

# GAPFA GLOBAL ALLIANCE OF PET FOOD ASSOCIATIONS GLOBAL PET FOOD SAFETY GUIDANCE

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# **1. INTRODUCTION**

The Global Alliance of Pet Food Associations (GAPFA) is a non-profit association, established in Belgium in 2014, representing the following national and regional pet food industry associations and companies of pet food manufacturers across the globe:

- PFIAA, Pet Food Industry Association of Australia (Australia)
- ABINPET, Brazilian Pet Products Manufacturers Association (Brazil)
- PFAC, Pet Food Association of Canada (Canada)
- FEDIAF, European Pet Food Industry Federation (Europe)
- JPFA, Japan Pet Food Association (Japan)
- KPFA, Korea Pet Food Association (South Korea)
- AMASCOTA, Consejo Nacional de Fabricantes de Alimentos Balanceados (Mexico)
- NZPFMA, New Zealand Pet Food Manufacturers Association (New Zealand)
- PFMA, Pet Food Manufacturers Association (Russia)
- PFI-SA, Pet Food Industry Association of Southern Africa (South Africa)
- PIA, Petfood Industry Association (Thailand)
- PFI, Pet Food Institute (The United States of America)
- Hill's Pet Nutrition
- Mars Petcare
- Nestlé Purina PetCare

GAPFA members represent at least 92% of the total global pet food production (total global value estimated at \$70-75 billion USD in 2015).

The Alliance works to promote adherence to food safety and nutritional standards enabling manufacturers to deliver wholesome, healthy and nutritious prepared pet foods; to promote the feeding of prepared pet food to support the health and wellbeing of pets; and to develop and disseminate educational resources which highlight and enhance the benefits of human pet interaction.

Feeding pet animals with safe pet food for a long healthy life is the paramount objective of all pet food manufacturers. This applies to the entire manufacturing process from the selection of raw materials to the finished product.

The Global Pet Food Safety Guidance serves as a general self-regulation framework for pet food manufacturers to produce safe pet food and to provide guidance for safety criteria facilitating international trade.

The scope of this Guidance document covers shelf-stable pet food for dogs and cats, including dry, wet, semi-moist and treat formats. Raw and fresh pet food is not covered.

This Guidance has a purely voluntary character and does not replace national regulatory requirements or existing pet food safety guidelines/standards. It is based on full self-responsibility of the individual pet food manufacturer in accordance with GAPFA's mission to support the health and wellbeing of dogs and cats and to promote the benefits of living with them, by providing a forum to address industry consensus on key issues of mutual interest.

This document is reviewed and updated as deemed necessary by the GAPFA membership.

# 2. GLOSSARY

The glossary contains definitions of key words used in this Guidance document followed by the source of the definition. Whenever appropriate, definitions are adapted to pet food and included as GAPFA global internal definitions.

**Audit:** Systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

Internal, first party audits – are conducted by, or on behalf of, the organization itself for management review and other internal purposes.

External audits are second—and third-party audits. Second-party audits are conducted by parties having an interest in the organization such as customers, or by other persons on their behalf. Third-party audits are conducted by external independent organizations providing certification.

Third-party audits are conducted by external independent organizations providing certification. *(EN ISO 9000:2015)* 

**Calibration:** Set of operations required to ensure that measuring equipment conforms to the requirements for its intended use *(EN ISO 9000:2015)* 

**Contamination:** Hazard may be posed by any contaminant (e.g. biological or chemical agent, foreign matter, or other substance) not intentionally added to food which may compromise food safety or suitability (*Codex Alimentarius Commission, Recommended International Code of Practice, CAC/RCP 1-1969, Rev. 4-2003*)

**Corrective action:** Action to eliminate the cause of a detected nonconformity or other undesirable situation *(EN ISO 9000:2015)* 

**Critical Control Point (CCP):** A step at which it is essential that a specific control measure is applied to prevent or eliminate a food safety hazard or reduce the risk to an acceptable level (*Codex Alimentarius Commission, Recommended International Code of Practice, CAC/RCP 1-1969, Rev. 4-2003 and ISO 22000:2005 E*)

