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SCHEDULE**Definitions**

1. Words and phrases in these regulations shall have the meaning assigned hereto and any other word or expression shall have the meaning thereto in the Act, and unless the context otherwise indicates–

“all life stages” means gestation/lactation, weaning, growth, adult and senior life stages of an animal;

“analysis certificate” means a certificate which is not older than 12 months, issued by an accredited laboratory that indicates the complete chemical and physical composition of the particular product;

“animal” means any mammal, bird, fish, reptile or amphibian which is a member of the phylum vertebrates;

“applicant” means a legal entity or person in whose name an application for the registration of farm feed has been filed;

“application fee” means fees that, in terms of these regulations, are payable for the registration, amendment or renewal of registration for a farm feed;

“batch” means the uninterrupted production of a specific product of a specific formula;

“batch number” means the number or symbol allocated to a batch of farm feed by the manufacturer for traceability and recall purposes;

“bulk” means the packaging of a farm feed other than in a sealed container;

“complementary pet food” means a pet food which is either a treat, or is a fresh, frozen or canned meat or fish product that does not meet all the daily nutrient requirements of a pet animal;

“complete animal feed” means an animal feed which contains all the necessary nutrients in the correct quantities and proportions for a given physiological need of the animal as recognised by the registrar and which meets the total daily nutrient requirements of an animal. Complete farm feed and complete livestock feed have the same meaning;

“complete pet food” means a pet food which contains all the necessary nutrients in the correct quantities and proportions for a given physiological need of the animal as recognized by the registrar and which meets the total daily nutrient requirements of a pet animal. Balanced pet food has the same meaning;

“compound feed” means a mixture of ingredients, whether or not containing additives, for oral animal feeding in the form of a complete, supplementary or concentrated animal feed. Mixed animal feed has the same meaning;

“concentrate” means an animal feed that must be mixed with one or more raw materials to obtain a complete animal feed or supplement animal feed;

“custom mix” means a mixture compiled on the written advice of a qualified person for a specific client or a mixture of registered ingredients mixed at the written request of an end user. Prescription mixture shall have a corresponding meaning;

“enzyme” means a protein made up of amino acids or their derivatives; or catalytic RNA molecules which catalyse a defined chemical reaction. Required co-factors should be considered as an integral part of the enzyme;

“enzyme activity” means the catalytic activity required to convert a given quantity assay substrate to a given quantity of product per unit time under the standard conditions set forth in the assay procedure;

“enzyme substrate” means the material or substance which is acted upon catalytically by the enzyme;

“farm animal” means an animal nourished and kept by man for food and/or for commercial purposes;

“farm feed” means any mixture of acceptable ingredients intended for the feeding of animals as defined in the Act. Animal feed has the same meaning;

“feed additive” means any substance in any form, micro-organism or preparation, other than raw materials and premixture which is not classified as a medicinal substance, and is intentionally added to feed or water in order to perform, in particular, one or more of the following functions:

- (a) to favourably affect the characteristics of feeds;
 - (b) to favourably affect the characteristics of animal products;
 - (c) to favourably affect the colour of animals including ornamental fish and birds;
 - (d) to satisfy the nutritional needs of animals;
 - (e) to favourably affect the environmental consequences of animal production; or
 - (f) to favourably affect animal production, performance or welfare, particularly by affecting the gastro-intestinal flora or digestibility of feeding stuffs,
- and is proven to be safe under the conditions of its intended use, and includes, but is not limited to, nutraceuticals and herbal supplements;

“feedstuff” means any substance, whether processed, semi-processed or raw which is intended for animal consumption. Feedingstuff has the same meaning;

“fresh” means an ingredient of plant or animal origin that has not undergone any preservation process;

“good manufacturing practice or GMP” means a system of manufacturing designed to ensure that the final products made are fit for their intended purpose and meet all agreed specifications and statutory requirements;

“guaranteed analysis” means the stated minimum and/or maximum nutrient value of animal feed;

“herbal supplements” means herbs or botanicals which include phytonutrients but does not include phytomedicines or medicinal herbs, and which belong to the group of nutraceuticals.

“ILAC” means International Laboratory Accreditation Cooperation;

“immediate container” means in relation to farm feed, a container which is in direct contact with the farm feed;

“ingredient” means an edible substance that is used in making a feed. Feed ingredient has the same meaning;

“ingredient statement” means a collective and contiguous listing on the label of the ingredients of which the farm feed is composed;

“invoice” means an accompanying letter, delivery note or weigh bridge ticket, receipt note or receipt, or commercial document;

“kind of farm feed” means different kinds of farm feeds which includes but not limited to raw materials, feed additives, compound feed, pet food, seed and grain mixtures, milk replacers and substitutes. Class of farm feed has the same meaning;

“label” means, when used as a noun, any written, printed or graphic representation attached to an immediate container of a farm feed or produced on an immediate container in any possible manner and which states the details required in terms of these regulations for the particular farm feed;

“labelling” means all labels and other written, printed or graphic matter upon a farm feed or any of its immediate containers or wrappers accompanying such a farm feed;

“manufacture” means make, compound, mix, formulate, process, package and label for purpose of sale. Manufacturing and manufacturing process have a similar meaning;

“mark” means a mark as defined in section 1 of the Trade Marks Act, 1993 (Act No. 194 of 1993);

"medicinal claim" means any claim or statement made, purported or used regarding the suitability of any substance for use as veterinary medicine;

"medicated feed" means any premixture, animal feed or pet food which contains a registered or approved veterinary medicine in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947) or the Medicines and Related Substances Act, 1965 (Act No. 101 of 1965);

"neutraceutical" means a formulation of isolated nutrients, dietary supplements, diets and herbal preparations or any substance derived from food sources that may be considered as feed, or part of feed, that are purported to provide extra health or physiological benefits, in addition to the basic nutritional value found in feeds;

“non-protein nitrogen” means an organic or inorganic nitrogen source that can be converted to protein by ruminants;

“nutrient” means a substance which conveys nourishment to an animal;

"occupational health and safety Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

“particular nutritional purpose” means the purpose of satisfying the specific nutritional needs of certain animals whose process of assimilation, absorption or metabolism could be temporarily impaired or is temporarily or irreversibly impaired and are therefore able to derive benefit from ingestion of animal feeds appropriate to their condition. Functional feed/food or Dietetic feed/food are formulated for particular nutritional purpose;

“pet animal” means an animal belonging to a specie domesticated by man which is kept as a companion and nourished, and/or used for recreational purposes by man;

“pet food” means an animal feed for pet animals;

“premixture” means a mixture of feed additives or mixtures of one or more feed additives with substances used as carriers, intended for the manufacture of animal feeds;

“product family” means a group of products which are nutritionally adequate for any or all stages based on their nutritional similarity to a lead product for which nutritional adequacy has been successfully substantiated;

“protein equivalent” means the percentage of protein derived from non-protein nitrogen sources included in the animal feed and is calculated by multiplying the inclusion of the non-protein nitrogen source by the appropriate factor;

“raw material” means a product of vegetable or animal origin, in its natural state, fresh or preserved; a product derived from the industrial processing thereof; and an organic or inorganic macro mineral source, whether or not used as a carrier in a mixture. Feed material and feed ingredient has the same meaning;

“registration holder” means a legal entity or natural person to whom the registrar has issued a registration number;

“registration number” means the number given by the registrar once a product has been registered under which such product may be sold;

“SANAS” means South African National Accreditation System;

“sealed” means to close a container in such a visible manner with a mechanism that will break visibly the first time the container is opened;

“source organism” means an organism that actually produces the enzyme(s);

“supplement animal feed” means a feed used with another feed to improve the nutritional balance or performance of the total feed and is intended to be fed undiluted as a supplement to other feeds. Supplement pet food has the same meaning;

“sworn translator” means a person admitted and enrolled by any division of the Supreme Court (High court) in terms of Rule 59 of the Rules of Superior Court Practice;

“the Act” means the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947);

“the Department” means the Department of Agriculture, Forestry and Fisheries;

“tolerance” means the permitted deviation in the natural variation of the stated value of an animal feed that occurs in manufacture, sampling and chemical analysis, where the deviation is expressed as a percentage of the stated value of the animal feed;

“treat” means when used as a noun, a pet food product that is not necessarily balanced or complete;

PART I REGISTRATIONS

Application for registration

2. (1) An application in terms of section 3(1) of the Act for registration of an animal feed shall be submitted to the registrar on the application form which is obtainable from the registrar's office.

(2) Such an application shall –

- (a) be made by a person residing in the Republic of South Africa, or, in the case of juristic person, who has a registered office in the Republic;
- (b) be signed by an approved person or a person with power of attorney to act on behalf of the applicant;
- (c) the declaration for nutritional adequacy must be signed by a qualified person. Such a person shall be registered in terms of the Natural Scientific Professions Act, 2003 (Act No. 27 of 2003) as an animal scientist, and where applicable a registered veterinarian in terms of Act No. 19 of 1982 or registered pharmacist in terms of Act No. 53 of 1974; or a person registered with an equivalent international body recognized by the Registrar;
- (d) be accompanied by two copies, in English, of the actual label, packaging or typed version of the label. If any other language is used excluding English, the label or packaging shall also be submitted in duplicate with an affidavit from a certified translator declaring the label or packaging information to be a true translation of the English label;
- (e) be accompanied by supporting documents relevant for the kind of farm feed as outlined in the Guidelines on Farm Feeds registration requirements;
- (f) be accompanied by the applicable application fee as published in the government gazette;
- (g) be accompanied, when required by the registrar, two samples each containing at least 250 ml, in case of a liquid, or 500g in case of dry product;
- (h) in the case of an applicant who holds exclusive trade rights to the product within the Republic, be accompanied by a copy of such a contract;
- (i) in the case of a manufacturing facility being used for the first time for the purpose of manufacturing a farm feed -
 - (i) be accompanied by proof of registration in terms of the Companies Act, 2008 (Act No. 71 of 2008);
 - (ii) be accompanied by, when required by the registrar, proof of compliance with at least one of International Standards Organization Quality Management Systems, or Good Manufacturing Practices, or Hazardous Analysis Critical Control Point, or equivalent Code of Practice, equivalent South African National Standard, or equivalent international standard which is recognized by the registrar; and
 - (iii) only be made after the construction of the facility has been completed and where applicable, there has been a full inspection of the facility by the registrar, and the Registrar is satisfied that the facility is suitable and adequate for the manufacture of the animal feed concerned, and fully meet the requirements for establishments set elsewhere in these regulations.

- (j) where animal feed facility has previously produced animal feed and is no longer operated by the same legal entity that previously operated it, it shall -
 - (i) be accompanied by proof of registration in terms of the Companies Act, 2008 (Act No. 71 of 2008);
 - (ii) be accompanied by, when required by the registrar, proof of compliance with at least one of International Standards Organization Quality Management Systems, or Good Manufacturing Practices, or Hazardous Analysis Critical Control Point, or equivalent Code of Practice, equivalent South African National Standard, or equivalent international standard which is recognized by the registrar; and
 - (iii) where applicable, be inspected by the registrar before continuing operations.

(3) In the case where an application is incomplete or where there is insufficient or outstanding data for the evaluation and finalization of the application, the applicant shall furnish the registrar with such information within 30 calendar days from the date of receipt of such communiqué. Failure to submit such information within stipulated timeframe and without written request for an extension shall lead to the application being rejected and the registrar shall inform the applicant in writing.

(4) The registrar shall not be liable to pay a refund to an applicant whose application is rejected in terms of sub-regulation (3).

Period of registration

3. (1) Subject to the provisions of sections 4 and 4A of the Act, an animal feed registration in terms of section 3 of the Act shall be valid up to 31 March of a three year registration cycle.

Renewal of registration

4. (1) An application in terms of section 3(4)(a) of the Act for renewal of registration of an animal feed shall be submitted to the registrar on a form available from the registrar which is obtainable for this purpose.

- (2) Such an application shall –
 - (a) be made by the person to whom the current registration certificate has been issued;
 - (b) reach the office of the registrar no later than 31 March of the year in which the registration will lapse;
 - (c) be accompanied by an applicable fee specified in the tariffs applicable for the current financial year as published in the government gazette;
 - (d) be accompanied, when required by the registrar, by two copies of all labels or packaging material currently used in connection to the sale of the animal feed;
 - (e) be accompanied, when required by the registrar, by a certificate of analyses or a formulation report for that product;
 - (f) be accompanied, when required by the registrar, by a product sample; and
 - (g) where a conditional registration was granted, be accompanied by proof of compliance with the prescribed condition.

(3) Apart from the provisions of sub-regulation 2(b) above, an application under sub-regulation 4(1) received by the registrar up to 30 days after the expiry date of a particular year, will be considered as late application for renewal and a penalty fee will be payable. Renewal applications received after April 30 will be considered to have lapsed and the same registration may be reinstated or a new application must be made for the registration of the respective animal feed in terms of regulation 2.

Conditions for certain registrations and renewal of certain registrations

5. Registration and the renewal of a registration of an animal feed, in terms of Section 3 of the Act, is granted on condition that during the period of registration or a renewal of registration -

(1) The composition of the particular animal feed does not deviate by more than the allowable deviation stipulated in table 13 (a) and (b) under which it was registered;

(2) The details approved for use on a label or immediate container for sale of the particular animal feed may not be altered without the prior written approval of the registrar; and

Application for amendment of certain registrations and approved labels

6. (1) In the event that any amendment to the registered composition or a change to the details approved for use on the label are contemplated by the registration holder during the period of registration, the registration holder shall apply to the registrar under regulation 2.

(2) Such an application for amendment shall be accompanied by the applicable documents, the current registration certificate and applicable application fee stated under regulation 2(2)(f), on the proviso that the registrar may waive the application fee should the particular change or amendment be either in the public interest, or is effected on the insistence of the registrar.

Existing and new registration numbers

7. (1) In cases where significant changes have been made to a product's guaranteed analysis or a product's specification has been changed relating to new claims and resulting from guarantee and/or ingredient changes which have not previously been claimed, a new application for registration shall be submitted in order to allow the approval of such changes and the applicant shall retain the existing registration number. The application shall be accompanied by supporting documents relevant for the kind of farm feed as outlined in the Guidelines on Farm Feeds registration requirements.

(2) Where the registration holder changes, for example as a result of corporate restructuring or a change in business ownership or control, the registrar shall be advised of such change by letter in affidavit form before the effective date of such change. Where the products which are already registered in the name of such holder have not undergone a change in specification within the meaning of sub-regulation 7 (1), an application shall be submitted accompanied by supporting documents relevant for the kind of farm feed as outlined in the guidelines on farm feeds registration requirements. This application shall be made within two months of the effective date of the change.

(3) Products of the same composition but presented in different forms or sizes can be allocated the same registration number provided the products -

- (a) are manufactured from the same formulation;
- (b) are of the same state of matter (e.g. solid, liquid, gas, etc.); and
- (c) have the same name.

