essential in order to control the likelihood of spoilage and the introduction of feed safety hazards or contamination
PARNUTs *Comm Reg (EU) 2020/354*	Feedingstuffs for particular nutritional purposes. Specific criteria for authorised PARNUTs are laid down in Commission Regulation (EU) 2020/354
UK Pet Food (previously PFMA)	UK Pet Food is the leading trade body for the UK pet food industry representing over 90% of the market to the government, media and public
Processed pet food	Pet food, other than raw pet food, which has been processed in accordance with Reg (EU) 142/2011 point 3 of Chapter II of Annex XIII
Product recall	The return of product from both retailers and pet owners
Product withdrawal	The return of product from retailers
Prohibited materials *Reg (EC) 767/2009* *Annex III*	Materials strictly prohibited from use in animal nutrition, eg. faeces, sawdust and household waste.
Raw pet food *Reg (EU) 142/2011* *Annex I, 21*	Pet food containing certain Category 3 material which has not undergone any preserving process other than chilling or freezing
Safe sourcing *Reg (EU) 1069/2009* *Article 37*	Using material that does not create unacceptable risks to public or animal health and has been collected and transported under conditions to minimise such risks i.e. at appropriate temperatures and in appropriate conditions
Supplier assurance	A form of audit undertaken to ensure suppliers are able to deliver a good service and that materials consistently meet the needs of the product specification
Third country	Non-EU countries are known as third countries. The EU provides a list of approved third countries and permitted establishments for importing of raw materials.
Traceability *Reg (EC) 178/2002* *Art 3, 15*	The ability to trace a finished product or raw materials through all stages of sourcing, production, processing and distribution
Undesirable substances *Dir 2002/32/EC* *Art 2 (l)*	Undesirable substances are any substance or product, with the exception of pathogenic agents, which is present in and/or on the product intended for animal feed and which represents a potential danger to animal or human health or to the environment or could adversely affect livestock production. These include, for example, pesticides which are subject to strict limits.

1 REGULATION AND APPROVAL

1.1 MANUFACTURING FACILITY APPROVAL

	Raw pet food manufacturing plants must be registered under the Feed Hygiene Regulations (EC) 183/2005 with their local authority **and** require approval under ABP Reg (EC) 1069/2009 from the APHA **before** they begin to manufacture raw pet food. Each manufacturing site requires a separate ABP approval number. Registration or approval number is required on pack.	Reg (EC) 178/2002 Art 15 & 20 Reg (EC) 183/2005 Chapter 2 Article 9 Reg (EC) 1069/2009 Chapter 1 Article 24
	1.1.1 Registration under Feed Hygiene Regulations - General registration required by all Feed Business Operators (FeBOs) who make, market or use animal feed - Production, distribution and storage of pet food fall within the scope of the Regulation but it does not apply to retailing of pet food - Application based on activity to be undertaken on the site eg. Manufacture of pet food - Apply to register via local trading standards office (via Department of Agriculture Environment and Rural Affairs in NI) - Inspection may be undertaken prior to granting registration ***Requirements:*** *Described in Annex II of the Feed Hygiene Regulations and includes requirements relating to facilities and equipment, personnel, production, quality control, storage and transport and record-keeping. In addition, feed businesses are required to apply the principles of a HACCP system.*	Reg (EC) 183/2005 Chapter 2 Article 9
	1.1.2 APHA Approval - Approval required to be licensed to handle category 3 animal by-products (ABPs) under the ABP Regulations - Approval is very specific to the intended purpose of the site and is granted based on recognition of specific related hazards - Apply to local APHA Office for inspection and approval which is a requirement (in addition to those described above): 1. Must operate in accordance with Annex XIII of the EU Implementing Regulation 142/2011 2. Must have adequate facilities for storage, treating and disposing of incoming materials in such a way to prevent the introduction of further risks to public and animal health (see section 2) 3. Send unused ABP or product to an appropriate approved ABP plant for disposal if necessary	Reg (EU) 142/2011 Chapter VI Reg (EC) 1069/2009 Section 2 Articles 23, 24 etc.

Raw pet food manufacturing plants must be registered under the Feed Hygiene Regulations (EU) 183/2005 **and** approved by the APHA (Reg (EC) 1069/2009)

DIRECT FEEDING

It is possible to purchase raw animal by-products for the direct feeding to pets from retail outlets at abattoirs and cutting plants that are not approved as pet food establishments. However, all of the following conditions apply:

- Must be category 3 material that is fit for but not intended for human consumption
- Tripes must be cleaned, washed and free from visible contamination
- Must be unprocessed
- Must be kept separate from other category 3 material which does not fit this description and human food
- Must be for personal use only; feeding to own pets only, must not be placed on the market, cannot be used for pet food manufacture
- Must be collected by the pet owner (or a personal representative) directly from outlet
- No indirect sale or supply to pet owners through third parties (including couriers)
- The outlet business operator must keep a record of each sale (including quantity sold, purchaser's name and address) for minimum 2 years

Ref: Defra 2011, amended 2014 → **only applicable in England**
Animal by-products legislation for England: exemptions - GOV.UK (www.gov.uk)

Ref: Wales: Competent Authorities Authorisations can be found at:
Animal by-products and derived products: authorisations | GOV.WALES

Ref: Scotland: Competent Authorities Authorisations can be found at:
http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/ABPs/CAA#top

2 PLANT DESIGN AND MAINTENANCE

Pet food plants and establishments or plants producing derived products **must** have adequate facilities for: (a) **storing** and **treating** incoming material under conditions which prevent the introduction of risks to public and animal health; (b) **disposing** of unused animal by-products and derived products remaining after production, unless the unused material is sent for processing or disposal another establishment or plant, in accordance with this Regulation.	Reg (EU) 142/2011 Annex XIII Chapter I
The following standards (2.1-2.2) cover the regulatory requirements for plant design and maintenance laid out in the Feed Hygiene Regulations, they are further elaborated with additional guidance to help ensure all conditions are met in practical terms.	Reg (EC) 183/2005 Annex II

Whilst many of the following standards (2.1-2.2) are not explicitly described in the Regulations, collectively they would ensure all the premises legal requirements of the EU legislation are met.

2.1 PLANT DESIGN

	2.1.1 Location ✓ Ideally the plant should not be on premises where animals or birds are kept. If animals/birds are kept on the same premises, there must be total safe separation (i.e. fences/walls/air spaces etc) between all the pet food plant operations and the animals/birds, and also their accommodation, feed and bedding. ✓ Site boundaries should be clearly defined ✓ Where possible, all buildings should be surrounded by a clear space which shall be kept clean. ✓ Where natural drainage is inadequate, additional drainage shall be installed to avoid the risk of contamination of feed materials and pet food.	Reg (EC) 183/2005 Annex II
	2.1.2 Utilities ✓ The premises must have adequate power (eg. electricity supply), water supply, and drainage/sewerage. ✓ Facilities must have adequate natural and/or artificial lighting. ✓ All water supplies used for cleaning, or as feed material in preparation of the product, shall be potable. ✓ Water supply systems should be properly labelled and segregated between potable and non-potable supplies.	
	2.1.3 Fabric ✓ The fabric of the premises must be in good condition and permit satisfactory cleaning and disinfection. This includes ceilings, floors, walls and work surfaces, which should be easily cleaned. ✓ Floors must be designed to drain effectively. Corners and crevices should be avoided or minimised. ✓ Ceilings should be in good repair and designed to minimise mould growth and the accumulation of dirt, dust and condensation. ✓ Materials for floors, walls and work surfaces must be non-toxic, waterproof and smooth. Suitable materials for floors include smooth non-slip concrete or tiles. ✓ Walls may be of the same materials or sheeted with rust-resistant metals or plastics. ✓ Suitable materials for work surfaces include stainless steel or plastics. Wood must not be used, as it cannot be satisfactorily cleaned and disinfected. ✓ Where windows are designed to be opened for ventilation purposes, they shall be adequately screened to prevent the ingress of pests (including insects) ✓ The use of glass windows close to production machinery must be avoided and wherever necessary it must be protected against breakage.	
	2.1.4 Layout ✓ The plant must be laid out to prevent contamination of finished product by incoming ABPs. This requires adequate spatial and operational separation of reception, manufacturing and storage areas. ✓ The systems of working shall, where appropriate, be such as to reduce any potential physical, chemical or microbiological contamination risks. ✓ The design must permit adequate cleaning and/or disinfection ✓ Where external storage is necessary, items shall be protected from contamination and deterioration.	

	2.1.5 Receiving Area ✓ ABPs must be received into a covered vermin-proof building and used for pet food manufacture without undue delay, unless suitably stored in temperature controlled areas. ✓ Unprocessed category 3 material for pet food production, must be used within 24 hours if not chilled or frozen.	
	2.1.6 Staff Hygiene Facilities ✓ There must be adequate hygiene facilities for plant operators and visitors, including lavatories, washing facilities, changing rooms and protective clothing. ✓ Smoking shall only be permitted in appropriate designated areas which must lie outside the buildings.	

2.2 MAINTENANCE

	2.2.1 Equipment and Maintenance ✓ Equipment shall be designed for the intended purpose and used so as to minimise the risk of product contamination. ✓ Equipment should be positioned to allow easy access for cleaning and/or disinfection, inspection, and servicing. ✓ A system of planned maintenance shall be in place covering all items of equipment, which are critical to product safety, legality, and quality. ✓ Every facility should develop and operate a cleaning and disinfection protocol in order to maintain product safety.	Reg (EC) 183/2005 Annex II
	2.2.2 Treatment and Sampling ✓ There must be adequate equipment for producing, packaging, and labelling raw pet food. All the equipment in the plant must be well maintained and fully operational. ✓ There must be adequate equipment to comply with the requirements for bacteriological sampling.	
	2.2.3 Pest Control ✓ There must be a documented pest control programme for birds, rodents, insects, or other vermin. ✓ The pest control programme must be regularly reviewed for effectiveness. In the event of the presence of pests being identified the appropriate corrective actions should be identified and recorded. ✓ Detailed records of pest control inspections, recommendations and necessary action undertaken shall be kept. ✓ The location of all pest control measures shall be identified on a plan/diagram of the site.	
	2.2.4 Vehicle Cleaning ✓ There must be adequate facilities for cleaning vehicles and any containers used to transport ABPs.	
	2.2.5 Waste ABP Disposal ✓ Waste collection should take place in a well-defined area.	