**Cross-contamination:** The passing of microorganisms, chemicals or other harmful substances indirectly from one material to another through improper design and layout, unsterile equipment, air, procedures, or products (*Codex Alimentarius Commission, Recommended International Code of Practice, CAC/RCP 1-1969, Rev. 4-2003*)

**F.I.F.O. (first in first out):** Stock rotation based on the principle of despatching earliest received products first (*PAS 222*)

**F.E.F.O (first expired first out):** stock rotation based on the principle of despatching earliest expiration date first

**Food safety management system:** A system to define food safety policy, related objectives, documented procedures, records, and responsibility to ensure that all products will not harm the consumer when prepared and/or eaten according to the intended use. (*EN ISO 22000:2005 E*)

**Food Safety Plan:** A plan which defines the food safety policy, related objectives, documented procedures, records and responsibility to ensure that all products will not harm consumer when prepared and/or eaten according to intended use

**GHPs:** Good Hygienic Practices

**GLPs:** Good Laboratory Practices

**GMPs:** Good Manufacturing Practices

**HACCP (Hazard Analysis and Critical Control Point):** A system which identifies, evaluates, and controls hazards which are significant for food safety (*Codex Alimentarius Commission Recommended International Code of Practice General Principles of Food Hygiene CAC/RCP 1-1969, Rev. 4-2003*)

HARPC: Hazard Analysis and Risk Based Preventive Controls (United States, 21 CFR Part 507)

**Hazard:** A biological, chemical or physical agent in, or condition of, food or feed with the potential to cause an adverse health effect

**Monitoring:** Conducting a planned sequence of observations or measurements to assess whether control measures are operating as intended (*EN ISO 22000:2005 E*)

**Prerequisite Programme (PRP):** "Food safety" basic conditions and activities that are necessary to maintain a hygienic environment throughout the (pet) food chain suitable for the production, handling and provision of safe end products and safe food for pets. PRP is a combination of all of good practices like GMP, GHP, GLP (EN ISO 22000:2005 E)

**Product Recall:** Any measures aimed at achieving the return of an unfit product from consumers and customers

**Risk:** Function of the probability of an adverse health effect and the severity of that effect, consequential to a hazard

**Risk assessment:** Scientifically based process consisting of four steps: hazard identification, hazard characterization, exposure assessment and risk characterization

**Shelf-life:** The period during which the product maintains its microbiological safety, nutritional and sensory qualities at specific storage conditions. It is based on identified hazards for the product, heat or other preservation treatments, packaging method and other hurdles or inhibiting factors that may be used

**Traceability:** The ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution

**Undesirable substance:** Substance or product, with the exception of pathogenic agents, which is present in and/or on the product intended for animal feed and which presents a potential danger to animal or human health or to the environment

**Validation:** Obtaining evidence that the control measures managed by the risk-based preventive controls system and by the operational PRPs are capable of being effective

**Verification:** Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled. It involves the application of methods, procedures, tests and other evaluations, in addition to monitoring, to determine compliance with the specifications laid down in the hazard analysis and the effectiveness of the risk-based Food Safety System

# 3. FOOD SAFETY MANAGEMENT SYSTEM AT PET FOOD MANUFACTURING ESTABLISHMENTS

## 3.1 Outcome

The requirements of the pet food safety management systems are based on the internationally recognised Standards, e.g. EN-ISO 9000:2005 series, ISO 22000:2005 (or FSSC 22000), PAS 222, and Global Food Safety Initiative benchmark requirements.