Return of registration certificate

8. A registration certificate that is returned under Section 4A(3) of the Act must reach the registrar –

- (1) Within 14 days of the day on which –

- (a) the person to whom the particular registration certificate has been issued, is informed in writing in terms of section 5 of the Act of the reason for cancellation of such registration; or
- (b) the registration of the animal feed has expired in terms of section 4A(2) of the Act; or

(2) At least 30 days prior to the date on which the registration is transferred to another person; provided that the registration envisaged in regulation 2 for the particular animal feed in favour of such other person shall be submitted concurrently.

PART II APPEALS

Submission of appeals

9. (1) An appeal in terms of section 6 of the Act shall be submitted to the Director-General of Agriculture, Forestry and Fisheries within 60 days of the date on which the reason for which the decision has been furnished in terms of section 5 of the Act.

(2) Such an appeal shall -

- (a) be in the form of a written statement which is sworn before the commissioner of oaths;
- (b) state the reference number and date of the notification by which such person or applicant has been informed of that decision;
- (c) indicate the grounds on which the appeal is based;
- (d) be accompanied by the documents relating to the subject of the appeal; and
- (e) be accompanied by an applicable fee as specified in the government gazette.

(3) The person who appeals may be represented by a third party, in which case the appeal application shall be accompanied by a power of attorney attesting to the fact that such third party is empowered to act for him.

(4) The applicable fee within the meaning of regulation 9(2)(e) shall be paid by cheque, postal order, money order or electronic funds transfer (EFT) in favour of the Director-General; Agriculture, Forestry and Fisheries, provided that such an amount may be paid in cash if the appeal concerned is delivered by hand.

Address for submission of appeals

10. An appeal within the meaning of regulation 9(1) must -

(1) When submitted by post, be addressed to the Director-General, Department of Agriculture, Forestry and Fisheries, Private Bag X343, Pretoria, 0001; or

(2) When delivered by hand or private courier service, be delivered to The Director-General, Department of Agriculture, Forestry and Fisheries, Agriculture Place, 20 Steve Biko Road, Pretoria, 0002.

PART III
REQUIREMENTS FOR ANIMAL FEEDS

General requirements for animal feeds

11. (1) A product may be registered as an animal feed if -
 - (a) it possesses the applicable properties specified in these regulations;
 - (b) depending on its nature, it is available for sale in any form which the animal can consume by oral ingestion only;
 - (c) the genetically modified organisms Act, 1997 (Act No. 15 of 1997) provides for an authorization procedure for using genetically modified food and feed that are not approved in the Republic of South Africa. Such genetically modified products shall only be registered after undergoing an authorization procedure provided for under the GMO Act;
 - (d) where applicable, medicated feed complies with the Medicines and Related Substances Act, 1965 (Act No. 101 of 1965) or the Foodstuffs, Cosmetics and disinfectants Act, 1972 (Act no. 54 of 1972);
 - (e) where applicable, it complies with the requirements of the Animal Diseases Act, 1984 (Act No. 35 of 1984);
 - (f) where applicable, it complies with the requirements of the Agricultural Pest Act, 1983 (Act No. 36 of 1983);
 - (g) where applicable, it complies with the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
 - (h) where applicable, it complies with the Meat Safety Act, 2000 (Act No. 40 of 2000); and
 - (i) where applicable, imported feed complies with the Customs Control Act, 2014 (Act No. 31 of 2014).
- (2) A product containing feed grade urea or another non-protein nitrogen source as its major constituent or source of protein may be registered as an animal feed only if -
 - (a) it is intended for ruminants;
 - (b) the urea or another non-protein nitrogen source used in the feed is registered as an animal feed additive;
 - (c) the protein equivalent of an animal feed mixture -
 - (i) in the case of a complete dairy meal intended for calves except for calf starter, does not exceed 15 percent;
 - (ii) in case of a complete and semi complete dairy meal, does not exceed 30 percent;
 - (iii) in case of a concentrated dairy meal, does not exceed 35 percent;
 - (iv) in case of a concentrated dairy meal containing anionic salts which is intended for dry cows, does not exceed 67 percent;

- (v) in the case of finisher feeds intended for ruminants, does not exceed 40 percent; and
- (vi) in the case of any other farm feed mixture intended for ruminants, does not exceed 30 percent.

(3) A product containing undesirable substances may be registered as an animal feed if its contents do not exceed the maximum quantity specified in The Farm Feeds Undesirable substances regulations.

(4) A product shall not be registered as an animal feed if -

- (a) it contains any feedstuffs of such nature or in such quantities that it could cause an interaction leading to the loss of one or more of the nutrients in that product such as to be below the intended nutritional requirement for that product;
- (b) it consists of or contains any substance of animal origin, including excreta or other by-products, and which has not been sterilized beforehand to such extent that the infection or contamination of such product with *Bacillus anthracis*, organisms of the gas-gangrene type, other pathogenic or putrefactive organisms of viable micro-organisms or substances has been reduced to the level where such organisms or substances will be injurious to or endanger the health or detrimentally affect the productive capacity of animals to which such product is fed;
- (c) the weed seed content or foreign material thereof exceed the maximum determined in the grading regulations of the product as determined under the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) and in the Farm feeds undesirable substances regulations, for the product concerned;
- (d) it contains ingredients which are prohibited for use as products intended for animal feeding as listed in table 1;
- (e) it contains unregistered stock remedies; and
- (f) it contains a registered stock remedy or veterinary medicine that has not been approved to be included in an animal feed or animal feed for the intended animal species.

(5) A product may be registered if -

- (a) not specifically provided for in these regulations, or containing a feedstuff likewise not provided for; and
- (b) it contains an ingredient in excess or less than the quantity provided for in these regulations;
- (c) if the registrar is satisfied, based on supporting scientific documentation, that such product or ingredient will not be injurious to or endanger the health or detrimentally affect the productive capacity of animals to which such product is fed.

(6) A product containing more than 80 grams of oil or fat per kilogram thereof shall only be registered as an animal feed if an anti-oxidant which is approved by the registrar, is added thereto: Provided that if the registrar is, in respect of particular product, satisfied that the addition of an ant-oxidant is undesirable, he/she may determine that such addition need not be made.

(7) Notwithstanding the provisions of section 16(1)(a) in the Act, the registrar may use his/her discretion to grant an import permit to an applicant if the product imported is to be used for trial purposes, laboratory analysis or own use by an individual.

Requirements for raw materials

12. (1) A mechanically or chemically treated product of plant origin, animal origin or a source of macro mineral may be registered as a raw material if –
- (a) it is to be used in the manufacture of an animal feed or fed directly to an animal;
 - (b) the minimum or maximum nutrients that are guaranteed as may be outlined in the Farm Feeds General Guidelines are declared;
 - (c) it conforms to the requirements of these regulations; and
 - (e) it is available in a form which will facilitate proper mixing.
- (2) A grain and/or oilseed mixture, whether mechanically processed or unprocessed, maybe registered as farm feed under sub-regulation 21(4)(j).

Requirements for feed additives

13. (1) An additive may be registered as a feed additive if –
- (a) another product has to be added before it can be fed to animals;
 - (b) it possesses the applicable properties specified in these regulations and as may be outlined in the Farm Feeds General Guidelines;
 - (c) it conforms to the requirements of these regulations; and
 - (d) it is available in a form which will facilitate proper mixing.
- (2) Additives shall be grouped and registered according to the classes (functional groups) assigned to them under this sub-regulation –
- (a) 'technological additives' shall comprise of the following classes-
 - (i) preservatives: substances for prolonging the shelf life of feed and ingredients through protection against deterioration caused by microorganisms or their metabolites;
 - (ii) antioxidants: substances for prolonging shelf life of feed and ingredients through protection against deterioration caused by oxidation;
 - (iii) emulsifiers: substances for maintaining a homogeneous mixture of two or more immiscible phases in feed;
 - (iv) stabilizers: substances for maintaining the physico-chemical state feed;
 - (v) thickeners: substances for increasing the viscosity of feed;
 - (vi) gelling agents: substances for the formation of a gel in the feed;
 - (vii) binders: substances which increase the tendency of particles of feed to adhere;
 - (viii) substances for the control of radionuclide contamination: substances that suppress absorption of radionuclides or promote their excretion;

- (ix) anticaking agents: substances that reduce the tendency of individual particles of a feed to adhere;
 - (x) acidity regulators: substances which adjust the pH of feed;
 - (xi) silage additives: substances, including enzymes or micro-organisms, intended to be incorporated into feed to improve the quality of silage;
 - (xii) denaturants: substances which are used for the manufacture of processed feed in order to allow for the identification of the origin of specific feed or ingredients;
 - (xiii) substances for the reduction of contamination of feed by mycotoxins: substances that can suppress or reduce the absorption, promote the excretion of mycotoxins or modify their mode of action.
- (b) 'sensory additives' shall comprise of the following classes-
- (i) colourants; substances that add or restore colour in feed or substances which, when fed to animals, add colour to food of animal origin or substances which favourably affect the colour of ornamental fish or birds; and
 - (ii) flavouring compounds: substances which, when included in feed increase feed smell or palatability.
 - (iii) aroma compounds: substances that enhance the aroma of the feed.
- (c) 'nutritional additives' shall comprise of the following classes-
- (i) vitamins, pro-vitamins and chemically well-defined substances having similar effect;
 - (ii) compounds of trace elements;
 - (iii) amino acids, their salts and analogues; and
 - (iv) urea and its derivatives.
- (d) 'zootechnical additives' shall comprise of the following classes-
- (i) digestibility enhancers: substances which, when fed to animals, increase the digestibility of the diet, through action on target ingredients;
 - (ii) gut flora stabilizers: micro-organisms or other chemically defined substances, which when fed to animals, have a positive effect on the gut flora;
 - (iii) enzymes;
 - (iv) substances which favourably affect the environment; and
 - (v) other zootechnical additives.

Requirements for premixture

14. (1) A product containing a mixture of additives or mixtures of one or more additives with substances used as carriers, intended for the manufacture of animal feeds and contains nutrients or other

ingredient in quantities and such ratios that it will supply the prescribed requirements for animals may be registered as an animal feed premixture.

(2) A premixture containing undesirable substances may be registered as an animal feed if its contents do not exceed the maximum quantity specified in the farm feeds undesirable substances regulations.

(3) A person manufacturing a premixture shall keep a reference sample for at least 6 months.

Requirements for custom mixes

15. (1) A person managing the undertaking where custom mixes are manufactured for specific clients, shall, in respect of each batch or series of the different custom mixes, manufactured, controlled, packed, marked or labelled there, keep comprehensive records of –

- (a) the results of quality checks made on the additives and ingredients used in the manufacture of the custom mix comprising such batch or series and of each such custom mix;
- (b) each date on which a quantity of such batch or series was sold, the names and addresses of the purchaser to whom each such quantity was sold, and the quantity thereof which was sold to each such person;
- (c) the name and address of the person on whose behalf the custom mix was prepared;
- (d) the composition and mixing instructions, as well as the purpose for which it is needed;
- (e) the quantity mixed; and
- (f) the signature of and date on which the person on whose behalf the custom mix was prepared, submitted a request.

(2) Where the custom mixes are not sold in containers, the label or invoice shall contain the following information:

- (a) name and address of the person who placed the order;
- (b) the words “not for public sale”;
- (c) the name of the product or for which purpose the product is intended;
- (d) the mass of the product;
- (e) the name and address of the manufacturer; and
- (f) information which allows the consumer to readily ascertain whether the product is past its shelf life, in one of the following two formats -
 - (i) a “best before” date shall be used for non-highly perishable products and shall be expressed as “best before...” followed by the date (indicating at least month and year); or
 - (ii) an “expiry” date shall be used for microbiologically highly perishable products to be expressed as “expiry...” followed by the date (indicating day, month and year).
- (g) all NPN warnings as required in the regulations.

(3) A person manufacturing a custom mix shall keep a reference sample for at least 3 months.

(4) A person manufacturing a custom mix is prohibited from selling the same custom mix to another person other than the one who ordered it.

Requirements for complete animal feed

16. (1) A product which consist of a mixture of different feedstuffs, whether or not containing additives, and which contains nutrients and other ingredients in such quantities and such ratios that it will supply the nutritional requirements of animals of a kind indicated in column 1 of Table 2 may be registered as complete animal feed of which the name is indicated in column 2 of the said Table if it meets the nutrient requirements, as may be outlined in the Farm Feeds General Guidelines, for the respective kind of animal.

(2) A person manufacturing a complete animal feed shall keep a reference sample for at least 3 months.

Requirements for complete Pet Foods

17. (1) A product which consist of a mixture of different feedstuffs, whether or not containing additives, and which contains nutrients and other ingredients in such quantities and such ratios that it will supply minimum and maximum nutrients as specified in column 3, 4 and 5 of Table 3 for dog food and column 3, 4 and 5 of Table 4 for cat food shall be registered as a complete pet food of which the name is indicated by the kind of animal if it meets the nutrient contents so specified in the applicable columns of the applicable tables. Where the digestibility of a complete pet food is higher than 65% on which the tables are based, the corresponding corrections shall be made and evidence of the higher digestibility provided to the registrar -

(a) the application for registration shall be accompanied by data attesting to the nutritional adequacy of the complete pet food. This shall be established by at least one of the following methods:

- (i) submission of the full details of the nutritional profile for all relevant nutrients as specified in Tables 3 or 4 which shall be signed and attested by a qualified person. All nutrients must be corrected for moisture, energy and processing losses;
- (ii) submission of the scientific results of a feeding trial using the latest American Association of Feed Control Officials (AAFCO) testing procedures; or
- (iii) submission of the full results of a chemical analysis of the finished pet food product. The data shall include at least an analysis of those elements with asterisks in Table 5. Applicants shall be at liberty to submit more comprehensive data if they so desire. The registrar shall reserve the right to require the analysis of further elements in the table without asterisks in the event that he or she is of the opinion that such analysis is necessary in order to substantiate nutritional adequacy of a particular product.

(b) with regard to registration applications for dry pet foods with a moisture content of more than 100 g/kg, the applicant shall provide the registrar with additional stability data to prove that the product in question is stable enough to be stored and sold bearing in mind the weather conditions in the Republic of South Africa;

- (i) dry pet food containers must carry a "best before" date which is up to 12 months from date of manufacture and information in support of the shelf life must be supplied to the registrar with the application for registration.