	✓ Plants must have adequate facilities for disposing of unused ABPs remaining after production. Alternatively, this material must be sent to a processing plant or to an incineration plant. ✓ External waste collection containers and compactors should be closed and/or covered and emptied at appropriate frequencies in order to exclude the risk of any product contamination. ✓ Disposals should be fully documented and traceable.	

3 SOURCING RAW MATERIALS

	The sourcing of raw materials is a **key step** in meeting the microbiological criteria set out in the European Animal By-Product Regulations. Key legislation for raw materials for use in pet food is subdivided into **feed materials** (ingredients from both animal and non-animal sources), **additives** (such as vitamins, colourants, flavourings, and binders), **undesirable substances** (contaminants subject to strict control) and **prohibited materials** (such as wood and glass) as seen in Figure 1.	Dir 2002/32/EC Reg (EC) 1831/2003 Reg (EC) 767/2009 Chapter 9 Article 24 Dir 2008/76/EC Reg (EU) 142/2011Annex XIII Comm Decision 2004/217/EC
	Feed materials must be listed in either the **Catalogue** of Feed Materials (Reg (EU) 68/2013 as amended by 2017/1017) or the Feed Materials **Register**. Use of the terms in the **Catalogue** is voluntary. However, if a term listed is used for labelling the specification of the feed material must meet that in the Catalogue. If a company wishes to use a new feed material not listed in the Catalogue, providing they are registered under the Feed Hygiene Regulations 183/2005, they should enter it on the **Register**. Adding materials to the voluntary register is a simple on-line process taking a matter of seconds; log into http://www.feedmaterialsregister.eu and completing the relevant form, material name and description then submitting.	Reg (EC) 767/2009 Art 24 (6)
	In contrast the use of **additives** is very **tightly controlled,** and approval of additives is a meticulous process. The **European Union Register of Feed Additives** is regularly updated to account for alterations, removals, and additions.	Reg (EC) No. 1831/2003

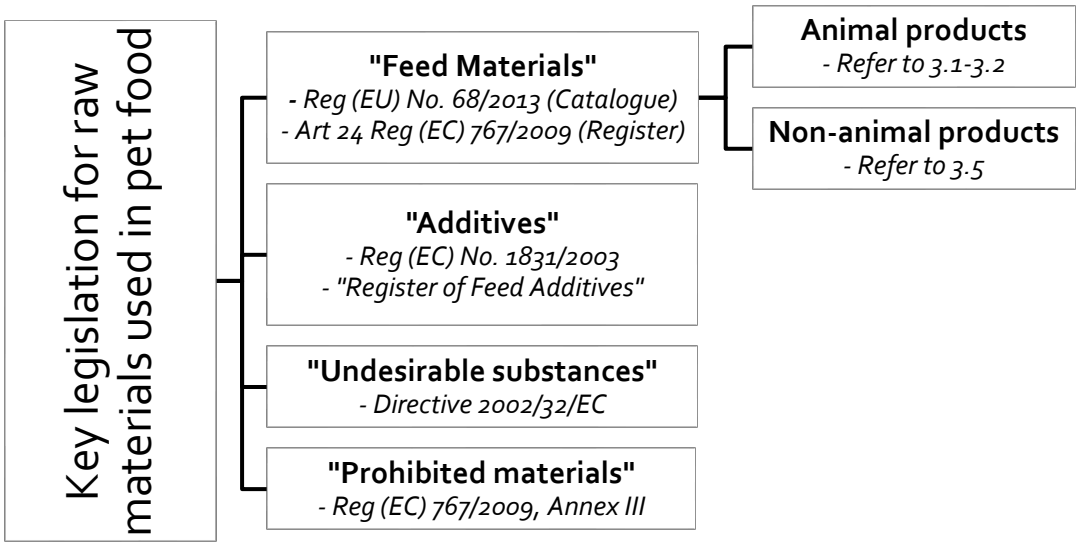

Figure 1: Summary diagram of key legislation covering raw materials used in pet food

3.1 PERMITTED ABPS FOR RAW PET FOOD MANUFACTURE

EU legislation specifies a restricted list of permitted category 3 animal by-products for use in raw pet food manufacture. Operators may **only** manufacture raw pet food from Category 3 material described in Article 10(a) and (b)(i) and (ii) of Regulation (EC) No 1069/2009. Permitted category 3 material is described as follows: ✓ carcasses 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; carcasses 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: ✓ 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: o carcasses 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; o heads of poultry.	Reg (EC) 1069/2009 Chapter I Article 10 (a), (b) i) and ii) Article 35 (a) (iii)

3.2 ABPS NOT PERMITTED FOR RAW PET FOOD MANUFACTURE

EU legislation also specifies a list of other animal by-products NOT permitted for use in raw pet food manufacture. Manufacturers of raw pet food **must not** make pet food using: • category 1 or 2 ABPs • catering waste • fat from animals that passed inspection for diseases before death but failed inspection after death • any category 3 material specified in Reg (EC) 1069/2009 Article 10 (c) through (p)	Reg (EU) 142/2011 Annex XIII Chapter II Reg (EC) 1069/2009 Chapter I Article 10

3.3 CHOOSING ABP SUPPLIERS

The ABP Regulation requires operators to carry out safe sourcing. **Safe sourcing** means using material that: - Does not provide unacceptable risks to public or animal health. - Has been collected and transported, or brought from the point of import, to the plant under conditions excluding risks to public and animal health i.e. at appropriate temperature and in appropriate conditions.	Reg (EC) 1069/2009 Chapter 2 Articles 35(b), 37 and 38 Reg (EC) 183/2005 Article 9

	All suppliers must be registered and approved with their respective competent authorities and commercial documents (as described in section 4.1.5) must be retained for a minimum of two years. **New import requirements from 1 January 2022 call for all consignments of ABPs from EU to be pre-notified using IPAFFS.** **New import controls from 1 July 2022 require consignments to be accompanied by an officially signed veterinary health certificate and entry via a designated border control post (BCP).** See: Import or move live animals, germinal products, animal by-products and high risk food and feed not of animal origin - GOV.UK (www.gov.uk)	Reg (EC) 1069/2009 Chapter 1 Article 24

3.4 CHOOSING ABP SUPPLIERS OUTSIDE UK

	In addition to adhering to those requirements for GB suppliers, the following also applies: • The import of animal by-products and derived products and the transit of such material should take place in accordance with rules which are **at least** as strict or recognised to be equivalent to those applicable within the Community. • Consignments must come from a third country listed and approved by the UK. • Consignments must come from establishments or plants approved or registered by the competent authority of their country of origin and listed on the official Defra website: Importing animal products from non-EU countries to Great Britain - where can you import from? GOV.UK (www.gov.uk) • Consignments must be accompanied by an officially signed veterinary health certificate. At the border control post (BCP)) the port health authority will retain this certificate and issue a common health entry document (CHED) which must accompany the shipment to its final destination (and be retained for a minimum of 2 years). • If consignments are split with different final destinations, the official vet at the BCP will sign duplicate copies of the CHED identifying the quantity in each shipment.	Reg (EC) 1069/2009 Chapter III Article 41 Reg (EU) 142/2011 Annex XV Chapter 3
	Commission Regulation 2021/632/EC lists the products that are subject to veterinary checks at import and includes products such as: • red meat and poultry and foods containing these • fish and shellfish • dairy products such as milk, butter, cheese, yoghurt • honey • composite products • animal by-products such as dog chews, meal worms, feathers • hay and straw	Regulation 2021/632/EC

The legislation requires imported ABPs for raw pet food must:

- Originate from an establishment approved/registered by its own competent authority within a listed third country
- Be accompanied by appropriate documentation/licences
- Be imported and transported in accordance with rules at least as strict as those recognised in the UK

3.5 NON-ABPS PERMITTED FOR RAW PET FOOD MANUFACTURE

	3.5.1 Non-animal derived feed materials Feed materials not of animal origin are not covered by The Animal By-products Regulations however they do fall under same Feed Hygiene Regulations and The Animal Feed Regulations as ABPs, including - Reg (EC) 767/2009 on the placing on the market and use of feed - Comm Reg (EU) 68/2013 on the catalogue of feed materials, as previously described in Section 3. - Dir 2002/32/EC on undesirable substances in animal feed - Reg (EC) 1831/2003 on additives for use in animal feed	Reg (EC) 183/2005
	3.5.2 Additives The use of additives in pet food is very strictly controlled. All additives permitted for use in pet food are listed in the Official Register of Feed Additives. If manufacturers wish to use an additive not listed, they must first submit an application for authorisation and undergo a robust process by which they propose a tight specification along with a specific method of analysis. They must also provide research data to prove the safety and efficacy as well as evaluating any environmental effects. This proposal is then reviewed before a decision is made on the authorisation. The Official Register is updated regularly to allow for alterations, removals, and additions.	Reg (EC) 1831/2003 Article 7-9 Article 17

3.6 NON-ABPS NOT PERMITTED FOR RAW PET FOOD MANUFACTURE

	3.6.1 Undesirable substances Undesirable substances are **contaminants** of animal feed which are subject to strict limits on the levels permitted eg. heavy metals. They refer to any substance or product, with the exception of pathogenic agents, present in and/or on the product intended for animal feed which presents a potential danger to human health, animal health or the environment or could adversely affect livestock production. The council directive sets out **maximum permitted levels (MPLs)** for these substances which must not be exceeded. Feed that contains a contaminant at a level above the relevant MPL must be withdrawn and disposed of outside of the food chains. The 'blending down' of consignments with levels of contamination above the MPL, i.e. mixing them with uncontaminated consignments to reduce the overall level of contamination is prohibited.	Dir 2002/32/EC (Check latest consolidated version at www.eur-lex.europa.eu)

- Pet food manufacturers must not produce foods with contamination of **undesirable substances** above the maximum permitted levels
- Pet food manufacturers must not produce food containing any of the **prohibited materials** described in Reg 767/2009, Annex III