## 3.2 Management System

The operator of a manufactured pet food establishment should have a documented system consistent with the principles and objectives of ISO 9000 series which:

- a) includes the policy objectives of the pet food establishment for the production of pet food products that are safe and fit for purpose;
- b) describes the organizational structure (including the responsibility for Product Safety what, who, how, when), the provision of resources and the provision of personal training;
- c) describes the system of operational hygiene and process controls that ensure that pet food products are safe and fit for purpose and are accurately identified in accordance with this Guidance;
- d) specifies how each requirement of this Guidance that applies to the production undertaken at the establishment will be met by the operator;
- e) contains procedures for each stage of production, storage and distribution;
- f) uses records to validate and verify the production of pet foods that are safe and fit for purpose;
- g) provides for internal audits and management reviews of the operational activities and policy objectives of the pet food establishment. The results of these reviews and the preventive/corrective actions taken should be documented;
- h) provides for the implementation of a Food Safety Risk Assessment (such as HACCP, HARPC or equivalent) plan for each family of products produced at the establishment; and
- i) includes a system for the handling of raw material/packaging material including traceability of raw materials/packaging materials.

This food safety system should be reviewed regularly for continuous improvement on at least an annual basis or if there is a significant change to the food safety system.

# 3.3 Calibration

Equipment used to monitor critical control points for Product Safety, Operational Prerequisite Programmes and product legality should be calibrated and traceable.

# 3.4 Consumer/Customer Satisfaction

The pet food manufacturer should have a system in place for the effective capture, retention, management and trend analysis of consumer/customer complaints.

# 4. PLANT DESIGN AND MAINTENANCE

## 4.1 Outcome

Plant design and maintenance should safeguard product safety through elements such as location, layout, product flow, building materials, lighting, ventilation, waste management, pest control, personnel facilities and maintenance.

The common objective is to produce safe products and to avoid cross-contamination.

## 4.2 General Principles of Plant Design and Maintenance

The following principles should be assessed and implemented as appropriate by pet food manufacturers:

- The fabric of the site, buildings and facilities should be suitable for the intended purpose.
- The site should be located and maintained so as to prevent contamination and enable the production of safe and legal pet foods.
- All grounds within the site should be finished and maintained to an appropriate standard.
- Premises and plants should be designed, constructed and maintained to control the risk of product contamination.
- Consideration should be given to building material for walls, floor, windows and ceilings as to not accumulate dirt, easiness of cleaning and prevent pests entrance.
- Door design should prevent pest ingress.
- Use of glass near production areas should be avoided where possible or be protected to avoid contamination.
- Appropriate natural or artificial lighting should be ensured.
- Ventilation systems should be designed to avoid cross contamination.
- Equipment should be suitably designed for the intended purpose and should be used so as to minimise the risk of product contamination (specifications for intended uses, easy to clean and to dry, impervious and non-reactive surfaces, food grade lubricants).
- Equipment should undergo appropriate and regular maintenance, in accordance with preestablished procedures to minimize the risk of contamination.
- Equipment that comes into contact with pet food should be designed and constructed to ensure that, where necessary, it can be cleaned, disinfected, maintained and inspected.
- Staff facilities should be designed and used to minimise the risk of product contamination (such as hand washing facilities, canteen/cafeteria and toilets separated from production facilities, restricted smoking areas).
- Appropriate facilities and procedures should be in place to control the risk of physical, chemical and biological product contamination.
- Pest control programmes should be implemented and be regularly reviewed for effectiveness.
- Adequate systems for the collation, collection and disposal of waste material should be in place.
- Programs should be applied to avoid foreign people inside factory without supervision of authorized people.
- All plant and equipment should be kept in a state of good and safe working order by using a regular and logged preventative maintenance programme.

# **5. PERSONNEL**

## 5.1 Outcome

Personal hygiene policies are developed and enforced to ensure safe pet food. Staff members involved in preparation, manufacturing, monitoring, storage and transport are trained on these and all relevant policies and procedures necessary to assure safe product.

## 5.2 Personal Hygiene

## **5.2.1** Documentation of Policies

Personal hygiene policies should be developed and documented such as for the following:

- a) Hand washing.
- b) Eating, drinking and smoking locations and conditions.
- c) Clothing requirements.
- d) Wearing of jewellery and watches.
- e) Treatment of injuries, cuts and wounds.
- f) Staff entry into areas where post kill-step product is handled.

Hygiene and food safety procedures should ensure that:

- a) staff flow between areas where raw material and finished products are handled avoids cross contamination
- b) staff facilities are maintained in a clean condition;
- c) adequate locker/storage facilities are provided for staff to store personal effects including footwear and clothing;
- d) protective clothing, footwear and head gear are provided where applicable; and
- e) eating, drinking and smoking areas are provided separate from production facilities.