- (c) with regard to registration applications for all semi-moist products the applicant shall provide the registrar with additional stability data to prove that the product in question is stable enough to be stored and sold, bearing in mind the weather conditions in the Republic of South Africa;
 - (d) with regard to registration applications for wet pet foods with a moisture content of more than 820 g/kg, the registrar shall be entitled to request from the applicant supporting documentation and evidence attesting to the nutritional adequacy of the product in question in order to satisfy himself that the product should be registered;
 - (i) wet pet food pet food containers must carry a “best before” date which is up to 24 months from date of manufacture and information in support of the shelf life must be supplied to the registrar with the application for registration.
 - (e) in the case of complete pet foods for cats, manufacturers shall ensure that their products contain the minimum quantity of taurine required to maintain the health status of the cat, based on the most recent scientific information available, and taking into account that the availability of taurine from products, and in particular from moist products, is influenced by factors such as the feed ingredients used, processing and nutrient profile of the pet food;
 - (f) each manufacturing establishment may establish families of products which are nutritionally similar to a lead product produced by that establishment of which the nutritional adequacy has been successfully substantiated. The other products within the established family must meet the criteria set out in Table 6; and
 - (g) feeding guidelines will be checked for nutritional adequacy using the standards and formulations as specified in Table 7 and 8.
- (2) A person manufacturing a complete pet food shall keep a reference sample -
- (a) for the period of the shelf life of the product plus one month;
 - (a) if there is a dispute, the sample must be kept until the dispute is resolved.

Requirements for complementary pet food

18. (1) A product may be registered as a complementary pet food if it satisfies the following requirements -
- (a) pet chews, toys and exercisers made of raw hide, wood or any man-made material, hooves, ears, bones and ligaments, whether flavour coated or unflavoured shall be exempt from registration unless any nutritional value or benefit to the animal is claimed on the label or labelling of the product (example digestibility, tartar control etc.);
 - (b) specific nutritional adequacy validation procedure may be required for treats or complementary pet foods if the registrar deems it necessary;
 - (c) complementary pet foods and treats with a nutritional value must show a guaranteed analysis specific to the nutrients supplied on the label, an ingredient statement as well as feeding instructions;
 - (d) dried pet food treats derived from meat and meat by-products shall declare a guaranteed maximum salt content of the product;

- (e) raw pet food shall not exceed the maximum permissible microbiological contamination as specified in the Farm Feeds undesirable substances regulations; and
- (f) only material from abattoirs or game slaughtered for human consumption can be used in raw pet food manufacture.

(2) Applications for the registration of pet foods for a particular nutritional purpose must satisfy the following requirements -

- (a) where an applicant is seeking to register a pet food for a particular nutritional purpose, he shall submit to the registrar appropriate substantiation demonstrating that the precise use, i.e. the particular nutritional purpose which he intends to attribute to the product, is in fact appropriate.

(3) Application for the registration of a pet food designed for veterinary purpose shall be accepted on condition that the product is only to be distributed and retailed through the veterinary channel and such a product shall not be available through grocery marketing channel.

Requirements for supplementary and concentrated animal feeds

19. (1) Such a product shall be registered according to kind of animal feed indicated in column 2 of table 2 as a supplementary or concentrated animal feed.

(2) A person manufacturing a supplementary or concentrated animal feed shall keep a reference sample for at least 3 months.

**PART IV
LABELLING AND CONTAINERS**

Containers of animal feeds

20. (1) Animal feeds shall –

- (a) be sold in containers which are sound and clean; and
- (b) subject to the provisions of the Legal Metrology Act, 2014 (Act No. 9 of 2014), be sold in containers which are sealed in such manner as the nature of such farm feed and containers thereof permit.

(2) Notwithstanding the provisions of sub-regulations (1) animal feed may be sold otherwise than in containers if –

- (a) it corresponds in all respects to the same product sold in containers; and
- (b) the provisions of regulations 23 are complied with at such sale.

Marking and labelling of raw materials, supplementary, concentrated, additives, premixtures and complete animal feeds for livestock

21. (1) (a) a container in which an animal feed is sold shall be marked in clearly legible symbols, letters and figures with, or be furnished with, a label on which is indicated –

- (i) the trade name, if any, under which such an animal feed is sold, which must be objective or be based on quantifiable factors which can be substantiated;

- (ii) the kind of animal feed, as indicated in column 2 of Table 2, expressed as “(class: _____)”;
 - (iii) in the case of enzymes and their preparations, the specific name of the active constituent(s) according to enzyme activity(ies);
 - (iv) the registration number of such an animal feed together with a reference to the Act, expressed as “Reg No V _____ Act 36/1947”;
 - (v) an indication of the composition of such an animal feed, expressed in the form and manner contemplated in sub-regulation (2);
 - (vi) subject to the provisions of the Legal Metrology Act, 2014 (Act No. 9 of 2014), the quantity of an animal feed in such container at the time of packing;
 - (vii) ingredient statement using ingredient names or collective terms listed in table 9. Inorganic substances in the feed shall be listed according to their groups i.e. vitamins, minerals etc. Use of ingredients identified with an (*) in the Table is restricted to non-ruminants unless this ingredient source is pure porcine or avian material. Feed containing these ingredients shall bear the following label statement “Do not feed to ruminants”;
 - (viii) the listing of feed ingredients on the animal feed label shall either indicate the amount contained or name the feed ingredients in descending order by mass;
 - (ix) warning where applicable;
 - (x) feeding recommendations;
 - (xi) a product containing genetically modified organisms shall be marked and labelled in terms of section 24(6) of the Consumer Protection Act, 2008 (Act No. 68 of 2008);
 - (xii) the name and address of the person in whose favour such an animal feed is registered;
 - (xiii) when mandated by the registrar the name and address of the manufacturer;
 - (xiv) the number of the batch from which the animal feed in such container originates; and
 - (xv) information which allows the consumer to readily ascertain whether the product is past its shelf life, in one of the following two formats -
 - 1) a “best before” date shall be used for non-highly perishable products and shall be expressed as “best before...” followed by the date (indicating at least month and year); or
 - 2) an “expiry” date shall be used for microbiologically highly perishable products to be expressed as “expiry...” followed by the date (indicating day, month and year).
- (b) the appearance of such information is not restricted to any sequence.

- (2)
 - (a) an indication of the composition of animal feed in terms of sub-regulation (1)(a)(v) shall reflect the name of each of its nutrients, as well as the guaranteed minimum or maximum contents, as the case may be, of each such nutrient.
 - (b) the particulars required in terms of paragraph (a) shall appear on the label (as required) expressed as percentages or grams per kilogram for macronutrients, milligrams or micrograms per kilogram for micronutrients, International unit per kilogram for vitamins A, D and E, as activity unit per gram or activity unit per milliliter for enzymes and their preparations, as colony forming units per gram for microorganisms and their preparations in the following order-
 - (i) crude protein (minimum)
 - (ii) equivalent crude protein from non-protein nitrogen (NPN) (maximum)
 - (iii) amino acids (minimum)
 - (iv) moisture (maximum)
 - (v) crude fat (minimum and/or maximum)
 - (vi) crude fibre (minimum and/or maximum)
 - (vii) calcium (minimum) and (maximum) or ash (maximum)
 - (viii) phosphorus (minimum) or ash (maximum)
 - (ix) other mineral guarantees (minimum)
 - (x) vitamins (minimum)
 - (xi) total sugar as invert (minimum)
 - (xii) viable microorganisms producing lactic acid (minimum)
 - (xiii) other guarantees (minimum)
 - (c) the animal feed which is made from or contains feed grade urea or other non-protein nitrogen source, the protein equivalent of such urea or other non-protein nitrogen source shall appear on the label and it shall be expressed as a percentage of the total protein content of the animal feed appearing in parentheses together with an indication of the protein content of such animal feed: The urea content of the animal feed must be indicated where applicable. The label of the animal feed shall bear the appropriate warning appearing in Table10 according to the respective kind of animal feed.
- (3) In addition to the information referred to in sub-regulation (1) and (2), there shall also-
 - (a) in the case of an animal feed where an additive or premixture is added that has a substance which possess medicinal properties, be indicated –
 - (i) where applicable, the period during which such animal feed or water should be withheld from animals intended for slaughtering; and
 - (b) in case of an animal feed to which a stock remedy is added, those particulars which, in terms of the registration of the stock remedy in question, shall be indicated or otherwise a label of such stock remedy may be affixed to the container of the animal feed including its inclusion level.

(4) In addition specific guarantees shall be given for complete, concentrate and supplement feeds which are specific to the following species:

- (a) milk replacers fed to calves, lambs and piglets
 - (i) a minimum guarantee for crude protein
 - (ii) a minimum guarantee for lysine
 - (iii) a maximum guarantee for moisture
 - (iv) a minimum guarantee for crude fat
 - (v) a maximum guarantee for crude fibre
 - (vi) a minimum or maximum guarantee for calcium
 - (vii) a minimum guarantee for phosphorus
 - (viii) a minimum or maximum guarantee for pH, if applicable
 - (ix) a maximum guarantee for starch, if applicable
 - (x) other guarantee(s) minimum.
- (b) dairy cattle feed
 - (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for non-protein nitrogen, if added
 - (iii) a maximum guarantee for moisture
 - (iv) a minimum and maximum guarantee for crude fat
 - (v) a minimum and maximum guarantee for crude fibre
 - (vi) a minimum and maximum guarantee for calcium
 - (vii) a minimum guarantee for phosphorus
- (c) dairy cattle, beef cattle, sheep, goat, game and horses - fed mineral supplement
 - (i) a minimum and maximum guarantee for calcium
 - (ii) a minimum guarantee for phosphorus
 - (iii) a minimum guarantee for magnesium
 - (iv) a minimum guarantee for potassium
 - (v) a minimum guarantee for sulphur
 - (vi) a minimum guarantee for specific trace minerals
 - (vii) a minimum guarantee for vitamins, if added
- (d) beef cattle feed

- (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for non-protein nitrogen, if added
 - (iii) a maximum guarantee for moisture
 - (iv) a minimum and maximum guarantee for crude fat
 - (v) a minimum and maximum guarantee for crude fibre
 - (vi) a minimum and maximum guarantee for calcium
 - (vii) a minimum guarantee for phosphorus
- (e) sheep, goat and game feed
- (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for non-protein nitrogen, if added
 - (iii) a maximum guarantee for moisture
 - (iv) a minimum and maximum guarantee for crude fat
 - (v) a minimum and maximum guarantee for crude fibre
 - (vi) a minimum and maximum guarantee for calcium
 - (vii) a minimum guarantee for phosphorus
 - (viii) a maximum guarantee for copper (mg/kg) if copper exceeds 22,5 ppm.
- (f) ducks and geese
- (i) a minimum guaranteed for crude protein
 - (ii) a maximum guaranteed for moisture
 - (iii) a minimum guaranteed for crude fat
 - (iv) a maximum guaranteed for crude fibre
 - (v) a minimum and maximum guaranteed for calcium
 - (vi) a minimum guaranteed for phosphorus
- (j) pigs
- (i) a minimum guarantee for crude protein
 - (ii) a minimum guarantee for lysine
 - (iii) a minimum guarantee for methionine
 - (iv) a maximum guaranteed for moisture
 - (v) a minimum guaranteed for crude fat
 - (vi) a maximum guaranteed for crude fibre

- (vii) a minimum and maximum guaranteed for calcium
 - (viii) a minimum guaranteed for phosphorus
- (k) chickens and other poultry
 - (i) a minimum guarantee for crude protein
 - (ii) a minimum guarantee for lysine
 - (iii) a minimum guarantee for methionine
 - (iv) a maximum guaranteed for moisture
 - (v) a minimum guaranteed for crude fat
 - (vi) a maximum guaranteed for crude fibre
 - (vii) a minimum and maximum guaranteed for calcium
 - (viii) a minimum guaranteed for phosphorus
- (l) mineral feeds (*if not identified as specific specie feed*)
 - (i) a minimum and maximum guarantee for calcium, if present
 - (ii) a minimum guarantee for phosphorous, if present
 - (iii) a maximum guarantee for fluoride, if present
 - (iv) a minimum guarantee for other minerals which are present in significant amounts
 - (v) a minimum guarantee for vitamins, if added.

Marking and labelling of pet foods

22. (1) A container in which a pet food is sold shall be either marked in clearly legible symbols, letters and figures. A minimum print size of 8 point is recommended where possible. The following mandatory details shall appear on the container or label in a sufficiently conspicuous manner and (c) and (d) details of the registration holder and the product's registration number - must appear below each other in that sequence on the label -

- (a) the type of pet food in question, i.e., whether it is a complete or complementary pet food, and the pet for which it is intended;
- (b) the directions for proper use of the pet food including the purpose for which the pet food is intended and the life stages at which the pet food may be fed and in what quantities expressed in grams per day;
- (c) the quantities fed in grams per day must be based on the metabolisable energy (ME) content of the diet (determined or calculated) and based on the energy requirements as set out in Table 8;
- (d) the name, company registration number and address of the person in whose favour such pet food is registered;

- (e) the registration number of such pet food together with a reference to the Act, expressed as "Reg. No. V _____ Act no 36/1947";
- (f) a declaration of all the feed ingredients;
- (g) the information that is required to appear in the "Guaranteed Analysis", "Typical Analysis" or "Average Analysis" shall be listed in the following order -
 - (a) dogs and cats
 - (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for moisture
 - (iii) a minimum guarantee for crude/total fat/oil
 - (iv) a maximum guarantee for crude fibre
 - (v) a maximum guarantee for crude ash
 - (vi) a maximum guarantee for calcium (optional)
 - (vii) a minimum guarantee for phosphorus (optional).
 - (b) horse feed
 - (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for moisture
 - (iii) a minimum guarantee for crude fat
 - (iv) a minimum and maximum guarantee for crude fibre
 - (v) a minimum guarantee for phosphorus
 - (vi) a declaration of Ca:P ratio
 - (c) ostriches
 - (i) a minimum guarantee for crude protein
 - (ii) a minimum guarantee for lysine
 - (iii) a maximum guarantee for moisture
 - (iv) a minimum guarantee for crude fat
 - (v) a maximum guarantee for crude fibre
 - (vi) a minimum and maximum guarantee for calcium
 - (vii) a minimum guarantee for phosphorus
 - (d) fish (all), crocodile, pigeon, parrot, mice and rat
 - (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for moisture

- (iii) a minimum guarantee for crude fat
- (iv) a maximum guarantee for crude fibre
- (v) a maximum guarantee for calcium or ash
- (vi) a minimum guarantee for phosphorus or ash
- (e) rabbits and chinchillas
 - (i) a minimum guarantee for crude protein
 - (ii) a maximum guarantee for moisture
 - (iii) a minimum guarantee for crude fat
 - (vii) a minimum and maximum guarantee for crude fibre
 - (viii) a maximum guarantee for calcium or ash
 - (iv) a minimum guarantee for phosphorus or ash
- (f) seed and grain mixtures for pigeons, cage birds and poultry
 - (i) race and breed mixtures and Maintenance mixtures
 - (a) grain, a minimum and maximum
 - (b) protein seeds, a minimum and maximum
 - (ii) caged bird seed
 - (a) grain, a minimum and maximum
 - (b) protein seeds, a minimum
 - (iii) mix poultry grain
 - (a) grain, a maximum
 - (b) protein seeds, a minimum
 - (iv) bird seed mixture
 - (a) a minimum guarantee for crude protein
 - (b) a maximum guarantee for moisture
 - (c) a minimum guarantee for crude fat
 - (d) a minimum and maximum guarantee for crude fibre
 - (e) a maximum guarantee for calcium or ash
 - (f) a minimum guarantee for phosphorus or ash