	3.6.2 Prohibited materials The Regulation 767/2009 provides a list of strictly prohibited materials for use in animal nutrition which are in addition to those materials specifically not permitted for raw pet food. The list is as follows: 1. **Faeces, urine** as well as separated digestive tract content resulting from the emptying or removal of digestive tract, irrespective of any form of treatment or admixture. 2. **Hide** treated with tanning substances, including its waste. 3. **Seeds** and other plant propagating materials which, after harvest, have undergone specific treatment with plant protection products for their intended use (propagation), and any derived by-products. 4. **Wood, including sawdust** or other materials derived from wood, which has been treated with wood preservatives as defined in Annex V of Directive 98/8/EC concerning the placing of biocidal products on the market 5. **All wastes** obtained from the various phases of the urban, domestic and industrial **waste water** as defined in Article 2 of Council Directive 91/271/EEC treatment process, irrespective of any further processing of these wastes and irrespective also of the origin of the waste waters. 6. **Solid urban waste**, such as household waste. 7. **Packaging** from the use of products from the agri-food industry, and parts thereof. 8. **Protein** products obtained from **yeasts of the Candida** variety cultivated on n-alkanes.	Reg (EC) 767/2009 Annex III

3.7 CHOOSING SUPPLIERS OF NON-ANIMAL BASED MATERIALS

	Whilst non-animal based materials are not subject to all the same regulations as ABPs, they are covered by the Animal Feed Regulations. Therefore, it still important to apply good practice and safe sourcing as described in 3.3. All suppliers must be either registered or approved as feed business operators with their local authority (depending on the specific activities carried out) in accordance with the regulations. Materials must also comply with relevant legislation, including; • Dir 2002/32/EC on undesirable substances in animal feed • Reg (EC) 767/2009 on the placing on the market and use of feed • GM reg, pesticide regs, etc This is not an exhaustive list.	Reg (EC) 183/2005
	3.7.1 Microbiological Standards The microbiological standards for fruit and vegetables for human consumption are found in section 2.5 of Regulation 1441/2007. While these same standards are not compulsory for these ingredients in pet food, they can be used as a benchmark. It should be noted that all non-animal products may also be a source of microbiological contamination, including Salmonella which has a zero tolerance in pet food containing animal-based materials.	Reg (EC) 1441/2007 Chapter I and II Reg (EU) 142/2011 Annex XIII Chapter II

	3.7.2 Undesirable substances Materials must be checked for the presence of undesirable substances including heavy metals and pesticide residues, environmental contaminants such as dioxins, mycotoxins, and moulds all of which have the potential to cause harm to animal health. • **Heavy metals, pesticides and environmental contaminants**: Maximum Permitted Levels (MPLs) are laid down in Dir 2002/32/EC. • **Mycotoxins:** The MPL for aflatoxin B1 is laid down in Dir 2002/32/EC. Guidance values for additional mycotoxins are provided in Commission Recommendation 2006/576/EC • **Moulds:** Materials should be clean and free from any signs of botrytis moulds. These moulds are not seriously toxic themselves but act as a good indicator of poor storage/treatment, which could raise other concerns.	Dir 2002/32/EC Comm Rec 2006/576/EC

3.8 SUPPLIER ASSURANCE

	Supplier assurance is a key part of a manufacturer's safety management system to establish confidence in a supplier's ability to consistently deliver goods or services that will meet the needs of the manufacturer. Once the requirements of the goods or service are defined, a manufacturer can begin to identify and evaluate suppliers before selecting the most suitable. It is then necessary to develop a good supplier relationship in which there is a shared understanding of product requirements. Written specifications, as described in 3.8.1, can be very valuable in achieving this. The final step is to validate conformance and plan for ongoing monitoring of supplier performance against defined criteria, with relevant feedback to suppliers and follow the relevant corrective action procedures in the Quality Manual. Due to the necessary risk management and legislative requirements of raw food manufacture, the use of assured suppliers is critical in sourcing safe, appropriate and authentic materials. Without a traditional kill step for microbiological pathogens, raw food is wholly reliant on the microbiological status of the raw materials used to produce a safe finished product, which is compliant with the legal microbiological criteria. Please note that using only materials intended for human consumption does not necessarily guarantee meeting the required microbiological standards for raw pet food, this is because the microbial standards for human food are different from those of raw pet food. Typically, ABP suppliers can view material intended for pet food as 'waste', which will be subject to further heat processing to ensure microbial safety. However, this is not the case with raw pet food and suppliers should be made aware of the difference and how this impacts on necessary hygiene controls during handling and storage. It is recommended to engage in supplier assurance through a number of means, for example: • Using raw material specification forms • Regular inspections and audits of supplier premises and materials • Planned monitoring and review of suppliers against defined approval criteria eg. internal microbiological testing	Reg (EU) 142/2011 Annex XIII Chapter II

	• Good supplier communications with regular feedback and agreed actions in the event of non-conformance • Use of external assurance schemes e.g. Soil Association for organic produce	
	3.8.1 Written specifications Written specifications can be produced for each feed material, additive and packaging material, and must be regularly updated. They should include the following information: • Nutritional and analytical characteristics of the feed material • Microbiological status where available • Approved origins and sources • Details of any processing the material has undergone • Types of feedstuffs in which its use is approved • Notes on any hazards • Limitations on its use • Special characteristics These specifications should then be agreed in writing with each supplier and appropriate actions can be jointly approved in the event of failure to meet the relevant specification. Please refer to Annex 1 for an example of a written specification for feed materials. This template can be amended as appropriate for the feed material.	

It is advised raw pet food manufacturers utilise **feed material specification** forms to notify suppliers of the intention to make raw pet food. These should outline any additional hygiene, storage and transportation requirements to maintain appropriate microbiological standards.

4. HANDLING RAW MATERIALS

4.1 TRANSPORTING ABPS

	4.1.1 Registration Registration with the Animal and Plant Health Agency (APHA) is required to transport ABPs, unless: ▪ the livestock keeper is transporting carcasses of animals they own ▪ the transport is owned by a site that is already approved or registered	Reg (EU) 142/2011 Chapter VI Reg (EC) 1069/2009 Chapter II Article 23
	4.1.2 Using sub-contractors If sub-contractors are used, they must be registered with APHA before they begin hauling ABPs and are required to maintain records of all shipments for a minimum of 2 years.	Reg (EU) 142/2011 Chapter VI
	4.1.3 Temperature for transporting ABPs • Temperatures shall be kept as low as possible to avoid condensation and spoilage • ABPs from meat and meat products that are to be turned into raw pet food should be transported at a maximum permitted temperature of 7°C, UK Pet Food members are recommended to use a lower temperature of the order of 5°C or less. • Unprocessed Category 3 ABPs which are to be processed into feed or pet food must be stored and transported in a chilled state, or frozen, or ensiled unless: ▪ they are to be processed within 24 hours of the collection ▪ the ABPs were chilled or frozen • The design of vehicles used for refrigerated transport must ensure the maintenance of an appropriate temperature throughout transport, and allow that temperature to be monitored.	Reg (EC) 183/2005 Annex II Reg (EU) 142/2011 Annex VIII Chapter I
	4.1.4 Removing Health Marks Periodically manufacturers purchase meats which were originally intended for human consumption but for a variety of reasons are no longer required for this purpose. Immediately these materials are no longer intended for human consumption their status is downgraded to Category 3 ABP. Thus, it is imperative that the veterinary health marks are defaced/removed at the earliest opportunity. Ideally this should be done at the point of loading the material for shipping to the pet food facility or its associated cold stores. Failing this the health marks should be defaced/removed at the point of unloading the shipment. Under no circumstances whatsoever should meats with intact health marks be found in any pet food facility or its associated cold stores. These former human meat materials should always be accompanied by the correct ABP documentation during transit.	Reg (EC) 1069/2009 Art.10(f) & (g)

	4.1.5 Vehicle hygiene When transporting ABPs or any ABP derived products, the following rules apply: • vehicles and/or containers must be covered and leak-proof • vehicles and containers must be cleaned, disinfected, and dried before and after every use • different categories of ABPs must be kept in separate containers and separate parts of the vehicle • animal protein must only be moved in a vehicle designed for that purpose alone	Reg (EC) 183/2005 Annex II Reg (EU) 142/2011 Annex VIII Chapter 1, Section 1.
	4.1.6 Documentation In order to move a consignment of ABPs or derived products, a commercial document is required. A template commercial document is provided in Annex 2 and a summary of documentation requirements for ABP movement in Annex 3. The commercial document must list: • a detailed description of the contents, including category and quantity • the date of transport • an address of origin and destination, and contact names at both • ABP approval or ABP registration numbers for the factory or vehicle • the signature of whoever is responsible for the contents • A copy of the commercial document should be kept for at least 2 years for presentation to the competent authority The commercial document is a minimum three-part document: **Part 1** – retained by supplier **Part 2** – retained by carrier **Part 3** – retained by recipient (Part 4 (optional) – recipient returns to original shipper in confirmation of receipt) A record of any consignments of ABPs or derived products that enter or exit the premises must also be kept for a minimum of 2 years. This can be done using commercial documents or a logbook – the following must be recorded: • the date the consignment is sent or received • a description of the material sent or received, including its category • the weight, volume and quantity of the material • the origin or destination of the material	Reg (EU) 142/2011 Annex VIII Chapter III
	4.1.7 Labelling ABP materials or containers All raw materials (feed materials) should be labelled in compliance with regulation 767/2009 Article 16 (Feed Materials). In addition, raw materials which are subject to the ABP regulations should be labelled in compliance with regulation 142/2011 Annex VIII Chapter III In transit the ABP documentation must include the following details: • weight • number of containers, with estimates of their average weight • number, for example '85 tripes'	Reg (EU) 142/2011 Annex VIII Chapter III

	• volume, for example '20,000 litres of bovine blood' Vehicles, containers, or packaging must also have a label attached that describes the ABP category of the contents, and must use the following wordings: • category 1 material - **'for disposal only'** • category 2 material - **'not for animal consumption'** • category 3 material - **'not for human consumption'**	
	4.1.8 Finished product During transport and storage of raw pet food, the packaging, container or vehicle must have a label attached which visibly and legibly states "as pet food only". However, compound feeds (defined as a mixture of at least two feed materials, with or without feed additives) manufactured from ABPs or derived products, which are packaged and placed on the market as feed (in accordance with Art 4 of Reg (EC) No. 767/2009) are not required to be labelled in this way.	Reg (EU) 142/2011 Annex VIII Chapter II 2.(b)(vii)

4.2 DELIVERIES OF ABPS

	Upon arrival utilise an acceptance procedure whereby specification of raw materials, temperature, packaging and additives are checked. Keep a monitor of traceability, compliance with specifications and registered/approved suppliers. Ensure records of deliveries are kept and maintained. Damaged, infected or dirty transports/containers should be rejected along with the materials shipped in them.	