#### 5.2.2 Visitors

Visitors to the plant and contractors should follow the above personal hygiene procedures.

# 5.3 Training

- Training requirements should be identified and documented. All staff should have appropriate training to carry out their duties.
- All staff, including temporary personnel and contractors, should receive relevant induction training specific to the facility. This should include relevant issues for the manufacture and safety of the products and for personal hygiene requirements as well as on relevant prerequisites such as GMPs.
- Specific training requirements such as training in Food Safety Risk Assessment system (such as HACCP, HARPC or equivalent), and internal auditing should be identified.
- A schedule for training staff and methods of training including assessments of competency should be documented (what, who, how, when).
- Records of training activities, assessments of competency and relevant training certificates should be maintained.
- The effectiveness of the training programme should be assessed periodically.

# 6. PRODUCTION PRACTICES AT PET FOOD MANUFACTURING ESTABLISHMENTS

## 6.1 Outcome

The manufacturing environment and personnel should not be a source of risk to product safety.

#### 6.2 Risk of Physical Contamination

- a) Contamination by glass, wood and other physical hazards Procedures should be in-place to protect ingredients and products from contamination by glass, wood and other physical hazards. Unprotected glass should be excluded from production and storage areas. Wooden implements should not be used where they might affect product safety.
- b) Contamination by metal or other foreign objects

The risk of contamination of products by metal or other foreign objects should be assessed and procedures developed to eliminate contamination. Where it is deemed necessary to use metal detection equipment, procedures for the operation of metal detectors should be documented. The procedures should include:

- i. Periodic testing and calibration of the metal detector sensitivity.
- ii. Methods of handling product rejected by a metal detector.
- iii. Procedures for re-checking product in the event that routine monitoring of a metal detector indicates the equipment has failed or is out of calibration.

## 6.3 Cleaning

Cleaning and sanitation procedures are appropriate and effective in protecting product safety and should be documented. They should specify items of equipment and plant areas to be cleaned. Cleaning procedures and chemicals used should be validated by technical people.

A schedule for cleaning identified items of equipment and plant areas should be documented. The schedule could include items such as methods of cleaning, chemicals used and their strength, the frequency of cleaning and assigning responsibilities for particular tasks (what, who, how, when).

Cleaning procedures should be monitored and results recorded. Where monitoring shows that cleaning has been inconsistent or ineffective, corrective action should be taken and recorded.

Chemicals used for cleaning should be identified and stored separately from food production areas. Access to cleaning chemicals should be limited to authorized staff. Cleaning chemicals should be returned to the specified storage area after use.

#### 6.4 Pest Control and Management

Pest control and management programmes should be in place to control the risk of contamination of products by pests and pest control chemicals.

Pest control procedures to prevent infestation by insects, birds, rodents and other pests should be documented and give consideration to human practices. The procedures should include:

- a) Maintenance of buildings and surrounds to eliminate breeding sites and prevent access of pests into production and storage areas. Holes, drains and other places where pests can gain access should be sealed. Doors and windows into production and storage areas should be close fitting and kept closed as far as possible.
- b) A schedule for the application of pest control chemicals with identification of pests that the chemicals are aimed at controlling.
- c) Instructions for the use and maintenance of other pest control devices such as traps, insectocutors, pheromone traps, and accurate documentation of their location.

Records of the application of chemicals including the name of the chemical and quantities used should be maintained.

Buildings and surrounds should be regularly examined for evidence of infestation and to assess the effectiveness of the pest control programme.

Pest control devices should be located such that ingredients and products cannot become contaminated from fall out.

Bait stations should be secured to prevent them being moved or tampered with. Toxic baits should not be used inside buildings where pet food ingredients or packaging are stored or production takes place.

## 6.5 Weighing

The accuracy of weighing and metering equipment, both for bulk and hand tipped pet food ingredients, is essential for the production of a safe pet food.