- (h) the analysis shall be expressed in terms of percentages or gram per kilogram for macro-nutrients, milligrams or micrograms per kilogram for micro-nutrients and international units per kilogram (IU/kg) for vitamin A, D and E where applicable. All guarantees shall be expressed on an as fed basis. Vitamin inclusion levels shall be those in the pet food at the "best before" date;
 - (i) subject to the provisions of the Legal Metrology Act, 2014 (Act No. 9 of 2014), the net quantity of pet food in such container at the time of packing;
 - (j) information which allows the consumer to readily ascertain whether the product is past its shelf life, in one of the following two formats -
 - (i) a "best before" date shall be used for non-highly perishable products and shall be expressed as "best before..." followed by the date (indicating at least month and year).
 - (ii) a "use by" date shall be used for microbiologically highly perishable products to be expressed as "use by..." followed by the date (indicating day, month and year).
 - (k) information which allows the product to be traced in the event of a product recall, if this information is not already inherent in the "best before" or "use by" date expressed under (j) above or the date of manufacture which may be presented in code provided that the registrar is advised in writing of the interpretation of the code system. This information may also be in the form of a batch number; and
 - (l) subject to the provisions of the Consumer Protection Act, 2008 (Act No. 68 of 2008) a product containing genetically modified organisms shall be marked and labelled accordingly.
- (2) Pet food labels for dog and cat food shall also conform to the following requirements -
- (a) a vignette, graphic or pictorial presentation of a product on a pet food shall not misrepresent the contents of the package. When a graphic or picture of animal protein, vegetables, cereals and grains is used on the label it shall be used subject to the following rules -
 - (i) where a label shows graphics or pictorial of vegetables, fish, milk and eggs it shall mean that there is at least 4%, in the final product of the ingredient appearing in the picture or graphic in the final product;
 - (ii) where a label shows graphics or pictorial of cereals or grains, it shall mean that there is at least 14%, of the ingredient appearing in the picture or graphic in the final product; and
 - (iii) where a label shows graphics or pictorial of meat, it shall mean that there is at least 26%, of the ingredient appearing in the picture or graphic in the final product or a total combination of those meat ingredients that make up 26% of the final meat inclusion level of the final product.
 - (b) personal or commercial endorsements are permitted on labels where said endorsements are factual and not otherwise misleading, in the case of an endorsement that state recommended by veterinarian or leading animal nutritionist such evidence shall be submitted and corroborated as follows:
 - (i) corroboration for an endorsement that states recommended by a veterinarian must include scientific results of feeding trials, from at least three veterinarians, conducted using the product to be endorsed; and

- (ii) the trials must be conducted according to the latest American Association of Feed Control Officials (AAFCO) testing procedures relevant for the claims made on the product.
- (c) the label of a pet food shall not contain an unqualified representation or claim, directly or indirectly that the pet food therein contained or a recommended feeding thereof is or meets the requisites of a complete, scientific or balanced ration for dogs or cats unless such product or feeding complies with the requirements of regulation 17(1) above;
- (d) the use of claims on pet food labels stating improvement or newness shall be substantiated and limited to the first twelve months' production. The use of claims stating a preference or comparative attribute shall be substantiated and limited to one year of production after which the claim must be removed or re-substantiated;
- (e) enriched or fortified terms used on a pet food label requires that the food must contain 25% and 15% more than the nutrient requirements as laid down in Tables 4 and 5 for enriched and fortified respectively;
- (f) calorie terms such as light, less, reduced or terms and words of similar connotation must be substantiated against a standard maintenance diet in the applicant's own product range and the energy content of such a product shall be declared on the label;
- (g) fat content related terms such as lean, less, reduced fat or terms and words of similar connotation must be substantiated against a standard maintenance diet in the applicant's own range;
- (h) the term "real meat" is interpreted as the soft substance of an animal body consisting predominantly of muscle and fat and this claim must be substantiated;
- (i) claims as to the content of particular ingredients shall be subject to the following rules, which are based on finished products and for which credible rehydration or dehydration factors respectively shall be used when applying them to products containing a combination of dry and wet ingredients -
 - (i) "with X flavour" shall mean that either there are traces of the flavour substance, essence or extract present in the product, or that there is up to or including 4 % of X itself in the product.
 - (ii) "with X" shall mean that there is at least 4 % of X present;
 - (iii) "high in X", "rich in X", or "with extra X" shall mean that there is at least 14 % of X present;
 - (iv) "X dinner", "X recipe" or "X menu" shall mean that there is at least 26 % of X present;
 - (v) "all X" shall mean that at least 65 % of X is present;
 - (vi) when the material is described as a form following the name of the material then the inclusion level must be at least 26% e.g. Beef Cubes – beef inclusion at least 26%;
 - (vii) when the form of the material precedes the name of the material then the inclusion level must be at least 65%. e.g. Cubed Beef – beef inclusion at least 65%.

(j) where “X” in subparagraph (i) above refers to the meat of an animal, the meat used for the purposes of making such a meat claim may include all parts of that species except -

- * added blood;
- * bone and bone meal;
- * bone fraction of fresh materials which consist of fleshy or other moist material with associated bone;
- * bone contents of meat and bone meals;
- * bone content of poultry carcasses;
- * bone component of poultry meals;
- * meals/greaves from knackers;
- * claws;
- * hair;
- * horns;
- * hide (except pork rind);
- * feathers;
- * teeth;
- * hooves;
- * the content proportion of intestines;
- * added fat.

an affidavit pertaining to the use and inclusion level of this ingredient must be submitted -

where “X” in subparagraph (i) above refers to a species of an animal, the material used for the purpose of making such a species claim may include all parts of that species except -

- * bone and bone meal;
- * meals/greaves from knackers;
- * claws;
- * hair;
- * horns;
- * hide (except pork rind);
- * feathers;
- * teeth;

- * hooves;
- * the content proportion of intestines.

in addition the material shall contain at least 25% tissue material.

- (k) the "best before" or "use by date" and the batch number may be marked on a different part of the packaging other than the label. In such cases the relevant expression shall be accompanied by an indication of where the information appears on the container;
- (l) declarations of feed ingredients shall conform to the following requirements -
 - (i) the listing of feed ingredients on pet foods shall either indicate the amount contained or name the feed ingredients in descending order by mass;
 - (ii) the feed ingredients shall be described by internationally recognized specific names. However, categories grouping several feed ingredients may be used, as set out in Table 11. In that case the indication of the specific name of the feed ingredient may be replaced by the name of the category to which the feed ingredient belongs. Use of one of these two forms of declaration shall exclude the use of the other, save where one of the feed ingredients belongs to none of the categories which has been defined. In that case, the feed ingredient, designated by its specific name, shall be mentioned in order of importance by mass in relation to the categories; and
 - (iii) vitamins and minerals may be grouped or split into individual elements independent of item l(ii).
- (m) the labelling of pet foods may also draw particular attention outside the area designated on the label for the items listed to the presence or content of one or more feed ingredients and/or nutrients which are essential aspects of the characteristics of the pet food. In such a case apply the following -
 - (i) if the item to which particular attention is drawn is classified as an ingredient, the ingredient must form part of the ingredient statement;
 - (ii) an Ingredient with ingredients shown as groups in the ingredient list, and the particular attention ingredient forms part of a specific group, requires the individual ingredient with its inclusion % to be shown in the Ingredient list in brackets following the specific group;
 - (iii) an Ingredient, to which particular attention is drawn, with ingredients shown as individual inclusions in the Ingredient List, the inclusion % is optional;
 - (iv) in the case of nutrients, the minimum content, expressed as set out in regulation 22(1)(g), shall clearly be indicated as part of the guaranteed analysis and shall follow the mandatory guarantees;
 - (v) if particular attention is drawn to an inclusion as part of a beneficial claim then the level may require substantiation to ensure inclusion at a level achieving the benefit claimed;
 - (vi) if particular attention is drawn to an inclusion as an optimum ratio then the inclusion ratio shall be shown in the analysis on the label; and

- (vii) the inclusion of herbs with particular attention will require documentation substantiating the inclusion level.
- (n) guarantees are not required for label claims that refer to a nutrient that is contained in a specific ingredient (for example: "corn is a rich source of linoleic acid"); or for claims that refer to a group of ingredients or nutrients (for example: "fortified with vitamins and minerals");
- (o) the person responsible for the labelling particulars of a pet food may provide information in addition to that required under these regulations. However, such information –
 - (i) may not be designed to indicate the presence or content of analytical constituents other than those present;
 - (ii) must not mislead the user, in particular by attributing to the pet food effects or properties that it does not possess or by suggesting that it possesses special characteristics when in fact all similar pet foods possess such characteristics;
 - (iii) must not claim that the pet food will prevent, treat, lessen, manage, mitigate or cure a disease including a medical condition;
 - (iv) must relate to objective or quantifiable factors which can be substantiated and this extends to the product name; and
 - (v) must not misrepresent the contents of the container.
- (p) in the case of a complementary pet food the directions for use shall be sufficient to make it clear to the person administering the pet food that the complementary pet food is not a complete food and is therefore only suitable for short term or intermittent use or, in the case of pure meat and fish products, that the complementary pet food has to be mixed with a complete dry pet food so that together they will provide all the energy and nutritional needs of the particular animal and physiological state for which they are intended;
- (q) weight control products must declare energy content;
- (r) statements of digestibility of nutrients or dry matter content shall not be permitted on labels;
- (s) claims such as premium, super premium, high digestibility or claims with a similar connotation must be scientifically substantiated by the manufacturer against standard or base line products within the manufacturer's own product range and also against similar comparable products on the market;
- (t) no reference to quality or grade of an ingredient shall appear in the ingredient statement of a pet food;
- (u) a reference to quality, nature, form, or other attributes of an ingredient shall not be made unless such reference is accurate and unless the ingredient imparts a distinctive characteristic to the pet food because it possesses that attribute, reference to poor, low, inferior, undesirable substances or ingredient(s) quality is not permitted on a pet food label;
- (v) urinary tract health claims are limited to the claims and criteria as set out in Table 12;
- (w) label claims using the term "natural" shall conform to the following rules-

- (i) the use of the term “natural” is only acceptable in reference to the product as a whole without the use of a disclaimer when all of the ingredients and components of ingredients meet the definition for “natural”;
 - (ii) the use of the term “natural” in reference to the product as a whole is false and misleading if any chemically synthesised ingredients are present in the product either by way of direct inclusion or as part of an ingredient included in the product;
 - (iii) a disclaimer may be used with the use of “natural” such as “Natural with added vitamins, minerals, and other trace minerals” where the “with” disclaimer includes all the items as appropriate to match the chemically synthesised ingredients included directly or indirectly when juxtaposed with the term “natural”;
 - (iv) the disclaimer must appear with the largest or most prominent use of the term “natural” on each panel of the label on which the term appears, in the same style and colour print and at least one-half the size of the term “natural”;
 - (v) where a disclaimer is used juxtaposed with the term “natural”, all other ingredients and components of ingredients in the product must meet the definition of “natural”;
 - (vi) if the disclaimer that is juxtaposed with the term “natural” is used only to identify in generic terms those vitamins, minerals and other trace nutrients which are not natural, then the disclaimer is not a nutrient claim;
 - (vii) if the disclaimer makes reference to a specific nutrient (e.g. “with added calcium”) then the nutrient referred to by the disclaimer must be included in the Guaranteed Analysis statement;
 - (viii) when the term “natural” is used only in reference to a specific ingredient, when other ingredients used in the product are not natural then the term “natural” must not be used in such a way as to imply that the product as a whole is “natural”;
 - (ix) products (mixed food) should not be described directly or by implication as “natural” but as “made from natural ingredients” even if all the ingredients meet the criteria for natural and particularly where the use of a disclaimer is also necessary;
 - (x) products (mixed food) which cannot meet the criteria for natural may not be claimed to have a “natural” taste, flavour, or, colour;
 - (xi) “natural” or its derivatives may not be included in brand or fancy names nor in coined or meaningless phrases in such a way as to imply that a food which does not meet the natural criteria is natural or made from natural ingredients.
- (x) label claims with respect to raw hides, biscuits and other pet food products claiming to cleanse, freshen or whiten teeth by virtue of their abrasive or mechanical action are allowed but must be substantiated; and
 - (y) food bearing claims for plaque or tartar reduction or control, or control of breath odour must be substantiated.

(3) The following additional indications shall appear on the label or labelling of pet foods for a particular nutritional purpose -

- (a) the precise use, i.e., the particular nutritional purpose for which the product is intended;
- (b) the indication of the essential nutritional characteristics of the pet food; and
- (c) the recommended length of time for use of the pet food.

(4) The labelling of pet foods for particular nutritional purposes may make reference to a specific pathological condition as long as no drug or medicinal claims are made and proper product registration has been completed

(5) The label of pet foods for particular nutritional purposes must bear the indication, such as "It is recommended that a specialist's or veterinarian's opinion be sought before use".

(6) The labelling of a pet food for a particular nutritional purpose may also highlight the presence of the low level of one or more nutrients and/or ingredients which are essential for the description of the pet food. In such cases, the minimum and/or maximum level of the nutrients expressed in g/kg of the pet food must be expressed in the guaranteed analysis. The ingredients must be clearly indicated in the ingredient list.

(7) Notwithstanding the provisions of sub-regulation (1) and sub-regulation (2) the registrar may, on written request of the applicant grant certain exemptions from the stipulations of these sub-regulations under certain conditions.

PART V INVOICES

Invoices for animal feeds

23. (1) An invoice given or sent in terms of section 9 of the Act in respect of an animal feed which is not sold in a container, shall indicate –

- (a) the particulars required in terms of regulation 21 or 22; provided that such particulars may be omitted from an invoice if a label which would otherwise have been affixed to a container is supplied together with such invoice;
- (b) the names and addresses of the seller and the purchaser of such an animal feed;
- (c) the date on which such an animal feed was sold in this manner; and
- (d) the quantity of such an animal feed which was sold in this manner.

(2) A copy of an invoice referred to in sub-regulation (1) shall be preserved by the seller of an animal feed for at least two years after the date on which such an animal feed was sold in this manner.

PART VI ADVERTISEMENTS

Publication or distribution of false or misleading advertisements relating to animal feeds

24. (1) No person shall publish or distribute any false or misleading advertisement relating to animal feeds.

(2) It shall be a sufficient defence for any person, other than the person selling the animal feed to which the false or misleading advertisement relates, who is charged with a contravention of sub-regulation (1), if he proves to the satisfaction of the court that he/she did not know that the advertisement was false or misleading in any respect, unless it is proved that the accused failed on demand by the registrar or a police official to furnish the name and address of the person at whose instance the advertisement was published or distributed.