4.3 STORING ABPS

	Raw pet food producers must only store Cat 3 ABP. **To note: only certain category 3 materials may be used for raw pet food** If a raw pet food producer is also authorised by the APHA as a category 2 material processing establishment specific rules must be followed. In such a situation it is a regulatory requirement that category 2 and category 3 ABP materials are stored and processed completely separately in order to avoid any possibility of cross contamination. The separation should be achieved by using separate buildings for the two different categories and operations, but the minimum should be floor to ceiling walls, completely separate air space, different operators, changing facilities, cleaning and maintenance equipment etc. Any cross contamination of Cat 3 material with Cat 2 material automatically leads the whole being reclassified as Cat 2.	Reg (EU) 142/2011 Annex IX
	Ensure materials are used in the correct order and within the allocated shelf life according to: - F.I.F.O (First In – First Out) or - F.E.F.O (First Expiring – First Out) ABPs should be stored frozen whenever possible to limit microbiological growth and spoilage.	

4.4 DISPOSING OF UNUSED/UNWANTED ABPS

	Methods for disposing of ABPs is dependent on the ABP category the material is assigned to. For category 3 ABP the following methods are allowed for disposal and use: • **Incineration** or co-incineration • Rendering them safe and sending to **landfill** after they have been heat treated in line with the ABP Regs Collectors licensed in accordance with ABP regulations can be utilised to dispose of unused/unwanted ABPs using these methods. For all other possibilities manufacturers are recommended to consult their enforcement authority and the ABP regulations. A full audit trail of material being disposed of must be maintained for traceability	Reg (EC) 1069/2009 Chapter II Article 14

4.5 CLEANING YOUR SITE AND VEHICLES

	The site and any containers or vehicles used for storing or transporting ABPs must be cleaned and disinfected. There must be: • a cleaning plan for all areas of the site made and enforced • regularly inspections of the site and all equipment to ensure they are clean, with the results recorded • a waste-water disposal system • full disinfection of vehicles, including the wheels, before they enter clean areas of the site • no contamination of finished products by splashes or run-off • a pest control programme to protect against insects, rats, birds, and other pests	Reg (EU) 142/2011 Annex VIII Chapter I Reg (EC) 183/2005 Annex II Reg (EC) 1069/2009 Article 25

4.6 HANDLING NON-ANIMAL BASED MATERIALS

	For non-animal based materials, such as fruit, vegetables and cereals, sensible and practical precautions should be taken during transport, delivery, storage, disposal and importation to ensure feed hygiene. The following (4.6.1-4.6.5) are safeguards to take to ensure both animal and public health remain protected at all levels.	Reg (EC) 183/2005 Annex I
	4.6.1 Transporting non-animal based materials Due consideration should be given to hygiene and temperature control during transport to minimise the microbiological risk.	
	4.6.2 Deliveries of non-animal based materials Upon arrival utilise an acceptance procedure whereby specification of raw materials, packaging and additives are checked. Keep a monitor of traceability, compliance with specifications and registered/approved suppliers. Ensure records of deliveries are kept and maintained. Damaged, infested or dirty transports/containers should be rejected along with the materials shipped in them.	
	4.6.3 Storing non-animal based materials	

	It is recommended to store non-animal based materials separate from ABPs until ready for processing to avoid any cross contamination of materials. For perishable non-animal based materials storage should be chilled or frozen to ensure viability and limit microbiological growth and spoilage.	
	4.6.4 Disposing non-animal based materials Non-animal based materials should be disposed of responsibly. If they have been stored alongside ABPs or allowed to mix, they should be disposed of as the most high risk material as per ABPs described in section 4.5 and must not be allowed to enter the human food chain.	
	4.6.5 Importing non-animal based materials When importing non-animal based materials from outside the EU the relevant legislation must be adhered to and safe sourcing should always apply (as described in section 3.3)	Reg (EC) 183/2005 Article 23

Non-animal based materials require the same level of care in sourcing, handling and ensuring hygiene as ABPs, since these materials can also introduce a range of hazards such as pathogenic bacteria, moulds or even pesticides.

5 PRODUCTION

5.1 PERSONNEL

	5.1.1 Training Pet food manufacturers shall ensure that all employees are adequately trained, instructed and supervised, commensurate with their activity. Such training should also include the microbiological risks associated with the materials and products being handled All staff must be informed clearly in writing of their duties, responsibilities and powers, especially when any change is made, in such a way as to obtain the desired product quality.	Reg (EC) 183/2005 Annex II

	5.1.2 Personal Hygiene Personal hygiene standards should be documented and adopted by all personnel, contractors and visitors to the factory. These standards shall be designed with due regard to the risk of product contamination in addition to the risks to personnel from the materials/products being handled.	Refer to FEDIAF Guide to Good Practice
	5.1.3 Protective Clothing Pet food handlers, visitors and contractors working in, or entering the pet food-handling areas, shall wear suitable issued protective clothing.	Refer to FEDIAF Guide to Good Practice

5.2 PRODUCTION REQUIREMENTS

	5.2.1 Responsibilities Responsibilities for production procedures are clear with a nominated employee responsible for production quality. Production stages are documented and measures are taken to ensure hygiene and safety.	Reg (EC) 183/2005 Annex II
	5.2.2 Procedures to control GMOs Procedures to be put in place to control GMOs. Authorised GMOs may be used and should be labelled appropriately. In case of GMO contamination of non-GMO products, cleaning is obligatory.	Reg (EC) 1829/2003 Reg (EC) 1830/2003
	5.2.3 Weighing Equipment Weighing equipment must be accurate. Use of appropriate devices with regular calibration and maintenance programmes.	Reg (EC) 183/2005 Annex II
	5.2.4 Mixing of Feed Materials Homogeneous mixing is essential and should be verified. Mixers are clean, appropriate and maintained, and operate for a pre-set time. Mixing efficiency is regularly checked for minor and major ingredients. Process and control measures should prevent the possibility of any cross contamination and carry-over of undesirable substances.	Reg (EC) 183/2005 Annex II

	5.2.5 Quality control plan Designate a qualified person responsible for quality control. Establish a Quality Control Plan (QCP) in writing, identify CCPs and OPRPs (refer to Annex 4 for guidance), manage modifications and implement. Analytical testing for shelf life, chemical factors etc. Use of external accredited laboratories.	Reg (EC) 183/2005 Annex II
	5.2.6 Packaging Raw pet food must be packaged in **new, clean, leak-proof** packaging. Packaging shall be assessed as a potential hazard and as an effective barrier in the HACCP plan.	Reg (EU) 142/2011 Annex XIII Chapter 2
	5.2.7 Temperature control Should be recorded as critical to product safety, implement alarm systems for monitoring and ensure hygienic conditions are maintained during processing and storage.	
	5.2.8 Foreign body detection Identify, eliminate or minimise foreign body contamination: determine CCPs and OPRPs, install detectors where necessary, such as metal detectors. If the metal detectors in use are only sensitive to ferrous metals, then it is recommended that additional visual control measures are used to detect lead shot, stainless steel and other foreign bodies. The appropriate corrective actions should be followed after detection of such materials.	
	5.2.9 Product release A structured product release procedure should be documented.	
	5.2.10 Non-conformance Out-of-specification products must be identified, labelled and quarantined followed by relevant corrective actions.	
	5.2.11 Quantity control Quantity checks to conform to EU law, equipment should be regularly calibrated see 5.2.12.	
	5.2.12 Calibration All equipment and process monitoring instruments should undergo regular calibration with records documented and it is recommended that documents relating to materials are kept by the manufacturer in order to ensure traceability for 2 years.	
	5.2.13 Handling and distribution of finished product Due consideration should be given to ensure any frozen finished product is always kept between appropriate temperature restrictions to prevent freeze/thaw cycles, which could encourage microbiological growth and spoilage affecting both safety and quality of the product. This could be achieved through temperature controlled vehicles or specialist insulating leak proof packaging material. All transit methods should be tried and tested in the field during a range of weather conditions. In order to reinforce the importance of temperature controls post factory gate (when the product is held by distributors, stockists or the end user), recommendations to keep product frozen and appropriate handling instructions can be placed on invoices or external packaging/cartons/pallets.	

5.3 LABELLING

5.3.1 Mandatory labelling requirements The mandatory information required by law to appear on a pet food label must be **legible** and **indelible**. Manufacturers are reminded that it is a legal requirement to label all products in compliance with the regulations, including a Best Before Date. The FEDIAF Code of Good Labelling Practice for Pet Food provides a very useful resource for interpreting the legal labelling requirements with examples and further guidance.	Reg (EC) 767/2009 FEDIAF Labelling Code
5.3.2 Additional retailer and consumer advice Due to the microbiological nature of raw pet food and the related risks, it is recommended to include additional guidance on **hygiene**, handling and storage, including a recommendation to use the product within certain time limits once defrosted, in order to protect **public health**. This guidance should be visible directly on-pack and be addressed in off-pack communications, such as on websites or marketing materials. Guidance should be clear and easy to understand using appropriate language and/or imagery. The following areas should all be addressed; examples are provided: 1. **Hygiene and handling** – emphasize raw nature of the product and appropriate hygiene measures to prevent cross-contamination between raw pet food, food, surfaces and equipment *"This product contains raw meat - use appropriate hygiene measures when handling and storing"* *"Handle in the same way that you would any raw meat product at home but using a separate preparation area"* *"Clean and disinfect surfaces and equipment before and after preparing raw pet food"* *"Always wash your hands thoroughly before and after preparing raw pet food"* 2. **Storage** – advise on suitable locations and temperatures *"Keep frozen until ready to use, only defrost required amount"* *"Once defrosted, always store at the bottom of the fridge"* *"Store separately from human food"* 3. **Thawing and serving** – advise on appropriate methods of thawing to prevent loss of thaw juice and the resulting loss of key essential water-soluble nutrients. *"Thaw in pet's bowl or a sealed container before serving"* *"Do not discard thaw juice"* *"Discard any uneaten raw pet food as soon as reasonably practical"*	

Taurine – currently the quoted safe nutritional minimum levels for Taurine in cats are based on dry extruded or canned wet food formats. The referenced evidence for this (Hickman et al 1990) determines frozen preserved raw formulations were able to maintain normal plasma taurine concentrations at lower levels than for heat processed diets. Therefore, the application of the lower reference level (for dry foods) will ensure sufficient taurine is present in a frozen raw food providing thaw juice is not discarded. Discarding the thaw juice could lead to a taurine deficiency.