The pet food manufacturer should have a system in place to assure the equipment is fit for its intended use, calibrated, certified where applicable, cleaned and maintained. Records are kept of these activities.

#### 6.6 Mixing

A homogenous mixture is essential for nutritional balance and pet food safety.

The accuracy of mixing should be assured, verified and should be able to be demonstrated on request

#### 6.7 Pet Food Safety Measures and Product Analysis

A Pet Food Safety Plan must be drawn up and implemented for the use of raw materials, premixtures and finished products. The pet food manufacturer should undertake or sub-contract analysis, critical to pet food safety and legality using appropriate procedures and facilities.

The Pet Food Safety Plan should identify checks determined in the Food Safety Risk Assessment system (such as HACCP, HARPC or equivalent) study as well as the frequency of these checks and sampling procedures. The plan should also specify which methods of analysis are to be used and how frequently. The Pet Food Safety Plan should mention actions to be taken in case of non-compliance with the specifications (what, who, how, when). The results should be recorded and reviewed regularly.

- a) Appropriate actions should be implemented promptly to address results outside of the specifications.
- b) A system of on-going shelf life assessment should be in place. This should be based on risk and should include microbiology and sensory analysis as well as relevant chemical factors.
- c) Procedures should be in place to ensure reliability of test results.

d) Where the pet food manufacturer undertakes or sub-contracts analyses critical to pet food safety or legal compositional verification, the laboratory should be independently accredited by a competent authority.

Appropriate microbiological monitoring programme should be in place to ensure pet food safety.

## 6.8 Heat Treatment, Process Control and Cold Chain/Cold Storage

The pet food manufacturer should be able to demonstrate effective control of all operations undertaken.

Where temperature control of the ingredients, intermediate or finished product, process and/or environment is critical to product safety or legality, this should be adequately controlled, monitored and recorded in accordance to the outputs from the Food Safety Risk Assessment (such as HACCP, HARPC or equivalent) study.

Processing criteria should be established that achieve compliance with microbiological criteria and plant and animal health requirements.

Specifications should be validated.

#### 6.9 Packaging Control

Packaging should be suitable for food purpose. Assess the integrity, condition and suitability of the material before accepting into the plant.

Prior to product filling, be aware of storage and condition of packaging materials.

#### 6.10 Product Release

The pet food manufacturer should ensure that the product is not released before all the procedures have been followed.

The pet food manufacturer should ensure that the product conforms to specifications and is only released by authorised personnel in line with release procedures ensuring product safety.

# 7. PET FOOD DESIGN AND FORMULATION

## 7.1 Product, Packaging and Process Design

A hazard analysis study (such as HACCP, HARPC or equivalent) should be undertaken during the design/development phase of the pet food, packaging and process to identify and assess all potential safety hazards (such as Codex Alimentarius).

- a) The pet food should be designed to produce a safe pet food and meet the nutritional requirements for its intended use.
- b) The pet food manufacturer should verify the manufacturing process capable of producing a nutritionally appropriate, safe and legal pet food by applying an appropriate testing system.
- c) Shelf life should be established, taking into account the pet food formulation, production process, packaging process and packaging and subsequent storage conditions. Records of shelf life assessments should be kept. Shelf life should be validated against criteria such as microbiological, chemical, nutritional and sensory analysis.
- d) Packaging, process and the material used in the manufacture should assure pet food safety.

# 7.2 Pet Food Ingredients

Pet food ingredients have to be mixed to produce a safe product.

- a) Appropriate control strategies to minimise the risk should be in place. Depending on local legislation, the presence of prohibited ingredients, undesirable substances, prohibited substances and pathogens in relation to animal or human health should be monitored.
- b) Systems should be in place to minimise the risk of dosing permitted additives above or below the authorized level.
- c) Systems should be in place to define risk level of suppliers and pet food ingredient/additives and the frequency of monitoring of undesirables and food fraud.
- d) The manufacturer must make sure that the pet food ingredients/additives are used accordingly and that the risks of accidental contamination are controlled/eliminated.
- e) Only permitted additives (based on legislation of the country where the product is sold) can be used and mixed in appropriate quantities and homogeneously with the pet food ingredients, in order to ensure that they are only present in authorized quantities.