(3) An advertisement relating to farm feeds shall only be published or distributed with the written approval of the registrar and an application for such an approval shall -

- (a) be lodged with the registrar in writing at least one month prior to the date of presentation of the advertisement in question for publication or distribution;
- (b) be accompanied by two copies of a typed version of the advertisement in English and, if applicable, two copies of illustrations to be used in connection with that advertisement; and
- (c) An advertisement shall only be published or distributed in the form which was approved by the registrar and within the period which he/she in each case determine.

(4) An advertisement shall in addition to any other relevant particulars which the registrar may approve to appear therein when published in a newspaper, magazine or other printed matter -

- (a) furnish the trade mark, if any, and the trade name which may be used by the person in whose favour the animal feed in question is registered;
- (b) furnish the name of an animal feed in question in accordance with the name prescribed for that kind of animal feed in these regulations and applicable annexure of the guidelines;
- (c) contain the registration number of the animal feed in question together with a reference to the Act, expressed as "Reg. No.....Act 36/1947".

(5) An advertisement shall, when screened or broadcasted, at least furnish those particulars referred to in sub-regulation 4 (a).

(6) All advertising shall conform to the standards of the Advertising Standards Authority of South Africa.

PART VII IMPORTS

Harbours and Ports through which imports may occur

25. (1) Animal feeds may only be imported through the ports of entry as established by the Customs Control Act, 2014 (Act No. 31 of 2014).

(2) A container in which an imported animal feed for sale in the republic shall in addition to any other relevant particulars which the Register may approve, be marked or labelled with the applicable particulars which are required to be marked or labelled on containers of similar animal feed manufactured in the republic.

PART VIII
MANUFACTURING ESTABLISHMENTS

Requirements for establishments

26. (1) The site where the manufacturing facility is located shall be maintained so as to prevent contamination and enable the production of safe feed, such that -

- (a) measures necessary to protect the site from any potential undesirable contaminants shall be in place and periodically reviewed to ensure they continue to be effective; and
- (b) the site boundaries shall be clearly defined and fenced.

(2) All grounds within the site shall be finished and maintained to an appropriate standard, such that -

- (a) where natural drainage is inadequate, additional drainage shall be installed to avoid the risk of contamination of feed;
- (b) where external storage is necessary, items shall be protected from contamination and deterioration;
- (c) wherever possible, all buildings shall be surrounded by a clear space. All immediate surrounding areas shall be kept clean, and effective pest control programmes shall be implemented; and
- (d) waste collection shall take place in a well-defined area.

(3) Premises and plant shall be designed, constructed and maintained to control the risk of product contamination, such that -

- (a) where livestock feed, pet food and premixtures are manufactured in one building, adequate partitioning for separation shall be provided;
- (b) the production process from reception to dispatch shall be designed to permit adequate cleaning or where applicable, disinfection in order to prevent personnel, product, facilities and equipment contamination and cross-contamination;
- (c) premises shall allow sufficient working space and storage to enable all operations to be carried out properly under safe and hygienic conditions;
- (d) the systems of working shall, where appropriate, be such as to reduce any potential physical, chemical or microbiological contamination risks;
- (e) there shall be an appropriate segregation between unprocessed and processed materials to minimise the risk of product cross-contamination;
- (f) segregation shall take into account the product flow, nature of materials, equipment, personnel, waste management, airflow, and air quality and services provision; and
- (g) manufacturing plants shall have adequate facilities for disposing of unused animal by-products remaining after the production of the products. Alternatively this material shall be sent to a processing plant or to an incineration or co-incineration plant.

(4) The fabric of the site, buildings and facilities shall be suitable for the intended purpose. The

- (a) walls shall be designed, constructed, finished and maintained to prevent the accumulation of dirt, to reduce condensation and mould growth and to facilitate cleaning;
- (b) wall/floor junctions and corners shall be covered to facilitate cleaning and disinfection; cavities in the surface of walls shall be avoided, where necessary, to prevent debris from accumulating and pest harbourage;
- (c) drainage shall not compromise product safety and shall flow away from high-risk areas;
- (d) drainage facilities shall be adequate for the purpose intended and shall be designed and maintained to minimise risk of product contamination;
- (e) floors shall be designed to meet the demands of the process, and withstand cleaning materials and methods; where applicable they shall be impervious and maintained in good conditions;
- (f) where applicable, floors shall have adequate slope to cope with the flow of any water or effluent towards suitable drainage;
- (g) with careful consideration to the position of machinery; where applicable, suitable drainage shall be provided so that any discharge or overspill from processing goes directly into a drain rather than on the floor;
- (h) use of false ceilings shall be accompanied by adequate access to the void in order to facilitate cleaning, maintenance of services and inspection for pest activity;
- (i) ceilings and overhead fixtures, where necessary, shall be designed, constructed, finished and maintained to prevent the accumulation of dirt, to reduce condensation, minimise mould growth and to prevent the accumulation of dust that can affect the safety and quality of livestock feed or pet food;
- j) use of glass close to production machinery shall be avoided and wherever necessary it shall be protected against breakage;
- (k) windows shall be designed to be opened for ventilation purposes, they shall, where necessary, be adequately screened to prevent the ingress of pests;
- (l) doors shall be kept closed at all times, when not in use;
- (m) doors shall be close-fitting and proofed against pests when closed;
- (n) where external doors to raw material handling, processing, packaging and storage areas are kept open; ingress of pests shall be prevented through suitable precautions;
- (o) facilities shall have adequate natural and/or artificial lighting;
- (p) shatterproof plastic diffusers or sleeve covers shall protect all bulbs and strip lights, including those on electric fly killer units, where they constitute a risk to the product; for high temperature lights, where plastic covers are not viable, a fine mesh metal screen shall be fitted; where full protection cannot be provided, the glass management system shall take this into account;
- (q) equipment used for the purpose of screening or filtering air shall be adequately maintained;

- (r) dust extraction equipment for dry powder handling areas shall be installed;
- (s) compressed air in contact with products shall be filtered;
- (t) water supplies used for cleaning shall, where appropriate, be potable, either being drawn from mains supply or suitably treated according to its source;
- (u) water used in livestock feed or Pet food manufacture shall be of suitable quality and meet human standard for drinking water; all piping etc. shall be of inert nature;
- (v) quality of water, steam or ice that comes in contact with livestock feed or pet food shall be regularly monitored and shall present no risk to product safety; and
- (w) water supply systems shall be properly labelled and segregated between potable and non-potable supplies.

(5) Equipment shall be suitably designed for the intended purpose and shall be used so as to minimise the risk of product contamination, such that -

- (a) equipment shall be designed, so as to minimise the risk of error and to avoid contamination, cross-contamination and any adverse effect, generally on the safety and quality of the products; when appropriate, machinery coming into contact with feed shall be dried following any wet cleaning process;
- (b) equipment shall be positioned so as to allow easy access for cleaning and/or disinfection and servicing;
- (c) all equipment shall be properly specified prior to commissioning, and shall be adequately maintained, serviced and operated to allow for the production of safe and quality compliant feed;
- (d) all equipment surfaces coming into contact with the product shall be impervious and non-reactive;
- (e) all equipment shall be designed so that it does not in itself contaminate the product due to leaking seals, lubrication or through subsequent modification; and
- (f) all feed or food contact lubricants shall be of food grade quality.

(6) A system of planned maintenance shall be in place covering all items of equipment, which are critical to product safety and quality, such that -

- (a) equipment shall undergo appropriate and regular maintenance, in accordance with written procedures pre-established by the equipment manufacturer;
- (b) the manufacturer shall ensure that the safety and quality of product is not jeopardised during and after maintenance operations; particular attention shall be drawn to the risk of foreign body contamination;
- (c) third party contractors and all engineers shall be aware of and adhere to the manufacturer's hygiene standards, with particular focus on both high and low risk areas; and
- (d) cleaning or replacing light fittings and glass shall be done in a manner as to minimise the potential of product contamination.

(7) Staff facilities shall be designed, and used to minimise the risk of product contamination, such that -

- (a) where specific work-wear is required, changing facilities shall be provided for all personnel, whether staff, visitor or contractor, prior to entry to production or packing areas, and where appropriate, prior to entry to storage areas;
- (b) where appropriate, suitable and sufficient hand washing facilities shall be provided;
- (c) toilet doors shall not open directly into production, packing or storage areas;
- (d) smoking shall only be permitted in appropriate designated areas;
- (e) where catering facilities are provided, these shall be suitably controlled to prevent contamination of product;
- (f) where appropriate, changing facilities shall be located to allow personnel direct access to the packing or storage area, without first passing through areas external to the factory buildings;
- (g) suitable provisions shall be made for the storage of food brought onto the premises by staff;
- (h) outdoor clothing and other personal items shall be stored separately from work wear within the changing facilities; and
- (i) where appropriate, the use of work-wear shall be restricted to the work premises.

(8) Appropriate facilities and procedures shall be in place to control the risk of physical or chemical product contamination, such that -

- (a) the manufacturer shall adopt all measures to comply with the maximum permitted levels of physicochemical residues;
- (b) appropriate storage facilities shall be provided for the control and storage of any hazardous chemicals;
- (c) written procedures for handling glass and hard clear plastic breakages in raw material handling, preparation, processing, packing and storage areas shall be in place to ensure the necessary precautions are taken; these procedures shall form part of a formal glass policy; and
- (d) the use of wood within raw material handling, preparation, processing, packing and storage areas shall, be minimized.

(9) Appropriate standards of hygiene and housekeeping shall be maintained at all times, such that -

- (a) cleaning and disinfection programmes shall be implemented and effective in order to minimise the risk of contamination; programme shall be documented;
- (b) all cleaning staff shall be trained and competent to perform the required tasks;
- (c) the effectiveness of the cleaning and sanitation procedures in processing areas shall be verified; and
- (d) only approved food grade cleaning agents shall be used.

(10) There shall be adequate systems for the collation, collection and disposal of waste material, such that -

- (a) sewage, waste and rain water shall be disposed of in a manner which ensures that the safety and quality of feed is not affected; spoilage and dust shall be controlled to prevent pest invasion;
 - (b) waste and materials not suitable as feed shall be isolated and identified; any such materials containing hazardous levels of veterinary drugs, contaminants or other hazards shall be disposed of in an appropriate way and not used as feed;
 - (c) systems shall be in place to minimise the accumulation of waste in production areas, and shall prevent the use of unfit materials; defined waste areas shall be established;
 - (d) waste disposal shall meet legislative requirements and, where appropriate, be removed by licensed contractors;
 - (e) external waste collection containers and compactors shall be closed or covered; and
 - (f) all waste containers shall be clearly marked and designated for that purpose only.
- (11) The Manufacturer shall be responsible for minimising the risk of pest infestation on the site, such that -
- (a) pest control programmes are implemented.
 - (b) the manufacturer either contract the services to a competent registered pest control operator, or shall have trained personnel, for the regular inspection and treatment of premises to stop and eradicate pest infestation; where the services of a pest control contractor are employed, the service contracted shall be clearly defined and reflect the activities of the site;
 - (c) detailed records of the pest control inspections, recommendations and necessary action undertaken shall be kept;
 - (d) where appropriate, permanently operational electric fly killers shall be provided and correctly positioned;
 - (e) drains shall be fitted with screens and traps to prevent pest entry;
 - (f) where appropriate, incoming raw materials shall be thoroughly checked on arrival for the absence of pests;
 - (g) raw materials, packaging and finished products shall be stored so as to minimise the risk of pest infestation; where stored the product may attract pests, appropriate measures shall be included in the control programme;
 - (h) documentation shall provide detailed information on the safe use and application of baits; and
 - (i) the location of all pest control measures shall be identified on a plan/diagram of the site.

Practices to be followed at all establishments

27. (1) The Manufacturer shall ensure that all employees are adequately trained, instructed and supervised, commensurate with their activity, such that -

- (a) all employees involved in the production of animal feed, including storage and transport, be aware (e.g. clearly informed in writing of their duties responsibilities and powers) that they contribute to the quality and safety of the finished products;
- (b) all personnel, including temporary personnel and contractors, shall be in sufficient number, possess the skills and qualifications necessary for the manufacturing process and be appropriately trained prior to commencing work; they shall be adequately supervised throughout the working period;
- (c) the staff shall be adequately trained for quality management; the person responsible for supervising quality control shall furthermore be in a position to carry out his/her tasks independently and to take the appropriate decisions; and
- (d) the manufacturer shall have full training programmes and records.

(2) The Manufacturer's personal hygiene standards shall be documented and adopted by all personnel, including contractors and visitors to the factory. These standards shall be designed with due regard to the risk of product contamination, such that -

- (a) jewellery and watches shall not be worn unless in exceptional circumstances when there is no risk of product contamination and with the exception of a plain wedding ring and sleeper earrings;
- (b) all cuts and grazes on exposed skin shall be covered (e.g. by a detectable blue metal strip plaster, that is Pet food manufacturer-issued);
- (c) smoking, eating and drinking shall only be permitted in designated areas;
- (d) hand cleaning shall be performed in an appropriate manner and frequency;
- (e) medical screening procedures shall be implemented, where appropriate, in particular for staff working in areas where product safety could be compromised; and
- (f) personnel known, or suspected, to be suffering from a disease likely to be transmitted to livestock feed or pet food shall not be allowed to enter any feed handling area where there is a likelihood of contaminating the feed, posing a risk to the safety of the product, the target animal and to humans handling the feed.

(3) Feed handlers, visitors, and contractors working in, or entering the feed handling areas, shall wear suitable feed manufacturer-issued protective clothing, such that -

- (a) where appropriate, all hair shall be fully covered to prevent product contamination;
- (b) suitable safety footwear shall be worn within the factory environment;
- (c) all protective clothing shall be laundered effectively on a regular basis; and
- (d) gloves, if worn, shall be subject to adequate control to avoid product contamination.

(4) Clear responsibilities and procedures for the production process shall be in place, such that -

- (a) a qualified employee shall be designated as the person responsible for the production process;

- (b) a qualified employee(s) shall be designated as the person responsible for feed formulations and such a person shall be registered in terms of the Natural Scientific Professions Act, 2003 (Act No. 27 of 2003) as an animal scientist, and where applicable a registered veterinarian in terms of Act No. 19 of 1982 or registered pharmacist in terms of Act No. 53 of 1974; or a person registered with an equivalent international body recognized by the registrar;
- (c) the manufacturer shall ensure that the different production stages are carried out in accordance with written procedures and instructions; in order to obtain the desired quality of feed, these procedures shall define the critical points of the manufacturing process; and
- (d) measures shall be taken to avoid contamination, cross contamination and human error to maintain the hygiene and safety standards.

(5) Weighing and metering equipment, both for bulk and hand tipped ingredients, is essential and shall be accurately done in order for the production of a safe feed, such that -

- (a) all scales and metering devices used in the manufacture of feed shall be appropriate for the range of weights or volumes to be measured and a regular programme of calibration and testing of weighing and metering equipment shall be implemented; guidance from equipment manufacturers shall be taken in developing written procedures for calibration and testing; and
- (b) a regular maintenance programme shall also be in place in order to ensure that weighing equipment is kept clean and that worn parts are replaced when necessary.