5.4 PRODUCT FORMULATION

	• A **HACCP** study shall be undertaken during the design/development phase of the product, packaging and process to identify and assess all potential safety hazards and ability to manufacture according to designed formulae
	• **Shelf-life** shall be established, validated and recorded.
	• The presence of the following shall be monitored and appropriate control strategies to **minimise** the **risk** in compliance with the respective regulations:
	  ○ Prohibited feed materials
	  ○ Undesirable substances (including residues of veterinary products)
	  ○ Prohibited substances
	  ○ Pathogens, specifically Salmonella and Enterobacteriaceae
	  ○ Unauthorised quantities of permitted additives
		Reg (EC) 183/2005 Article 6
		
		Directive 2002/32/EC
		
		Reg (EC) 1831/2003

	• When formulating a raw pet food, it is advised to refer to the FEDIAF Nutritional Guidelines for the known safe limits for macro- and micronutrients in cats and dogs. This document also comprises a wealth of additional guidance in pet food formulation such as feeding test protocols and energy calculations, and is widely recognised across Europe as a standard for complete pet food. • Manufacturers may undertake **trials or testing** to **verify** if product formulation and manufacturing processes are capable of producing a nutritionally well balanced, safe and legal pet food.	FEDIAF Nutritional Guidelines (Product validation)

5.5 NUTRITIONAL ANALYSIS

	Nutritional analysis is required by law to provide the analytical constituents labelled on pack. However, more in depth analysis is recommended to ensure the formulations are appropriate and safe as well as being able to meet all the nutritional requirements of the pet if the product is declared to be 'complete'. With minimal treatment involved in raw pet food manufacture, compared to other techniques, there should also be some consideration given to the significant variability of raw materials and how these can be minimised as well as ensuring the quoted analysis is representative of the average composition.	

6 HACCP AND QUALITY MANAGEMENT

6.1 QUALITY MANAGEMENT SYSTEM

	6.1.1 Pet food safety policy and Quality management manual Manufacturers shall have a defined and documented pet food safety policy stating the intention to meet its obligations to produce safe and legal products. Manufacturers shall also have a quality management manual stating their commitment to quality and outlining working methods and practices employed to meet those requirements.	Reg (EC) 183/2005 Annex II
	6.1.2 Organisational structure and management review Manufacturers shall have an organisational structure reflective of all the required tasks and detailing personal responsibility and reporting. Directors shall provide adequate resources and investment to ensure product safety, legality and quality. Senior management shall review the system at planned intervals to ensure its continuing adequacy and effectiveness. This should include planned internal audits and verification.	Reg (EC) 183/2005 Annex II
	6.1.3 Specifications Manufacturers shall ensure appropriate specifications exist for: • Feed materials • Packaging materials • Processing • Finished products • Transport and warehouse Specifications shall be adequate, accurate, and ensure compliance with relevant safety and legislative requirements.	FEDIAF Guide to Good Practice
	6.1.4 Corrective and preventative actions When necessary, manufacturers shall investigate causes of significant non-conformity with standards, specifications and procedures, which are relevant to pet food safety, legality and quality.	FEDIAF Guide to Good Practice
	6.1.5 Customer satisfaction Manufacturers shall monitor information relating to customer perception and whether expectation with regard to product safety and quality have been met. The company shall clearly identify those individuals responsible for communication with customers and shall have an effective system for dealing with complaints.	FEDIAF Guide to Good Practice Reg (EC) 183/2005 Annex II
	6.1.6 Internal communication In order to maintain the effectiveness of the quality and safety management system, the manufacturer shall ensure the pet food safety team are informed in a timely manner of any relevant changes eg. new products, complaints indicating a hazard.	FEDIAF Guide to Good Practice
	6.1.7 External Communication Manufacturers shall have a procedure in place to inform stakeholders both up and down the pet food chain, customers APHA, Local Trading Standards and the FSA in case of serious animal or public health hazards related to the product.	Reg (EC) 183/2005 Annex II

6.2 HACCP Requirements

Manufacturers shall put in place, implement and maintain a permanent written procedure based on HACCP principles to ensure pet food safety. The 7 Codex **HACCP principles** are: 1. Conduct a hazard analysis 2. Determine the Critical Control Points (CCPs) and Operational Prerequisite Programs (OPRP) 3. Establish the Critical Limits 4. Establish a system to monitor control of the CCP and the OPRP 5. Establish the corrective action to be taken when monitoring indicates that a CCP is not under control 6. Establish procedures of verification to confirm that a HACCP System is working effectively 7. Establish documentation concerning all procedures and records appropriate to these principle and their applications.	Reg (EC) 183/2005 Chapter II Article 6 Reg (EC) 1069/2009 Article 29

A thorough HACCP plan is a crucial component in the manufacture of responsible raw pet food. A significant amount of time should be spent designing an appropriate plan and ensuring it is implemented effectively.

6.3 Risk Assessment and Hazard Analysis of Raw Pet Food

Risk assessment and hazard analysis forms a crucial and compulsory step in identifying potential risks and necessary and appropriate control measures. The relative occurrence and severity of each hazard should be quantified where possible. Micro-organisms, toxins, chemicals and physical agents should all be considered as well as the conditions that could lead to or exacerbate their presence. The potential for biological hazards in raw pet food compared to extruded dry or canned pet food is significantly different. Therefore, those hazards that could pose a risk as foodborne pathogens to both animal and humans are discussed in more detail in section 7. Please refer to Annex 5 for an example of some hazards and their control methods.	Reg (EC) 183/2005 Chapter II Article 6

6.4 Traceability

Traceability shall be the **responsibility of each operator** of the entire pet food chain ("from farm to feeding bowl"). Manufacturers shall identify all materials used in the pet food production (feed materials, additives and packaging), including the finished product and be able to trace (in both directions and in a timely manner) what occurred in all phases of production up to the distribution to the customer. **Downstream traceability** for pet food produced and delivered, and **upstream traceability** for raw materials used. Key objectives of **traceability**: ✓ To protect animal and human health ✓ To enable efficient withdrawal or recall of products ✓ To provide information on quality problems ✓ To comply with EU legislation	Reg (EC) 183/2005 Annex II

	6.4.1 Key Requirements • Manufacturers must work with an adequate system of documentation to ensure traceability • Records should be kept at least two years and samples until end of "commercial life" • Relevant traceability objectives shall be defined for each stage of production, processing and distribution • Traceability in case of co-packed products should be guaranteed • The system shall be regularly reviewed and tested in order to assess whether its objectives are met.	Reg (EC) 183/2005 Annex II
	6.4.2 Product Identification Manufacturers shall identify each individual sales unit to ensure traceability of the batch. Documented procedures for identifying materials shall be established and maintained, from reception through production to finished products.	Reg (EC) 183/2005 Annex II
	6.4.3 Product Recall and Product Withdrawal Manufacturers shall have an effective product recall and withdrawal procedure for all products in the distribution network. Speed and accuracy of information are essential components of a successful recall and good communication is required at all levels, from the competent authorities to the general public. Should a manufacturer consider or have a reason to believe that a product which he has imported, produced, manufactured or distributed does not satisfy the feed safety requirements, he shall immediately initiate procedures to withdraw the product in question from the market. In the case of a serious risk to human or animal health or to the environment, the manufacturer must inform and collaborate with the Competent Authorities (this includes Trading Standards, APHA and the FSA/FSS) to initiate a full recall. Please refer to Annex 6 for the general steps in a product recall. Procedures shall be regularly tested with audit trails and revised where needed to ensure effective operation. It is advisable to have a draft prepared statement in the event of a recall, which can be adapted to the details of the situation. This statement should clearly identify the product involved in the recall with details of batch numbers, explain the reason the product is thought to be unsafe and provide consumers with instructions on how to proceed if they have purchased or used an affected product, including contact details for further information. Staff members responsible for managing a recall should be clearly identified and receive sufficient training to enable them to manage the task proficiently. Following a product recall it is the responsibility of the manufacturer to launch a full investigation into the probable cause to understand the steps that led to the production and distribution of an unsafe product, and then identify methods to implement in the future to prevent such events recurring. APHA should be kept informed of such investigations	Reg (EC) 183/2005 Annex II

7 PROTECTING PUBLIC AND ANIMAL HEALTH

7.1 MANAGING RISK

Due to the very nature of raw pet food, the risks posed to both public and animal health must be seriously considered and action taken to apply the legislation and ensure that only feed is placed on the market and used that is safe and does not have a direct effect on the environment or animal health. These risks are primarily biological hazards which have a potential to become significant food-borne pathogens as a direct result of the public handling the product or the pet consuming it.	
The current **EU legislation** addresses some of the risks **specific** to raw pet food in the following ways: - Restricted list of raw materials approved for use - Microbiological testing requirements i.e. **zero tolerance** to Salmonella, max limits for Enterobacteriaceae - Packaging requirements i.e. new, clean and leak-proof However, in order to achieve **best practice** in raw pet food manufacture it is necessary to consider additional ways to further minimise the variety of risks specific to the raw nature of the pet food eg. transport and storage.	Reg (EU) 142/2011 Annex XIII