# 8. PURCHASING AND DELIVERY

## 8.1 Outcome

The pet food manufacturer should operate procedures for approval and monitoring of its suppliers, including finished and semi-finished products manufactured by third parties, as well as procedures for monitoring the safety of raw materials/packaging at delivery.

# 8.2 Suppliers and Delivery

Safety of incoming material is the starting point for safe manufacturing and pet food manufacturers should assess suppliers/vendors:

- Suppliers/vendors should be subject to a pre-established verification programme based on a risk assessment and periodical review.
- Risk-based specifications for incoming materials should be established, communicated to the supplier and be tested according to their risk potential.
- Depending on the outcome of the risk assessment the pet food manufacturer should visit and verify the supplier's facilities, laboratories, transport, storage, respect of cold-chain/cold storage and any other condition of importance for hygiene and safety as appropriate.
- The suppliers should have suitable safety, GMP and verification programmes in place.
- The system to determine the frequency of suppliers/supplies verification may follow the decision tree in **Annex I** or equivalent.
- Perishable, fresh or frozen raw materials should receive special attention and be handled as to their hygienic conditions and compliance with specifications.
- Procedures should be in place to monitor the safety of raw materials and packaging at delivery, including pest control and potential cross contamination.

# 9. HAZARD ANALYSIS AND RISK-BASED PREVENTIVE CONTROLS

#### 9.1 Outcome

The team in charge of a pet food facility should have a system in place that evaluates the hazards that could affect food manufactured, processed, packed, or held by the pet food facility, identify and implement preventive controls to significantly minimize or prevent the occurrence of such hazards, monitor the performance of those controls, and maintain records of this monitoring and validation of these parameters as a matter of routine practice.

The applied system for the Food Safety Risk Assessment (such as HACCP, HARPC or equivalent) should follow international accepted rules. For food safety risk assessment, the steps and principles shall be followed that are set out in 'Hazard analysis and critical control point (HACCP) system and guidelines for its application' in the Annex to Codex Alimentarius 'Recommended International Code of Practice - General Principles of Food Hygiene'; CAC/RCP 1.

## **10. TRACEABILITY AND RECALL**

#### 10.1 Outcome

As indicated in Section 2. Glossary, traceability is the ability to trace and follow a raw material or a substance intended to be or expected to be incorporated into a pet food, through all stages of production, processing and distribution, and to trace the finished product.

The traceability tools should enable the pet food manufacturer to immediately initiate procedures to withdraw/recall the product in question from the distribution/market. The manufacturer should consider or have reason to believe that a product which was imported, produced, processed manufactured or distributed does not satisfy pet food safety requirements.

#### **10.2** Responsibility

Traceability is the responsibility of each operator in the entire pet food chain.

The pet food manufacturer should adequately identify all materials used in the pet food production including packaging materials and including the finished product and be able to trace these in both directions: up-stream (suppliers) and down-stream (distribution/customers).

The pet food manufacturer should identify a Recall Coordinator and a Recall Team to effectively manage traceability and recall/withdrawal procedures including food safety investigation, recall communication, disposition of recalled products and verification of the effectiveness of the recall.

# **10.3 Examples for Traceability Tools**

The following list includes examples of traceability tools which may be used cumulatively or selectively depending on how best to ensure traceability:

- Where applicable, official registration/approval by authorities of suppliers and pet food manufacturers;
- Record keeping (documents/computerized) for an appropriate time identifying materials, batch numbers, suppliers, quantities, usage in formulations, end products delivered and production records;
- Finished products should be labelled to ensure traceability of the batch/lot;
- Written product recovery procedures in companies;
- Periodical mock product recall trials/audits and mock traceability exercises (minimum annually);
- Review of internal procedures after product recalls.

# **11. PATHOGENS MONITORING**

When a pet food safety risk linked to pathogens is defined in the hazard analysis, a monitoring program should be implemented in order to proactively control the safety of products.