(6) A homogenous mixture is essential for nutritional balance and feed safety. The accuracy of mixing shall be assured and verified, such that -

- (a) all mixers used in the manufacture of feed shall be appropriate for the range of weights or volumes being mixed, and shall be capable of manufacturing homogeneous mixes or homogenous solutions;
- (b) the mixer shall be cleaned to ensure efficacy and feed safety;
- (c) written maintenance schedules shall exist for examination of the mixer to ensure that worn equipment parts do not lead to the build-up of residues when the mixer is emptied;
- (d) the mixers shall operate for a pre-set time, determined by pre-production trials to ensure homogenous mixes and/or solutions;
- (e) the efficiency of the mixing process shall be regularly checked to ensure that additives are evenly dispersed throughout the mix;
- (f) an unacceptable carryover of additives, veterinary medical substances or any other undesirable substance shall be prevented and carryover test shall be conducted to prove that the feed complies with the farm feeds undesirable substances regulations; and
- (g) operators shall demonstrate the effectiveness of mixers with regard to homogeneity.

(7) A Quality Control Plan shall be drawn up and implemented for the use of raw materials, premixtures and finished products. The Manufacturer shall undertake or sub-contract analysis, critical to product safety and quality, using appropriate procedures and facilities, such that -

- (a) the Quality Control Plan shall identify checks on critical control points in the manufacturing process, sampling procedures as well as determine the frequency of these checks and sampling procedures; the plan shall also specify which methods of analysis are to be used and how frequently; the quality control plan shall mention actions to be taken in case of non-compliance with the specifications;
- (b) the manufacturer shall, based on risk assessment (including HACCP), determine what level of analytical testing (microbiological, physical or chemical) needs to be performed to verify that the food safety management system is under control;
- (c) pet food and dog chews made from animal by-products, random samples shall be taken during production and finished products (before dispatching) to verify compliance with the following standards: Salmonella (absence in 25g, n=5, c=0, M=0); and Enterobacteriaceae (n=5, c=2, m=10, M=300 in 19); however, for canned pet food and other hermetically sealed heat treated containers that has undergone heat treatment described in the production section (temperature), sampling and testing for Salmonella and Enterobacteriaceae may not be necessary;
- (d) procedures shall be in place to ensure reliability of test results;
- (e) personnel undertaking analyses shall be suitably qualified, and/or trained and shall be competent to carry out the analyses required;
- (f) where the feed manufacturer undertakes or sub-contracts analyses critical to product safety or legal compositional verification, the laboratory shall be independently accredited by SANAS or ILAC;
- (g) where there is no accredited laboratory for performing a specific analytical procedure the registrar shall determine which laboratory shall be used for such analysis;
- (h) raw material suppliers of fats and oils shall regularly screen their products for the presence of dioxins and dioxin like PCBs, the frequency of the screening program shall be determined by both the supplier and the purchaser;
- (i) raw material suppliers of cotton seed, peanuts and their by-products shall regularly screen consignment delivered to animal feed manufacturers for the presence of aflatoxin B1, the frequency of the screening program shall be determined by both parties;
- (j) raw material suppliers that supply sweepings to the animal feed industry shall guarantee the safety of the product to the animal feed manufacturer in relation to the presence of undesirable substances as outlined in the Undesirable substances regulations; and
- (k) all animal feed manufacturers shall at least once a year send a sample for analysis, of their product(s) that they manufacture for retail, to a laboratory that is SANAS or ILAC accredited;
- (l) all complete pet food manufacturers in the republic shall have quality management systems in place that are based on HACCP principles, where a pet food is manufactured outside the republic such a facility shall be accredited for a quality management system that is based on HACCP principles or a standard that the registrar may recognise from time to time; and
- (m) all compound livestock animal feed manufacturers shall have quality management systems in place that are based on GMP principles or a higher or comparable standard that the registrar may recognise from time to time.

(8) The Manufacturer shall be able to demonstrate effective control of all operations undertaken. Where temperature control of the raw materials, intermediate or finished product process and/or environment is critical to product safety and quality, this shall be adequately controlled, monitored and recorded such that -

- (a) in circumstances where temperature and/or time control is critical to product safety and quality (e.g. thermal processing, freezing or chilling), temperature and/or time recording equipment, linked to a suitable failure alarm system shall be used to monitor at an appropriate frequency, the process status;
- (b) canned pet food and other hermetically sealed heat treated containers shall be subject to heat treatment to a minimum Fc value of 3;
- (c) processed pet food other than canned pet food or other hermetically sealed heat treated containers shall be subject to a heat treatment of at least 90°C throughout its substance; after treatment, every precaution shall be taken to ensure that the product is not exposed to contamination;
- (d) dog chews shall be subject to a treatment, during processing, sufficient to destroy pathogenic organisms (including salmonella); after treatment every precaution shall be taken to ensure that the product is not exposed to contamination; and
- (e) the product shall be packed in new packaging.

(9) The Manufacturer shall ensure that all necessary steps are taken to identify, avoid, eliminate or minimise the risk of metal or other foreign body contamination, such that -

- (a) the manufacturer shall use hazard analysis and determine the critical control points to avoid foreign body contamination. When necessary, metal or other foreign body detection equipment shall be installed;
- (b) where a metal or foreign body detector is required, the manufacturer shall establish and apply the best practice critical limits for detection, having due regard to the nature of the feed. The location of the detector and any other factors influencing the sensitivity of the detector;
- (c) the manufacturer shall establish and implement procedures for the operation. Routine monitoring and testing of the metal and other foreign body detectors; and
- (d) the manufacturer shall establish and implement corrective action and reporting procedures, in the event of the monitoring and testing procedure identifying any failure of the metal or foreign body detector; these will include the isolation, quarantining and re-inspection of all products since the last acceptance test of the metal or other foreign body detector.

(10) The Manufacturer shall ensure that the product is not released before all the procedures have been followed, such that -

- (a) The manufacturer shall ensure that the product is only released by authorised personnel in line with release procedures ensuring product safety.

(11) The Manufacturer shall ensure all out-of-specification raw materials and semi- or finished products are clearly identified, labelled and quarantined, such that -

- (a) clear procedures for the control of non-conforming material, including rejection, acceptance by concession, or agreement to use for another purpose, shall be in place and understood by all authorised personnel;

- (b) corrective actions shall be implemented to avoid recurrence of non-conformance and adequate records of the action taken; and
- (c) all non-conforming products shall be handled or disposed of according to the nature of the problem and/or specific requirements.

(12) Checks shall be carried out to demonstrate that a package conforms with the Legal Metrology Act, 2014 (Act No. 9 of 2014) legal requirements and with any additional recognised industry sector codes/guides, such that -

- (a) The frequency and methodology of quantity checking shall meet the minimum requirements of legislation pertaining to quantity verification, irrespective of the nature of the pre-packaged material (e.g. average quantity, weight or volume); and
- (b) all equipment used for quantity measurement shall be legally acceptable and regularly calibrated.

(13) The manufacturer shall operate procedures that verify that the process and equipment employed are capable of producing consistent safe products with the desired quality characteristics, such that -

- (a) in the event of changes to product formulation, processing methods, equipment or packaging, the manufacturer shall, where appropriate, re-establish process characteristics and validate product data, to ensure product safety and quality; and
- (b) in the case of equipment failure or process deviation, procedures shall be in place to establish the safety status of the product, prior to release.

(14) Equipment used to monitor critical control points and product compliance shall be calibrated and traceable, such that -

- (a) where necessary, equipment shall:
 - (i) be calibrated or verified at specified intervals or prior to use and the basis used for calibration or verification shall be recorded;
 - (ii) be adjusted or re-adjusted as necessary;
 - (iii) be identified to enable the calibration status to be determined;
 - (iv) be safeguarded from adjustments that would invalidate the measurement results; and
 - (v) be protected from damage and deterioration.
- (b) records of the results of calibration and verification shall be maintained.

(15) Where materials require special handling procedures, these shall be in place to ensure that product safety and quality are maintained, such that -

- (a) where packaging materials (e.g. glass containers) pose a risk to the product safety, special handling procedures shall be in place to prevent product contamination or spoilage; records of failures and corrective actions taken shall be maintained; and
- (b) where re-processing is used, or reworking operations carried out, procedures shall be implemented to ensure the safety and quality of the finished product.

(16) Product packaging shall be appropriate for the intended use and stored under proper conditions to minimise the risk of contamination and deterioration, such that -

- (a) proper packaging materials shall be used;
- (b) procedures shall be in place to confirm that product packaging conforms to specification;
- (c) where staples or other items likely to cause damage or contamination in packaging are used, appropriate precautions shall be taken to minimise the risk of product contamination;
- (d) any packaging material surplus to a specific production run shall be protected before being returned to storage; and
- (e) packaging material shall be stored apart from raw materials to avoid cross-contamination.

(17) All vehicles or warehouses used for the transportation or storage of raw materials (including packaging), intermediates/semi-processed products and finished product, shall be suitable for the intended purpose, and be maintained in good repair and in a Hygienic condition, such that -

- (a) the manufacturer shall make sure that, the goods delivered match with those ordered, the feed is properly labelled in accordance with legal requirements; and that all measures have been taken to ensure the quality and safety of the feed delivered;
- (b) all containers used for transporting or warehouses used for storing raw materials and finished products shall be kept free of potential contaminants, whether chemical, odour, pests (e.g. microorganisms, rodents, insects, birds) and domestic animals;
- (c) only persons authorised by the manufacturer shall have access to the storage facilities;
- (d) the name and the address of the transporter shall be recorded;
- (e) raw materials, packaging materials and finished products shall be stored and transported in such a way as to make them easily identifiable (product name, number, date and time of manufacture) and to prevent cross-contamination and deterioration;
- (f) refrigerated transport or storage shall be capable of maintaining product/raw material temperature within specification, under maximum load, and whilst the product/raw material is stored on the vehicle or in the warehouse;
- (g) procedures shall, where appropriate, be in place in the case of equipment failure (e.g. refrigeration); these procedures shall ensure product safety and quality;
- (h) where the raw material, packaging materials or finished product transported is susceptible to damage by the weather, vehicles shall be weather proofed and shall be loaded and unloaded in covered bays to protect the material.
- (i) animal by-products and processed animal products shall be collected and transported in sealed new packaging or covered leak-proof containers or vehicles;
- (j) vehicles and reusable containers and all reusable items of equipment or appliances that come into contact with animal by products or processed animal products, shall be: cleaned, washed and disinfected after each use; maintained in a clean condition; and cleaned and dried before use;

- (k) re-usable containers shall be dedicated to the carriage of a particular product in order to avoid cross contamination;
- (l) unprocessed animal by-products that are fit for human consumption destined for the production of feed material or pet food shall be transported chilled or frozen, unless processed within 24 hours of the time at which it was generated; and
- (m) Packaging material shall be incinerated or disposed of in accordance with relevant legislation (s).

(18) Storage segregation procedures shall be in place to prevent the cross-contamination of finished products, packaging and raw materials, such that -

- (a) processed feed and packaging material shall be separated from unprocessed feed materials and additives, in order to avoid any cross-contamination of the processed feed or of the packaging material.

(19) Procedures shall be in place to ensure that materials and products are used in the correct order and within the allocated shelf life, such that -

- (a) receipt documents and/or product labelling shall facilitate correct stock rotation (F.I.F.O. - first in first out).

(20) The basis of the Pet food manufacturer's food safety system shall be a HACCP Plan which shall be systematic, comprehensive and thorough and shall be based on the Codex Alimentarius HACCP principles, such that -

- (a) the pet food manufacturer shall use the Codex HACCP principles to:
 - (i) conduct a hazard analysis;
 - (ii) determine the Critical Control Points (CCP);
 - (iii) establish the Critical Limits;
 - (iv) establish a system to monitor control of the CCP;
 - (v) establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control;
 - (vi) establish procedures of verification to confirm that a HACCP System is working effectively; and
 - (vii) establish documentation concerning all procedures and records appropriate to these principles and their applications.
- (b) the HACCP study shall be based on an assessment of risk, and shall identify which hazards are of such a nature that their elimination or reduction to acceptable levels is essential to the correct production of pet food; in conducting the hazard analysis, wherever possible, the following shall be included:
 - (i) the likely occurrence of hazards and severity of their adverse health effects;
 - (ii) the qualitative and/or quantitative evaluation of the presence of hazards;
 - (iii) survival and multiplication of micro-organisms of concern;

- (iv) production and persistence in pet foods of toxins, chemical or physical agents; and
- (v) conditions leading to the above.
- (c) HACCP shall have Senior Management commitment and shall be implemented through the Pet food manufacturer's quality management system;
- (d) the HACCP team leader or nominated team representative shall be able to demonstrate competence in the understanding of HACCP principles and their application;
- (e) key personnel identified as HACCP Team members shall have adequate training and experience;
- (f) the HACCP system shall be specific to the application, practical to implement and effective in controlling the associated hazards of the operation;
- (g) all existing and new products shall be covered by the HACCP system, which shall be reviewed on a regular basis (at least once a year) and shall be validated;
- (h) Critical Control Points, identified in relation to the operation, shall be controlled and monitored within predetermined Critical Limits; records of conformance and effective corrective action resulting from non-conformance shall be maintained;
- (i) the food safety management system shall consist of both a validated and verified prerequisite programme and a HACCP system, and through these, the pet food manufacturer shall be able to demonstrate effective food safety control of all operations undertaken; and
- (j) the HACCP study shall be carried out by a multi-disciplinary team.