7.2 RISK ASSESSMENT FOR RAW PET FOOD – BIOLOGICAL HAZARDS

7.2.1 Bacterial pathogens ***Salmonella*** is a bacterial foodborne pathogen, which has been on a steady decline as a result of a co-ordinated effort amongst food producers and the government. A survey by the FSA undertaken in 2008 found a consistently low prevalence of around 5-6% in fresh chicken at retail in the human food chain.	Meldrum, et al, 2005 FSA, 2008
Salmonella can also be isolated from the faeces of around 0-4% of healthy, clinically normal dogs (Lowden, et al, 2015) and is described as an uncommon cause of diarrhoea in dogs, often only seen in the face of an impaired immune system (Merck Veterinary Manual, 2010). *Salmonella* can however cause illness in humans if contaminated products are consumed or via secondary transfer from contact with contaminated surfaces eg. kitchen surfaces or dog bowls.	Lowden, et al, 2015 Merck Veterinary Manual, 2010
EU legislation demands a **zero tolerance for *Salmonella*** in raw pet food and testing requirements are described in section 7.3 as well as recommended actions in response to a test failure (product cannot be placed on the market if there is presence of *Salmonella* in 25g sample).	
Control of this organism should be based on prevention of contamination with hygienic handling and storage, in addition to careful sourcing of materials from the restricted list permitted for use in raw pet food.	
Campylobacter is also very commonly isolated from the faeces of clinically normal dogs and cats. In a Danish study nearly 100% of dogs were carriers (Hald, et al, 2004) but the prevalence is more often quoted around 50-60% for both dogs and cats (Chaban, et al. 2010; Engvall, et al, 2003; Queen, et al, 2012). However, it is	

	important to note that the strain typically cultured is far more commonly *C.upsaliensis* and not *C.jejuni* which is the common culprit in human Campylobacteriosis. Control should also be focused on careful sourcing. There is no legal requirement to test for ***Campylobacter*** and end-product testing is unlikely to herald any meaningful results given the frozen nature of most raw pet food. ***E.coli*** belongs to a family of bacteria known as Enterobacteriaceae, which are ubiquitous in nature, and many are present in the mammalian intestinal tract as commensal flora. Current testing requirements for Enterobacteriaceae are described in section 7.3. ***Listeria monocytogenes*** is another potential bacterial foodborne pathogen but it is also known to be carried asymptomatically by healthy humans, animals and birds. Studies have reported ***Listeria spp***. to be present in 1-2% of healthy dogs (Lida, et al., 1991; weber, et al., 1995) and illness is uncommon but there are isolated case reports in the literature. Control should be focused on safe sourcing and hygienic handling along with guidance (as used in human food) to raise public awareness of appropriate food hygiene rules. **7.2.2 Bacterial spoilage organisms** Whilst not all bacteria pose an acute disease some can lead to significant degradation of the food and risk inadequate nutrition for the pet and so still warrant adequate control measures. The most important of which being a reliable and consistent cold chain throughout transport, production and storage as chilled and freezing temperature will halt or significantly slow the multiplication of nearly all foodborne bacteria.	Hald, et al, 2004; Chaban, et al. 2010; Engvall, et al, 2003; Queen, et al, 2012
	7.2.3 Viral pathogens A report from WHO recommends an increased awareness of viral foodborne risks and advises its inclusion into HACCP plans. **Norovirus and Hepatitis A Virus** are currently recognised as the most important foodborne viral pathogens in the Western world (Koopmans & Duizer, 2004). Human Norovirus has been shown to survive in the gastrointestinal tract of dogs without causing any symptoms (Summa, et al. 2012) suggesting a potential new route of infection. Therefore, control measures to prevent contamination such as prevention of staff suffering from acute gastrointestinal symptoms from entering the production site should be considered. There is also an emerging foodborne viral risk of **Hepatitis E Virus**. A seroprevalence for Hepatitis E virus of >92% was recently reported in UK pig abattoirs (Defra, 2014), therefore of particular interest for manufacturers using pork raw material.	FAO/WHO, 2008 (Koopmans & Duizer, 2004) (Summa, et al. 2012) Defra, 2014

Viruses are inherently very different to bacteria, often hardy in the environment and resistant to processing, therefore tailored control measures are required. Viruses will not replicate in food so do not pose a spoilage risk but have a very low infective dose and so control must focus on prevention of contamination. Food handler transmission and contaminated water sources are both known risk factors for foodborne viral pathogens (Bidawid, et al., 2000 and Bidawid, et al., 2004).

7.2.4 Protozoal pathogens

Toxoplasma gondii, Sarcocystis and **Neospora** are all notable coccidial protozoa capable of causing infection via the consumption of various raw animalbased materials. **Toxoplasma** can affect a wide range of livestock, most commonly sheep, pigs and wild game as well as pets, most notably cats. It is estimated that 350,000 people become infected with toxoplasma each year in the UK (FSA, 2012) with 10-20% of those showing symptoms. **Sarcocystis** is a particular concern in raw lamb, it does not always cause symptoms in the livestock but the link between infected dogs and sheep (from eating faeces) is compelling. **Neospora** is one of the most common causes of abortion in UK cattle (APHA, 2013) and can lead to inflammatory myopathies in dogs (Podell, 2002) but current evidence suggests it does not cause disease in humans.

All three of these key protozoa have been shown to be rendered non-infective by freezing protocols as shown in the table in Annex 7.

FSA, 2012

APHA, 2013
Podell, 2002

7.2.5 Parasitic pathogens

Carcases demonstrating a particularly heavy burden of parasites will not be passed fit for human consumption and the by-products cannot then go on to be re-categorised as category 3 and used in raw pet food manufacture. However, carcases with only a minor parasitic burden could be passed and go on to present a risk to animal and public health as consumption over time may lead to a greater risk of exposure to some internal parasites. Therefore, it is important to ensure a pet's worming schedule is kept up to date. It would be possible to institute a freezing protocol to manage this risk as discussed in 7.3.4 as the following key parasites are all susceptible to freezing for specific time periods (refer to Annex 7):

FSA Manual of Official Controls Amendment 72 Chapter 2.4

Parasite		Source of infection
Cestodes (tapeworms)	Taenia spp.	Raw beef, lamb and pork
	Echinococcus (Hydatid cysts)	Raw beef, lamb, pork and goat
Nematodes (roundworms)	Toxocara spp.	Raw rabbit, pork, goat, rodents etc. (i.e. any paratenic hosts)
Trematodes (flukes)	Neorickettsia helminthoeca	Raw Salmon (Sourced from USA, Canada, British Columbia and Brazil)

Rumen fluke (Paramphistomes) – The consumption of raw tripe infected with rumen fluke does **not** directly pose a risk to animal or human health. Owing to the lifecycle of the fluke, the only infective stage is that of the metacercaria which are released from snails onto the grass and consumed by the mammalian host before developing into the larval stage found in the rumen. Therefore, consumption of the metacercaria or an infected snail is required to acquire an active infection. However, it is still not recommended to use such product due to quality concerns and undesirable appearance to the customer.

7.2.6 Prions

The risk to public health posed by prions, such as BSE and Scrapie, is addressed through the TSE regulations (Reg (EC) 999/2001) and the removal of the specified risk materials (SRM) from animal by-products. Therefore, risk is minimal as long as materials are sourced appropriately from abattoirs following the regulatory requirements.

Reg (EC) 999/2001

7.3 MICROBIOLOGICAL ANALYSIS

Regulation requires random samples of pet food products must be sent to an ISO 17025 accredited laboratory to be tested for bacteria.

Reg (EU) 142/2011 Annex XIII Chapter II

7.3.1 Finding a laboratory

Samples must be sent to a laboratory accredited by the United Kingdom Accreditation Service (UKAS).

The UKAS website provides details for laboratories accredited to carry out a specific test, or a group of tests.

Those laboratories are accredited on a test-by-test basis so it may be necessary to send samples to more than one laboratory in order to test for more than one type of bacteria.

Defra also lists some UKAS accredited laboratories approved for ABP testing. https://www.gov.uk/government/publications/animal-by-product-testing-laboratories-in-the-uk

7.3.2 Undertaking testing

Sampling should be carried out in line with a site specific APHA agreement. For guidance refer to Annex 8 for sampling guidance. Manufacturers are also encouraged to submit a draft sampling protocol as part of their HACCP plan, this may take the following form:

Product Line	**TRIPE**	**BEEF**		**CHICKEN**	
Product Type	*Tripe mince*	*Beef mince*	*Beef chunks*	*Chicken mince*	*Chicken chunks*
Week 1	X	X		X	
Week 2	X		X		X
Week 3	X	X		X	
Week 4	X		X		X

7.3.3 Interpreting results

The laboratory divides the sample into 5 sub-samples and gives a result for each sub-sample using the notation: bacteria name and bacterial count (x per y grams).
Where bacteria name is the name of the bacteria tested for (eg. *Salmonella*), and x is the number of colonies of that bacteria counted in y grams of the sub-sample.
Instead of giving a number the laboratory may also report the result for a sub-sample as:
'non-detected' or '<10cfu/g'

	This means the laboratory was not able to detect any bacterial colonies in that sub-sample. **7.3.3.1** ***Salmonella*** The sample will be non-complaint if **any** sub-sample contains **any** Salmonella colonies **7.3.3.2** ***Enterobacteriaceae*** The sample will be non-compliant if: ▪ any of the sub-samples contains more than 5,000 Enterobacteriaceae colonies per gram ▪ 3 or more sub-samples contain more than 500 Enterobacteriaceae colonies per gram	Reg (EU) 142/2011 Annex XIII Chapter II
	7.3.4 Actions following any non-compliance ***Salmonella*** ✓ Raw pet food that does not fulfil the provisions regarding Salmonella cannot be placed on the market as they are not compliant with the regulation ✓ If one sample fails a test the local APHA and Trading Standards office must be notified immediately. Any failed test must be recorded, and actions taken as a result. ✓ The cause of the failed test will need to be investigated and the APHA must be provided with an explanation of how the problem will be fixed. (Refer to Annex 9 for a proposed standard checklist of actions to take in response to a test failure) ✓ APHA will then need to agree that the proposed solution addresses the problem. ✓ Testing will be increased to weekly intervals until four consecutive clear results are achieved in the affected product. ***Enterobacteriaceae*** ✓ Sampling for Enterobacteriaceae is a "process hygiene criterion". This means a criterion indicating the acceptable functioning of the production process. ✓ Such a criterion is not applicable to products placed on the market. It sets an indicative contamination value above which corrective actions are required in order to maintain the hygiene of the process in compliance with general requirements for the safety of feed. ✓ Where raw pet food does not meet the process hygiene criterion for Enterobacteriaceae the local APHA must be notified immediately. Any non-compliance must be recorded, and the actions taken as a result ✓ The cause of the non-compliance will need to be investigated and the APHA must be provided with an explanation of how the problem will be fixed. ✓ APHA will then need to agree that the proposed solution addresses the problem and may impose further corrective actions including further samples to be taken if necessary.	Reg (EU) 142/2011 Annex XIII Chapter II
	7.3.5 Test records Test results must be kept for at least 2 years in written or electronic form, and presented to APHA officers if requested.	Reg (EU) 142/2011 Annex XIII Chapter II