Zoning and a pre-defined flow of product and personnel is an important prerequisite programme to proactively prevent pathogen presence.

Pathogen monitoring is a way to ensure the safety of pet food and is one of the programs aimed at measuring the effectiveness of the implementation of the pre-requisite programs, in particular for products which are not sterilised in hermetic package. In order to monitor the microbiological state of a facility, samples are collected and analysed according to a pre-defined plan (location, frequency, number). Data obtained from the monitoring should be routinely trended and the information obtained will drive subsequent sampling and testing protocols as well as corrective actions.

The type of pathogen (and indicator) microorganisms to be monitored will be defined by the hazard analysis (food safety plan) and it is expected to include *Salmonella*.

Pathogens monitoring control programmes should be implemented and regularly reviewed.

Pathogens monitoring may include environmental samples, line samples and samples of finished products.

A pathogen monitoring plan can include:

- The frequency of sampling;
- The number and location of samples to be taken; and
- The target micro-organism(s)

As required under a facility's food safety plan (and at least periodically), the pathogen monitoring plan should be adapted as to identify any new potential risk specific to the facility.

The pet food manufacturer must have specific trained personnel to set up a plan and to take samples.

Sampling must be done by trained personnel in a way as to avoid:

- Cross-contamination of samples;
- Contamination within/between the production line(s).

Samples should be stored and transported in a way as to ensure their integrity.

It is essential that all staff dealing with pathogens monitoring (collection, transportation, storage and analysis) are properly trained and well equipped, to prevent any risks of affecting the analysis results (e.g. by cross-contaminating or by mixing up samples) and any risks about their own safety.

# 12. REWORK

Rework must be treated as a raw material and therefore the basic principles must be applied:

- Where rework or any reworking operation is performed, traceability must be maintained.
- Where re-processing is used, or reworking operations carried out, procedures must be implemented to ensure the safety and quality of the finished product, in accordance with applicable national regulations.
- The use of rework should be evaluated as part of the hazard analysis.

# **13. STORAGE AND TRANSPORT**

All vehicles or warehouses used for the transportation or storage of ingredients (including packaging), intermediates/semi-processed products and finished product, should be suitable for the intended purpose, and be maintained in good repair and in a hygienic condition.

Ingredient usage and product shipping schedules should follow, where possible, a FIFO (first in – first out) or FEFO (first expiry – first out) strategy.

All storage areas should be designed and maintained to minimize the risk of damage, contamination, unintended mixing or deterioration of ingredients or packaging materials.

To ensure proper identification, all fixed and mobile bins, silos, tanks and bagged storage areas should be clearly identified. Records of the storage location of ingredient should be maintained.

Silos, bins or tanks and warehouses should be inspected regularly for structural integrity and condition of contents. Special care should be taken to look for and eliminate wet spots, mouldy product and insect infestation in dry ingredients. Bins and storage areas should be ventilated to avoid condensation.

Facilities for storage of chilled and frozen products should have sufficient capacity to accommodate all ingredients and products that are required to be held under refrigeration.

All storage areas should be maintained in a clean and tidy condition and in a manner, that minimizes the risk of contamination by birds, rodents and insects.

Storage segregation procedures should be in place to prevent the cross-contamination of finished products, packaging and ingredients.

Processed pet food and packaging material should be separated from unprocessed ingredients and additives, in order to avoid any cross-contamination of the finished pet food and/or of the packaging material.

# **ANNEX I - SUPPLIERS ASSESSMENT DECISION TREE**

# Assessment of suppliers with a view to undesirable substances/contaminants Decision Tree for monitoring system: Ingredients, additives, packaging, finished products to determine monitoring frequencies

(see point 8.2 of this Guidance document)

This decision tree or equivalent may be used by pet food manufacturers to help determining the frequency of monitoring suppliers/supplies on the presence of undesirable substances/contaminants depending in particular on its geographical origin and of its supplier.

The indicative, non-prescriptive steps with criteria hereafter are based on past experience with certain third country imports from business partners not producing the commodities themselves referred to as "traders" ("brokers", "dealers"...) as opposed to purchasing directly from producers of commodities.