(21) Traceability shall be applied and be the responsibility of each operator of the entire animal feed and pet food chain ("from farm to fork" or "from farm to feeding bowl"). The Manufacturer shall adequately identify all materials used in the livestock feed or pet food production (raw materials, additives, packaging, packaging materials), including the finished product, and be able to trace what occurred in all phases of production, and up to the distribution to the customer, such that -

- (a) the manufacturer shall work with a system of documentation designed to ensure an adequate level of traceability. Traceability is the capability to be able to identify any person from whom they have been supplied with feed materials, additives, packaging material or any substance intended to be, or expected to be, used for the production of feed. The manufacturer shall record and keep the following information for at least two years, or five years if the product contains GMOs, in order to ensure product traceability:
 - (i) the name and address of the suppliers (e.g. raw materials, additives/premixture, packaging) and the sources (as declared by the supplier) of these raw materials, including the batch number, quantity and delivery date;
 - (ii) the raw material registration number of the suppliers;
 - (iii) the nature, formulation and quantity of the finished products manufactured, along with the manufacturing date and batch number; Samples and records of each batch shall be retained in accordance with these regulations; and

- (iv) the name and address of the site where the batch of semi-finished or finished products are delivered.
 - (b) where rework or any reworking operation is performed, traceability shall be maintained.
- (22) The manufacturer shall identify each individual sales unit, such that -
 - (a) the manufacturer shall establish and maintain documented procedures for identifying materials from reception through production to finished products; finished products shall be labelled to ensure traceability to batch.
- (23) The Manufacturer shall have an effective product recall procedure for all products in the distribution network, such that -
 - (a) the manufacturer shall implement a system for the prompt recall of products in the distribution network;
 - (b) should a product be delivered, which does not meet the food safety requirements, the manufacturer has to recall these products from the distribution network; the manufacturer has to take care that the products will not be put back into circulation unless they have undergone a risk assessment and, if required, treated in an appropriate way; the manufacturer, therefore, shall have a recall procedure implemented; a Rapid Alert System shall be in place, which is the obligation to inform the registrar, in case a product recall is necessary;
 - (c) the procedure shall be: appropriate; formalised; capable of being operated at any time within four hours; the procedure shall be regularly reviewed and revised as appropriate; and
 - (d) the procedure shall be regularly tested in a manner that is appropriate to ensure its effective operation.
- (24) A hazard analysis study (HACCP) shall be undertaken during the design/development phase of the product, packaging and process to identify and assess all potential safety hazards (Codex Alimentarius, 1997 (II)), such that -
 - (a) the feed shall be designed to produce a safe feed and meet the nutritional requirements of the animal;
 - (b) the manufacturer shall, where appropriate, undertake factory trials and carry out testing to verify if product formulation and manufacturing processes are capable of producing a nutritionally well balanced and safe product;
 - (c) shelf life shall be established, taking into account the product formulation, production process, packaging process and packaging and subsequent storage conditions; and
 - (d) packaging, process and the material used in the manufacture shall assure feed safety.
- (25) Ingredients have to be mixed to produce a safe feed, such that -
 - (a) the presence of prohibited feed materials, undesirable substances, prohibited substances and pathogens in relation to animal or human health shall be monitored and appropriate control strategies to minimise the risk shall be in place;
 - (b) this regulation establishes a list of products whose use as feed materials is prohibited; the manufacturer shall make sure that the products included on the list

of prohibited products are not used; certain feed materials and additives are subject to restriction for use in certain species; the manufacturer shall make sure that they are used accordingly and that the risks of accidental contamination are controlled/eliminated; and

- (c) only permitted additives can be used and mixed in appropriate quantities and homogeneously with the feeding materials, in order to ensure that they are only present in non-toxic quantities.

(26) The Manufacturer shall operate procedures for approval and monitoring of its suppliers, including finished and semi-finished products manufactured by third parties, such that -

- (a) a Vendor/Supplier Assurance (VA) programme shall exist to control the purchase of raw materials and packaging materials from approved suppliers; this programme shall document all standards and monitoring procedures dealing with primary production, inbound raw material and packaging and transport;
- (b) specifications, based on risk assessment, for raw materials, semi-processed products (where supplied to other factories) and packaging materials shall be documented and implemented; the specification may include detail on analytical, nutritional requirements as well as food safety and hygiene requirements; there shall be a list of approved suppliers
- (c) appropriate methods of assessment/inspection of suppliers shall be performed with the frequency and type of audit being determined by risk assessment; assessment may take the form of monitoring performance through in-house checks, certificates of analysis or extend to supplier inspection, as appropriate;
- (d) supplier assessment shall include the suppliers' ability to trace back to their supplier, evaluation of HACCP systems, product safety information and legal requirements; the methods and frequency of assessment shall be based on formal risk assessment; and
- (e) the procedures shall define how materials of unknown origin are handled.

(27) The Manufacturer shall operate procedures for monitoring the quality and safety of raw material at delivery, such that -

- (a) each feed material, additive and packaging material shall have a written specification which is regularly updated; in addition to the nutritional and analytical characteristics of the feed material, this written specification shall include a list of approved origins and sources, details of any processing that the material has undergone, types of feedstuffs in which its use is approved, notes on any hazards or limitations on its use and any special characteristics of the feed material;
- (b) monitoring at delivery shall ensure that the feed materials and additives are traceable, conform to quality and safety specifications, delivered by an approved or registered supplier, when the products are covered by an approval or registration procedure;
- (c) a record shall be kept of the origin of each feed material and additive delivered;
- (d) suppliers delivering animal by-products shall meet specific registration, production process and analytical requirements; and
- (e) a raw material/packaging acceptance procedure shall exist and each material shall be checked (against the specification) following a schedule of examination that takes into account its critical importance, as identified by risk assessment, in the

final product, for example using certificates of analysis, sampling of the material on arrival.

Keeping of records

28. (1) The Manufacturer shall have a clearly defined and documented quality policy statement and quality objectives, such that -

- (a) the policy shall state the manufacturer's intentions to meet its obligations to produce safe products, and its responsibility to its customers; the policy shall also include the commitment of continuously improving the effectiveness of the quality management system;
- (b) quality objectives shall be established, implemented and reviewed; targets shall be defined and quality indicators shall be monitored in order to follow quality performance and trends; a regular evaluation of the data shall be a critical tool for continuous improvement of products and services which are delivered to the customer;
- (c) the manufacturer's Directors and Senior Management shall demonstrate commitment to the implementation of the manufacturer Quality Policy; and
- (d) the policy and the objectives, as well as the actual quality performance/trends shall be communicated throughout the company, and regularly reviewed.

(2) The Manufacturer shall have an organisational structure, clearly defined and documented, reflecting the effectiveness of all the required tasks and detailing personal responsibility and reporting relationships of the staff involved in the production process; in particular those activities affecting product safety and quality, such that -

- (a) the manufacturer's Directors shall be responsible for manufacturer policy and objectives, and shall provide adequate resources and investment to ensure product safety and quality; a qualified person responsible for quality and feed safety shall be designated;
- (b) the manufacturer's Directors shall ensure that all employees are aware of their responsibilities and mechanisms are in place either to monitor the effectiveness of their operation and/or to trigger corrective actions;
- (c) the manufacturer shall ensure that levels of responsibility and accountability are clearly defined for key staff involved with the production process, product safety, legality and quality systems; to this end, job descriptions and an organisation chart setting out qualifications and responsibilities of the supervisory staff shall be drawn up and made available to the registrar for inspection; a qualified person responsible for production shall be designated; there shall be appropriate arrangements in place to cover for the absence of key staff;
- (d) the manufacturer shall have a system in place to ensure that it is kept informed of all relevant legislation, food safety issues as well as, legislative, scientific and technical developments; and
- (e) the manufacturer shall ensure that adequate resources are available for training all employees, in particular new employees.

(3) The Management shall review the quality management system on a regular basis, such that -

- (a) senior management shall review the organisation's quality management system, at planned intervals, to ensure its continuing adequacy and effectiveness; this review shall include an assessment of any opportunity for improvement, as well as

an assessment of the need to change the quality management system, including the quality policy and quality objectives.

(4) The Manufacturer shall have, and operate in accordance with written detailed procedures, instructions, and reference documents to cover all relevant aspects of product safety and quality, such that -

- (a) documents shall be clearly legible, unambiguous and sufficiently detailed to enable effective use by appropriate personnel and shall be readily accessible at all times.

(5) The Manufacturer shall ensure that all documents, records and data critical to the management of product safety and quality, are in place and effectively controlled, such that -

- (a) the Manufacturer shall keep in a register, relevant data comprising details of purchase, transport, production and sales for effective tracing from receipt to delivery;
- (b) the documentation relating to the manufacturing process shall be designed to define and control the critical points in the manufacturing process and to establish and implement a quality control plan;
- (c) the commercial documents and health certificates shall be kept for a period of at least 2 years for presentation to the registrar; and
- (d) all documents in use shall be properly authorised and be the versions as issued by the manufacturer.

(6) The Manufacturer shall maintain records to demonstrate the effective control of product safety and quality. These records shall include product samples as appropriate, such that -

- (a) the manufacturer shall have access to a laboratory with adequate staff and equipment;
- (b) a quality control plan shall be drawn up in writing and implemented, to include, in particular, checks on the critical points, sampling procedures and frequencies, methods of analysis and their frequency, compliance with the specifications;
- (c) The manufacturer shall operate procedures for collation, review, maintenance, storage and retrieval of all records appertaining to product safety and quality; and
- (d) the records shall be retained in good condition, for an appropriate defined period, but not less than two years.

(7) The Manufacturer shall have in place a procedure to inform, as appropriate, the registrar in case of hazards related to the product, such that -

- (a) the manufacturer processing animal by-products shall inform the registrar, should the laboratory examination of samples or any other information available reveal the existence of a serious animal health or public health hazard;
- (b) the manufacturer processing stock remedies into feed shall inform the registrar, should the laboratory examination of samples or any other information available reveal the existence of a serious animal health or public health hazard;
- (c) the manufacturer processing contaminated animal feed shall inform the registrar, should the laboratory examination of samples or any other information available reveal the existence of a serious animal health or public health hazard; and

- (d) the manufacturer processing animal feed that contains undesirable substances shall inform the registrar, should the laboratory examination of samples or any other information available reveal the existence of a serious animal health or public health hazard.

(8) The Manufacturer shall ensure that appropriate specifications exist for -

- (a) raw materials;
- (b) packaging materials;
- (c) processing;
- (d) finished products;
- (e) intermediate/semi-processed products (where appropriate);
- (f) transport & Warehouse;

(9) The Manufacturer shall ensure that specifications according to regulation 27(9) shall be adequate, accurate, and shall ensure compliance with Legal Metrology Act, 2014 (Act No. 9 of 2014).

(10) The Manufacturer shall audit those systems and procedures, which are critical to product safety and quality, to ensure they are in place, appropriate and complied with, such that -

- (a) internal audits shall be carried out by competent auditors, who shall be independent of the area of operation being assessed; and
- (b) documentary results of the internal audit shall be brought to the attention of the personnel responsible for the activity audited; corrective actions and time-scales for their implementation shall be agreed.

(11) The Manufacturer shall, when necessary, put in place investigation on processes to assess the cause of significant non-conformity with standards, specifications and procedures, which are relevant to product safety (according to HACCP principles and procedures) and quality such that -

- (a) causes of problems, when clearly identified, shall be used to re-engineer processes and/or procedures to avoid recurrence of the non-conformity; this information shall also, whenever possible, be used to predict potential problems and to amend working practices to ensure that problems do not occur;
- (b) corrective actions shall be undertaken in a timely manner to prevent a reoccurrence of the non-conformity;
- (c) corrective actions shall be accurately documented, assigning responsibility and accountability;
- (d) HACCP is the recommended tool when taking preventive actions; a careful and detailed assessment of hazards from the product development stage up to consumption shall be performed for all products; and
- (e) changes in existing or new production lines, equipment or products, shall be based on HACCP study/review.

(12) The Manufacturer shall have a system in place for the registration and management of product complaints, such that -

- (a) the manufacturer shall implement a system for registering and processing complaints and a system for the prompt recall of products in the distribution

network; recalled products shall only be put back into circulation after undergoing a quality-control reassessment;

- (b) appropriate actions to the seriousness and frequency of the problems identified, shall be carried out promptly and effectively;
 - (c) complaint records and data shall, where appropriate, be used to improve the product safety and quality, and seek to avoid a reoccurrence;
 - (d) pet food safety complaints shall be evaluated in the light of the current HACCP plan and the defined Critical Control Points; the evaluation may lead to a review of the HACCP plan; and
 - (e) livestock feeds complaints shall be evaluated in light of good manufacturing practices.
- (13) The Manufacturer shall continuously improve the quality management system such that -
- (a) the Manufacturer shall continuously improve the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions, management review and maintaining up to date documentation.

PART IX RESTRICTED AND CONTROLLED SUBSTANCES

Undesirable substances in raw materials

29. (1) Feedstuffs for use in animal feed may not be sold in the Republic of South Africa unless they are sound, genuine and of merchantable quality;

(2) In particular, feedstuffs for use in animal feeds cannot be considered as sound, genuine and of merchantable quality if the level of undesirable substances or products is so high as to make it impossible to respect the maximum levels fixed for mixed or complete animal feeds in the Farm Feeds undesirable substances regulations;

(3) The undesirable substances and products present in feedstuffs listed in the Farm Feeds Undesirable substances regulations shall be tolerated in animal feeds only under the conditions set out in sub-regulation 29(2);

(4) The feedstuffs intended for use in animal feeds may only be sold if their content of the undesirable substance or product mentioned in these regulations does not exceed the maximum level specified in the Farm Feeds Undesirable substances regulations;

(5) Where the content of the undesirable substance or product listed in the Farm Feeds Undesirable substances regulations exceeds the maximum level laid down in column 3 of Table 1, in respect of an unmixed animal feed ingredient or raw material, the raw material may, without prejudice to sub-regulation (3), be sold only if it is intended for use by an establishment which has received written permission from the registrar to do so, and if the undesirable substance concerned is accompanied by a document stating –

- (a) that the raw material is intended for manufacturers of mixed or complete animal feeds that have been given permission by the registrar;
- (b) that the raw material will not be fed unprocessed to animals; and
- (c) the quantity of the undesirable substance in the feedstuffs.

(6) Establishments wishing to receive raw material specified in sub-regulation (5) shall apply in writing to the registrar for such permission. The registrar may, at his discretion, inspect the establishment concerned, before either granting or refusing in writing the request for permission;

(a) establishment which are granted permission to receive raw materials specified in sub-regulation (5) shall comply with the following requirements -

(i) the raw material shall not be sold to the general public;

(7) Where a person, as a result of new information or of a reassessment of existing scientific information made since the provisions in question were adopted, has detailed grounds for establishing that a maximum content fixed in the applicable regulations or a substance or product not listed therein constitutes a danger to animal or human health or the environment, that person shall inform the registrar immediately, giving his reasons. The registrar shall investigate the matter and make a decision on whether the farm feeds undesirable substances regulation should be modified or not;

(8) Any person who possesses, or has possessed or has had direct contact with a consignment of animal feeds which does not comply with this regulation shall immediately inform the registrar, even if the destruction of the consignment is envisaged. The registrar shall take the necessary measures to ensure that the necessary measures are taken to ensure that the consignment is not used in animal nutrition and that the final destination of the contaminated consignment, including possible destruction, cannot have harmful effects on public or animal health or on the environment.

Additives in supplementary and concentrated animal feeds

30. In the case of a complementary, supplementary and concentrated animal feed which contains any additive in excess of the maximum content specified for that additive in relation to the complete animal feed, the instruction for use shall state, according to the species and age of the animal, the maximum quantity in grams or kilograms of the animal feed to be given per animal per day, and shall be so formulated that, when they are correctly followed, the final content of the additive does not exceed the maximum so specified. This sub-regulation shall not apply to products delivered to manufacturers of complete animal feeds or to their suppliers.

Addition of substances possessing medicinal properties to farm feeds

31. A product which complies with the requirements referred to in these regulations, and to which a substance possessing medicinal properties is added, may be registered as an animal feed in term of the applicable regulations if –

(1) In case of a substance of which the use is regulated under the Medicines and Related Substances Control Act, 1965 (Act 101 of 1965) or under the Foodstuffs, Cosmetics and disinfectants Act, 1972 (Act no. 54 of 1972), the registrar has approved the addition of that substance to such an animal feed;

(2) In the case of any other substance, that substance is registered under section 3(2) of the Act as a stock remedy;

(3) Stock remedies shall only be used in animal feeds taking account of the maximum and minimum levels set in the approved label of the product for application in the final product;

(4) The mixing of medicinal substances shall only be permitted in animal feeds where there is physio-chemical and biological compatibility between the components of the mixture in relation to the effects desired; and

(5) The registrar shall maintain a database of all registered and approved medicinal substances for use in animal feeds.