REFERENCES

LEGISLATION

- **REGULATION (EC) No 1069/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation)
- **COMMISSION REGULATION (EU) No 142/2011** of 25 February 2011 implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive
- **REGULATION (EC) No 183/2005 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 12 January 2005 laying down requirements for feed hygiene
- **REGULATION (EC) No 1831/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 22 September 2003 on additives for use in animal nutrition
- **COMMISSION REGULATION (EU) No 1017/2017** of 15 June 2017 amending (EU) No 68/2013 on the Catalogue of feed materials
- **REGULATION (EC) No 767/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC
- **DIRECTIVE 2002/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 7 May 2002 on undesirable substances in animal feed
- **COMMISSION IMPLEMENTING REGULATION (EU) 2021/632** of 13 April 2021 laying down rules for the application of Regulation (EU) 2017/625 of the European Parliament and of the Council as regards the lists of animals, products of animal origin, germinal products, animal by-products and derived products, composite products, and hay and straw subject to official controls at border control posts, and repealing Commission Implementing Regulation (EU) 2019/2007 and Commission Decision 2007/275/EC
- **COMMISSION DECISION (2007/275/EC)** of 17 April 2007 concerning lists of animals and products to be subject to controls at border inspection posts under Council Directives 91/496/EEC and 97/78/EC
- **DIRECTIVE 98/8/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 16 February 1998 concerning the placing of biocidal products on the market
- **COUNCIL DIRECTIVE 91/271/EEC** of 21 May 1991 concerning urban waste-water treatment
- **COMMISSION REGULATION (EC) No 1441/2007** of 5 December 2007 amending Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs
- **REGULATION (EC) No 1829/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 22 September 2003 on genetically modified food and feed
- **REGULATION (EC) No 1830/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC

- **DIRECTIVE 97/7/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 20 May 1997 on the protection of consumers in respect of distance contracts
- **COMMISSION REGULATION (EU) No 2020/354** of 4 March 2020 establishing a list of intended uses of animal feedingstuffs for particular nutritional purposes
- **REGULATION (EC) No 999/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

FEDIAF GUIDELINES [AVAILABLE ONLINE]

Nutrition Guidelines for Complete and Complementary Pet Food for Cats and Dogs: http://www.fediaf.org/self-regulation/nutrition/

Guide to Good Practice for the Manufacture of Safe Pet Foods: http://www.fediaf.org/self-regulation/safety/

Code of Good Labelling Practice for Pet Food: http://www.fediaf.org/self-regulation/labelling/

PUBLISHED LITERATURE

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ANNEX 1

EXAMPLE OF A WRITTEN SPECIFICATION FOR FEED MATERIALS

FEED MATERIAL SPECIFICATION			
Product description			
Main contact			
Delivery address			
Specification	Specifications should be agreed in writing with each supplier and appropriate actions jointly approved in the event of failure to meet the relevant specification		**Approved?**
Approved RM for pet food	Note: operators may only manufacture raw pet food from Cat 3 material described in Article 10(a) and (b)(i) and (ii) of Regulation (EC) No 1069/2009		Yes/No
Commercial document	Note: a commercial document must be present. Part 3 to be retained		Yes/No
Origin/source	Note: must be from an approved origin and source		Yes/No
Health mark removal	Note: under no circumstances whatsoever should meats with intact health marks be found in any pet food facility or its associated cold stores		Yes/No
Processing methods	e.g. details of any processing the material has undergone		Yes/No
Temperature on receipt	Note: transport frozen or chilled (max 5°C) unless processed within 24hrs of collection		Yes/No
Storage	Note: ABPs should be stored frozen whenever possible to limit microbiological growth and spoilage		Yes/No
Shelf life	Note: shelf life must be allocated		Yes/No
Hazards	e.g. details of hazards, if any		Yes/No
Limitations on use	e.g.: specify limitations on use, if any		Yes/No
Microbiological count			**Approved?**
Salmonella			Yes/No
Enterobacteriaceae			Yes/No
Composition	Min %	Max %	**Approved?**
			Yes/No
			Yes/No
Analytical	Min %	Max %	**Approved?**
Moisture			Yes/No
Protein			Yes/No
Oil/Fat			Yes/No
Fibre			Yes/No
Ash:			Yes/No
Calcium			Yes/No
Phosphorus			Yes/No
Potassium			Yes/No
Sodium			Yes/No
Magnesium			Yes/No
Chloride			Yes/No
Sulphur			Yes/No
Zinc			Yes/No

ANNEX 2

ANIMAL BY-PRODUCTS COMMERCIAL DOCUMENT – TO ACCOMPANY ANIMAL BY-PRODUCTS

Consignor, transporter, and receiver each to retain a copy of this document for two years

Section 1 (to be completed by consignor) Unique number: .....

Name of consignor: ..... Date: .....

Lic/app/reg no. of consignor: .....

Address of consignor: .....

.....

Place of origin of material: .....

.....

Description of the material and ABP category .....

Quantity of material: .....

Name of haulier: .....

Signed for consignor: ..... Name: .....

Section 2 (completed by haulier)

The above material was collected from the consignor and delivered to the consignee in compliance with EU Regulation (EC) No 1069/2009 and EU Regulation (EC) No 142/2011

Date on which material was taken from the above premises: .....

Signed for haulier: ..... Name: .....

Name and address of carrier: .....

.....

Section 3

Name of receiver: .....

Approval number of receiver (if applicable): .....

Address of receiver: .....

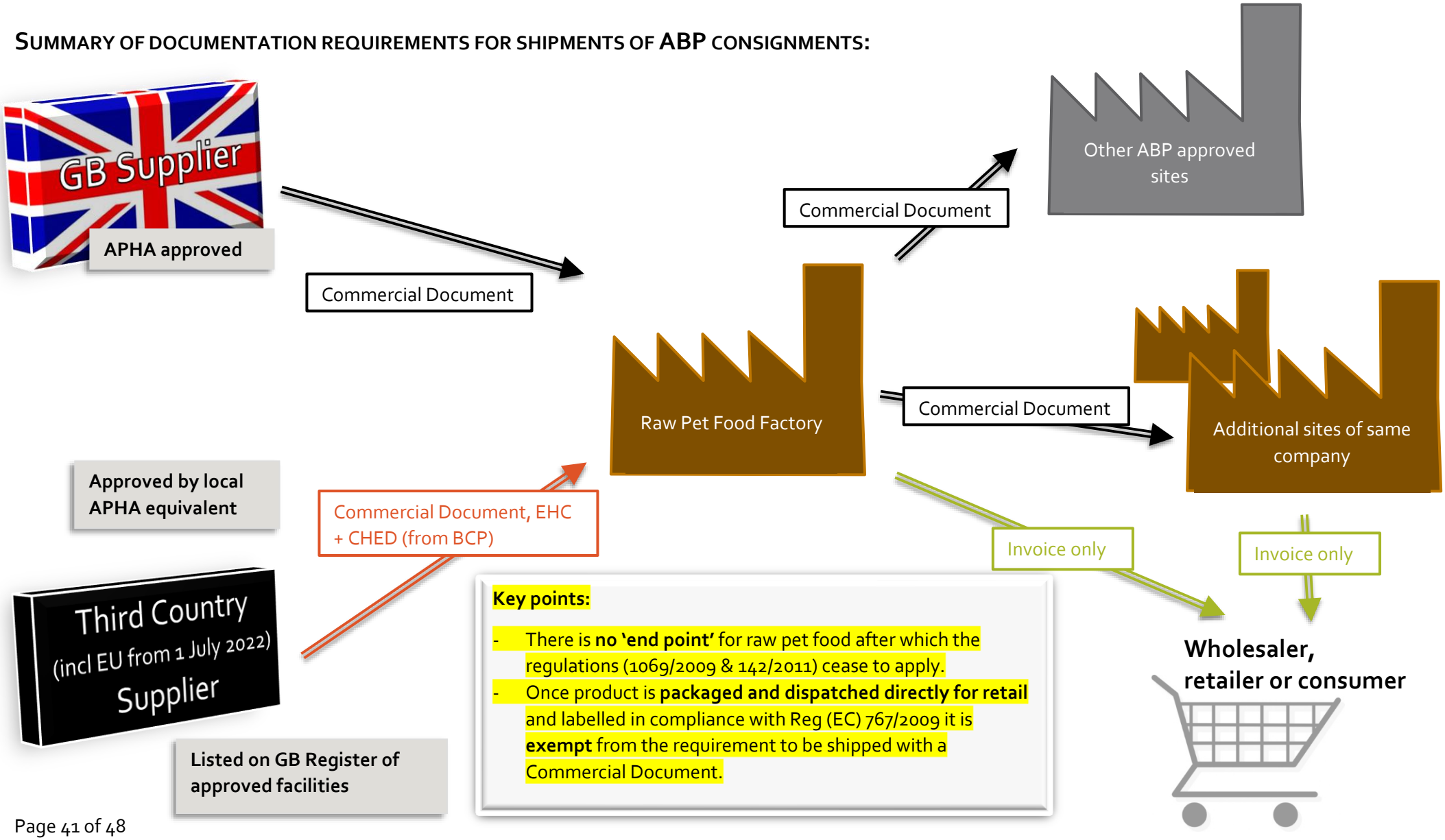
.....

I confirm that the material identified in section 1 above was received at the named consignee premises from the named haulier.

Signed for consignee: ..... Name: .....

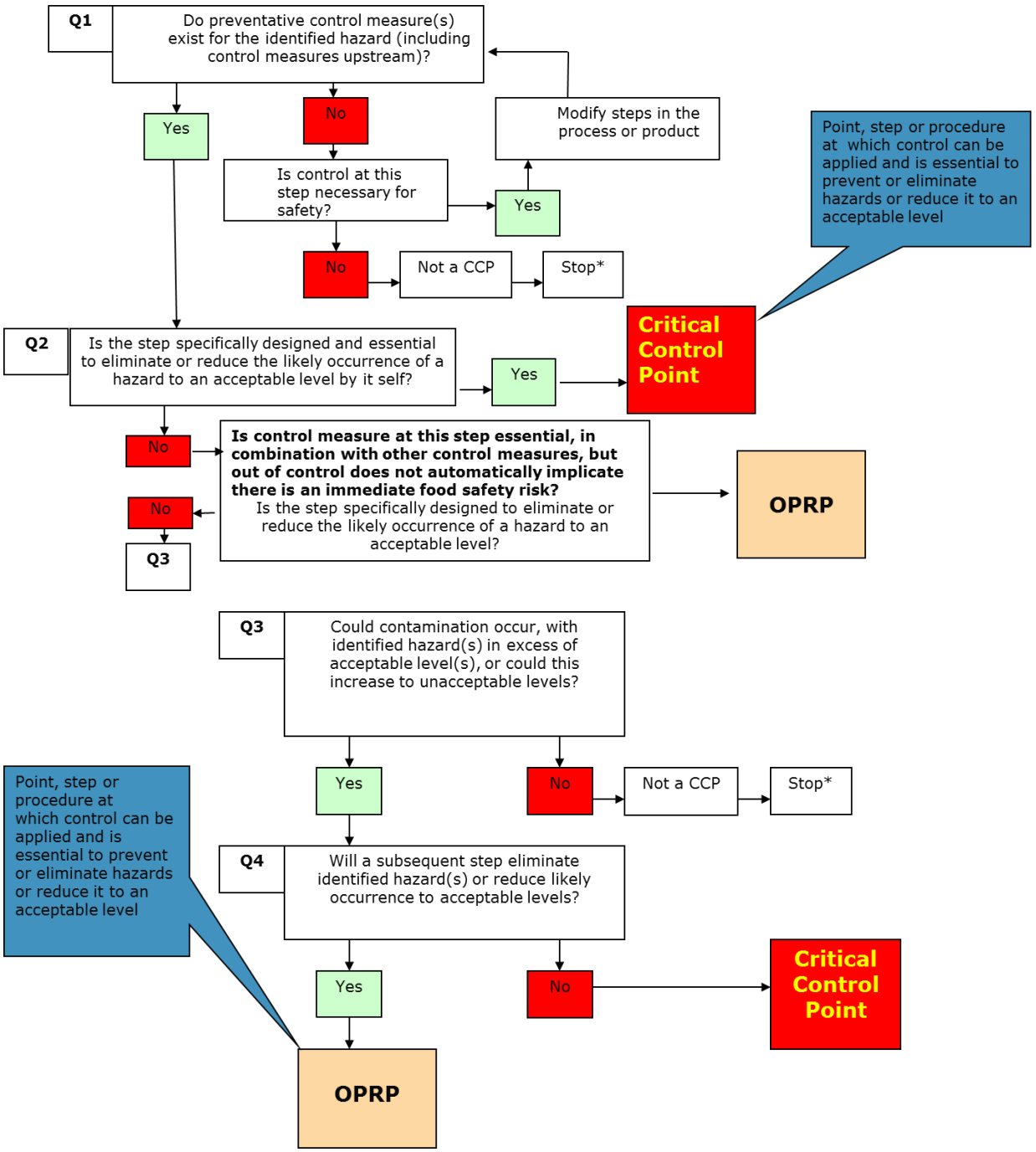
ANNEX 3

SUMMARY OF DOCUMENTATION REQUIREMENTS FOR SHIPMENTS OF ABP CONSIGNMENTS:



ANNEX 4

DECISION TREE TO IDENTIFY CCPS AND OPRPS



From FEDIAF Training Package Module III 'Hazard Analysis of Critical Points'

ANNEX 5

EXAMPLES OF HAZARDS TO CONSIDER IN HACCP DESIGN – FROM FEDIAF TRAINING GUIDE

(Not intended to be comprehensive)

Critical Control Point/OPRP depending on your HACCP.	Hazard to be controlled	Control Method
Transport / storage	Contamination or deterioration (eg. temp))	Assurance and inspection programme
Raw Materials conform spec.	Incorrect or contaminated raw materials (eg. SRM)	Supplier Assurance program and incoming inspection
Processing	Growth of spoilage bacteria in process (e.g. High number of Salmonella due to poor processing conditions; AW, time and temperature, cross contamination)	Monitoring / inspection, shelf-life control
Metal detection	Metal contamination	Permanent magnets, electric metal detection device. Visual inspection where lead shot/non-ferrous metal may not be detected automatically
Cooling / Freezing	Microbiological ingress during cooling	
Storage, transport, including point of sales	Contamination or deterioration, Growth of micro-organisms	Warehouse assurance and vehicle? inspection program, temperature monitoring
Handling of primary package	Contamination or deterioration due to loss of packaging integrity	Visual control

ANNEX 6

GENERAL STEPS IN A PRODUCT RECALL

- Reason for a recall is identified as a significant threat to public or animal health, or the environment
- Manufacturer notifies competent authorities (APHA and FSA/FSS) of their intention to recall a product or the Government or competent authorities may request a recall of a product
- Scope of the recall is specified through identification of affected serial or batch numbers of the product affected
- Manufacturer utilises traceability channels to identify location of all affected batch(es) and investigate probable source of original contamination
- Communication channels are established, such as consumer hotlines
- Product recall announcements are made through multiple media portals including the respective government agencies website, and often comprise prepared statements from the manufacturer
- Typically, consumers are instructed to return or destroy affected goods and obtain a full refund
- Full details and outcome of the recall is monitored and shared with relevant competent authorities

ANNEX 7

EFFECT OF FREEZING ON KEY PARASITE AND PROTOZOAL ORGANISMS:

[To note: Does not include microbiological organisms]

Parasite/Protozoa			Potential source of infection	Lethal effect of freezing	Evidence
Cestodes (Tapeworm)	Taenia spp.		Raw beef, lamb and pork	BEEF – 9 days at -10°C LAMB – 7 days at -10°C PORK – 4 days at 0°C	(Hilwig, et al., 1978) (Whitten, 1971) (Balderas, et al., 2009)
	Echinococcus (Hydatid cysts)		Raw intermediate host (sheep, goat, pig, cattle)	10 days at -18°C	(Veit, et al., 1995)
Nematodes (Roundworm)	Toxocara spp.		Raw carcass and offal (paratenic hosts)	10 days at -20°C (100% effective) 10 days at 0-4°C (95% effective)	(Dutra GF, et al., 2013)
Trematodes (Fluke)	Neorickettsia helminthoeca		Raw Salmon (USA, Canada, British Columbia and Brazil)	>24h at -20°C	(Gorham & Foreyt, 2006)
	Paramphistomes (Rumen fluke)		Raw tripe BUT larval stage not infective - must consume metacercaria stage encysted on grass from infected snail	Unknown	(Skuce, et al., 2013)
Protozoa	Coccidia	Sarcocystis	Raw lamb Faecal-oral route	7 days at -18°C	(Gestrich, 1974)
		Neospora	Raw beef Transplacental transmission	7 days at -18°C	(Lindsay & Dubey, 1989)
	Toxoplasma gondii		Any raw meat Transplacental transmission Faecal-oral route	4 days at -12°C Rendered non-infective by freezing	(Kuticic, 1992) (Fayer, 1980)
Crustacean (or Pentastomid)	Linguatula serrata (tongue worm)		Raw offal	3h at -18°C	(Basti, et al., 2011)

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ANNEX 8

MICROBIOLOGICAL SAMPLING PROTOCOL

What to sample, when and how

Details of sampling frequency by material are detailed on the APHA licence for each individual establishment. Samples should be taken and prepared in compliance with that APHA licence. Manufacturers must send separate samples from each material to be tested.

Collecting and storing a backup B sample

The sample that you send to the laboratory for testing is known as the A sample.

When you take the A sample, you must take a second B sample in exactly the same way. Seal the B sample in a container and place it in a fridge that is not used for storing food.

You will need to send the B sample to the laboratory if the laboratory cannot test your A sample for any reason (eg. if it is lost or damaged). You can destroy your B sample if your A sample passes the test (laboratory results show it contained an acceptable level of bacteria).

If your A sample is non-compliant (the laboratory results show it contains too high a level of the bacteria it was tested for) you can't send your B sample in place of the A sample. You must tell APHA you have a non-compliance.

ANNEX 9

CHECKLIST OF ACTION TO TAKE IN RESPONSE TO A SALMONELLA TESTING FAILURE:

- ✓ Notify local APHA office immediately
- ✓ Products cannot be placed on the market as they are not compliant with the ABP Regulation
- ✓ Ensure result is recorded in written or electronic form and filed for future reference
- ✓ Agree with APHA a proposed solution to investigate the failure and explain how the problem will be resolved and its reoccurrence prevented, such as:
    - Identify any finished product containing the affected material that is still on site and arrange for its safe disposal
    - Trace upstream and downstream to identify from which suppliers the failed sample came from, bearing in mind the possibility of a product recall.
    - Review supplier through vendor assurance, arrange a visit if necessary and investigate possible routes of contamination
    - Review relevant product specification brief, make necessary changes and discuss with suppliers affected
    - Review HACCP throughout production and identify any possible routes of contamination.
    - Conduct serotyping to collect further information on Salmonella strain and relative pathogenicity in an APHA official laboratory.
    - Thorough cleaning and disinfection of equipment and work areas