Stock Remedies in supplementary and concentrated farm feeds

32. In the case of a complementary, supplementary and concentrated animal feed which contains any stock remedy in excess of the maximum content specified for that stock remedy in relation to the complete farm feed by the applicable annexure of the farm feeds general guidelines, the instruction for use shall state, according to the species and age of the animal, the maximum quantity in grams or kilograms of the animal feed to be given per animal per day, and shall be so formulated that, when they are correctly followed, the final content of the stock remedy does not exceed the maximum so specified.

PART X DATABASE

Registered feedstuffs

33. The registrar shall maintain a database of all feedstuffs registered as animal feeds for use in animal feeding.

PART XI INSPECTIONS

Routine inspections

34. An officer delegated under section 2(2)(a) of the Act shall perform routine inspection at manufacturing establishments at least once a year. The officer shall verify the following –

- (1) There is compliance to hygienic requirements and standards of the premises, equipment and staff;
- (2) The effectiveness of own checks conducted by plant management in accordance with manufacturers own procedure developed to comply with the requirements of this regulation, particularly in taking samples and examining the results;
- (3) The standard of products after processing, analyses and test are carried out in accordance with scientifically recognized methods;
- (4) Availability of good storage facilities and conditions;
- (5) Make the following validation inspections -
 - (a) description of the manufacturing process by a process of flow diagram;
 - (b) identification of critical control points (CCPs) including the material process rate for continuous systems; and
 - (c) compliance with specific process requirements as stipulated in these regulations.
- (6) The registrar shall be entitled to inspect establishments at random, take random samples and take all necessary measures to ensure that animal feeds conform to this regulation.

Sampling of animal feeds

35. (1) (a) an animal feed which is sold in containers shall be sampled by selecting at different places from the stock of a particular animal feed the number of containers required to obtain a sufficient quantity of such an animal feed for a sample;
- (b) such containers shall be similarly marked or labelled and shall contain an animal feed originating from the same batch or series;

- (c) if a sample is composed of the contents of more than one container, such sample shall be thoroughly mixed before being divided in terms of section 15(3)(c) of the Act;
 - (d) notwithstanding the provisions of paragraph (a) at least three sealed containers in which an animal feed is sold, may also be taken as the sample of such an animal feed, and the containers comprising such sample shall, without being opened, be delivered in terms of section 15(3)(c) of the Act.
- (2)
- (a) an animal feed which is not sold in a container shall be sampled by taking small quantities at different places from the stock of such an animal feed to obtain sufficient quantity for a sample;
 - (b) such a sample shall be thoroughly mixed before being divided in terms of section 15(3)(c) of the Act.
- (3) The provisions of sub-regulation (2) shall *mutatis mutandis* apply to the sampling of animal feed referred to in sub-regulation (1) prior to the packaging thereof in containers, and to the sampling of feedstuffs used in the manufacture of animal feed;
- (4) A certificate in terms of section 15(4)(b) of the Act relating to a sample of an animal feed which is forwarded to an analyst shall be in a form of Annexure 1;
- (5) A certificate in terms of section 15(4)(b) of the Act relating to the result of a test, examination or analyses of a sample of an animal feed shall be in the form of Annexure 2;
- (6) That part of a sample of an animal feed which is referred to in section 15(4)(c) of the Act -
- (a) shall, if a certificate referred to in sub-regulation (5) indicates that such sample is not of the composition specified in the application for registration of the animal feed in question, or in an application in terms of regulation 11 in connection therewith, does not possess the chemical, physical or other properties so specified or does not comply with any requirements referred to in these regulations, be retained until the action arising from such certificate is concluded;
 - (b) may otherwise be destroyed.

Analysis method

36. (1) In the case of a dispute and for annual testing, laboratories performing such analyses shall be accredited by SANAS or ILAC to perform such specific analysis, in the case where an accredited laboratory cannot be found the registrar shall appoint an independent laboratory to conduct such an analysis.

Permissible deviations in mixed and unmixed animal feed

37. An animal feed is not considered to have a deficiency of one or another of its registered nutrients as long as it is within the limits set out in Table 13(a), (b) and (c).

PART XII GENERAL

Offences and Penalties

38. Anyone who refuses or omits to comply with the provisions of these regulations shall be guilty of an offence and upon conviction in a court of law shall be liable to a fine not less than R1000 or imprisonment for a period not more than 2 years or to both the fine and imprisonment.

Payment of fees

39. (1) The postal charges on and the delivery costs of an application or documents submitted under these regulations as well as the postal charges and the delivery costs of anything else in connection therewith must be paid by the sender;

(2) Any fee payable in terms of these regulations shall be paid by means of a cheque, postal order, money order in favour of the Director-General: Agriculture, Reference: Farm Feeds; if such payment is delivered by hand, they may be paid in cash in which case a receipt shall be issued, and if such fees are paid electronically through an Electronic Transfer Account payment shall be made as follows;

Account name: NDA-ACT36 of 1947
 Account number: 11203102
 Reference: 11 F1
 Branch code: 010845
 Branch name: Arcadia
 Bank name: Standard Bank

(3) Fees paid in terms of these regulations, except in terms of Section 6 of the Act, are not Refundable.

Address for submission

40. An application or item or anything connected therewith that under these Regulations has to be submitted to the registrar, must –

- (a) when sent by post, be addressed to – The Registrar: Act No. 36 of 1947, Private Bag X250, Pretoria, 0001; and
- (b) when sent by rail, delivered by hand, or delivered by a private courier service, be addressed to or delivered to – The Registrar: Act No. 36 of 1947, Agriculture Place, 20 Steve Biko Road, Arcadia, 002, Pretoria.

Amendment and Repeal of certain Regulations

41. The following Regulations are hereby repealed:

- (1) Regulations relating to Farm Feeds published under Government Gazette Notice No. R. 1087 of 03 November 2006;
- (2) Regulations relating to Farm Feeds published under Government Gazette Notice No. R. 70 of 12 February 2010;
- (3) Regulations relating to Farm Feeds published under Government Gazette Notice No. R. 552 of 25 June 2010; and
- (4) Regulations relating to Farm Feeds published under Government Gazette Notice No. R. 789 of 10 September 2010.

TABLE 1
PROHIBITED INGREDIENTS
REG. 11(4) d)]

1.	Faeces, urine as well as separated digestive tract content resulting from the emptying of or removal of the digestive tract.
2.	Processed hide and 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, sawdust and other materials derived from wood treated with wood protection products.
5.	Sludge from sewage plants treating waste waters.
6.	Solid urban waste, such as household waste.
7.	Untreated waste from eating places.
8.	The packaging and parts of packaging or the use of products from the agri-food industry.
9.	Untreated or unsterilized poultry litter.
10.	Processed hair and its by-product.
11.	Xylitol in pet food.
12.	Amaranth dye.
13.	NPN in pet food.
14.	Mammalian protein and by-product in feed for ruminant animals.

TABLE 2
REQUIREMENTS FOR COMPLETE, COMPLEMENTARY, SUPPLEMENTARY AND CONCENTRATED
ANIMAL FEED
(REG. 16 & 19)

1	2	1	2
Kind of animal	Kind of animal feed	Kind of animal	Kind of animal feed
Broiler	Pre-starter	Fish	Starter
	Starter	Abalone	Grower
	Grower	Cat fish	Breeder
	Finisher	Carp	Maintenance
	Post finisher	Gold fish	Complete
	Supplement	Koi	Supplement
	Concentrate	Marron	Concentrate
		Tilapia	
		Trout	
Broiler Breeder	Pre-starter	Crocodile	Starter
	Starter		Grower
	Grower		Maintenance
	Developer or Pre-lay		Complete
	Layer		Supplement
	Layer (late phase)		Concentrate
	Supplement		
	Concentrate		
Chickens	Chick starter	Pigeon	Complete
	Pullet grower		Maintenance
	Pullet developer or Pre-lay		Breeder
	Laying		Racing
	Laying (late phase)		Supplement
	Supplement		Concentrate
	Concentrate		Seed and grain mixture
	Seed and grain mixture		
Turkey	Starter	Parrot	Complete
	Grower		Maintenance
	Pullet developer		Supplement
	Finisher		Concentrate
	Pre-breeder		Seed and grain mixture
	Breeder		
	Supplement		
	Concentrate		
Duck	Starter	Rabbit	Complete
			Production
Geese	Grower		Maintenance
	Finisher		Supplement
	Developer		Concentrate
	Breeder		
	Supplement		
	Concentrate		

Ostrich	Maintenance	Chinchilla	Complete
	Pre- starter		Production
	Starter		Maintenance
	Grower		Supplement
	Finisher		Concentrate
	Slaughter		Seed and grain mixture
	Breeder (<i>ad lib</i>)		
	Breeder (restricted)		
	Supplement		
	Concentrate		
Horse	Full grown	Mice & Rat	Maintenance
	Brood mares		Production
	Weanlings		Complete
	Yearlings		Supplement
	Supplement		Concentrate
	Concentrate		
Pig	Creep	Game	Grower
	Weaner		Complete
	Grower		Maintenance
	Finisher		Drought
	Dry sow and boar		Supplement
	Lactating sow		Concentrate
	Supplement		
	Concentrate		
Sheep & Goat	Milk Replacer	Beef	Milk Replacer
	Acidified Milk Replacer		Acidified Milk Replacer
	Grower		Grower
	Finisher		Finisher
	Ram		Complete
	Ewe & Lamb		Bull
	Complete		Drought
	Drought		
	Supplement		
	Concentrate		
Dairy	Complete	Dairy Calves	Starter
	Semi-complete		Grower
	Concentrated dry cow		Complete
	Concentrated dry cow + anionic salts		Supplement
	Concentrated dairy feeds		Concentrate
	Supplement		
	Concentrate		
Dogs	Complete	Cats	Complete
	Supplement		Supplement
	Complementary		Complementary
All animals	Feed additives (technological, nutritional, sensory and zootechnical)		

TABLE 3
NUTRIENT REQUIREMENTS FOR COMPLETE DOG FOOD PER KILOGRAM DRY MATTER (DM)
(Based on 65 % digestibility)
(REG. 17)

Nutrient	Unit/kg DM ^a	Adult and senior Minimum ^b	All life stages (Puppies, junior and breeding) Minimum ^b	Maximum
Crude protein ^d	g	200	245	
Arginine ^e	g	6.1	7.6	
Histidine ^e	g	2.2	2.8	
Isoleucine ^e	g	4.3	5.4	
Leucine ^e	g	7.0	8.8	
Lysine ^e	g	6.2	7.7	
Methionine-cystine ^e	g	4.6	5.8	
Phenylalanine-tyrosine ^e	g	8.3	10.8	
Threonine ^e	g	6.5	7.0	
Tryptophan ^e	g	1.8	2.3	
Valine ^e	g	4.6	5.8	
Crude fat	g	50	70 ^f	
Crude fibre ^c	g	-	-	50
Ash	g	-	-	100
Linoleic acid	g	10	10	
Calcium	g	7.2	10	Adult: 25 ^h
				Early growth (8 months): 16
				Late growth (8 months): 18
Phosphorus	g	6.0 ^g	9	Adult: 12,5
				Early growth (8 months): 8
				Late growth (8 months): 9
Calcium: Phosphorus ratio ^k	Not applicable	1:1	1:1	Adult: 2:1
				Early growth (8 months): 1.6:1
				Late growth (8 months): 1.8:1
Potassium	g	6.0	6.0	
Sodium	g	0.5	0.7 ⁱ	
Chloride ^j	g	0.8	1.0	
Magnesium	g	0.4	0.4	
Iron ^k	mg	50 ^l	80	1 500
Copper	mg	4.0 ^l	7.3	250
Manganese	mg	5.0	5.0	
Zinc ^m	mg	120	120	1 000
Iodine	mg	0.7 ^l	1.5	50
Selenium	mg	0.11	0.11	2
Vitamin A ⁿ	IU	5 000	5 000	400 000
Vitamin D	IU	500	500	5 000

Vitamin E ^o	IU	30l	50	
Vitamin K ^p	mg	-	-	
Pantothenic acid	mg	10	10	
Thiamin	mg	1.0	1.0	
Riboflavin	mg	2.2	2.2	
Niacin	mg	11	11	
Pyridoxine	mg	1.0	1.0	
Folic acid	mg	0.18	0.18	
Vitamin B12	mg	0.022	0.022	
Choline	mg	1 200	1 200	
Biotin ^q	mg	-	-	

NOTE 1: Maximum values are based on American Association of Feed Control Officials (AAFCO) 2009 and RSA regulatory requirements. Where differences exist with AAFCO 2009, explanations are provided (see also note 2 and footnotes (a) to (q) of this table). Maximum values are only given for nutrients where a toxic level has been established in dogs. For nutrients where no value is provided, although the nutrient may still be toxic in the dog if consumed at high levels, no data exist specifying the toxic level in this species.

NOTE 2: Because processing may destroy up to 90 % of the thiamin in the diet, allowances in formulation should be made to ensure the minimum nutrient level is met after processing.

- a. Conversion of units/MJ to units/100 g on dry matter (DM) basis or units/1 000 kcal shall be obtained by multiplying units/MJ by 1.6736 and 4.184 respectively. The conversion from units/MJ to units /100 g (DM) assumes that the diet has an energy density of 14.64 MJ (3 500 kcal)/kg metabolisable energy (ME). Rations greater than 16.74 MJ (4 000 kcal)/kg should be corrected for energy density. Rations less than 14.64 MJ (4 000 kcal) should not be corrected for energy density.
- b. Values are suitable for products of average (65 %) DM basis. Digestibility and availability shall be defined. These values shall be increased in products of lower digestibility and availability. Values in this table are principally based on published recommendations of the National Research Council (NRC) 2006 +25 % and NRC 2006 +35 % for protein, amino acids and certain minerals (see also note 1 and note 2 and footnotes (a) to (q) of this table). Where differences exist between the RSA regulations and NRC 2006 + 25 % or NRC 2006 + 35 %, explanations are provided (see also note 1 and note 2 and footnotes (a) to (q) of this table)
- c. Legal maximum crude fibre level to ensure energy density and digestibility.
- d. Adult maintenance requirement based on AAFCO 2013 plus 10% to compensate for the quality and digestibility of local protein sources. A lower level of protein may be adequate. However, manufacturers should ensure that the bioavailability of minimum 72% protein and its constituent amino acids, as well as the amino acid pattern, are in line with current scientific recommendations and have biological testing to support data.
- e. The level of essential amino acids for "adult minimum" is based on NRC 2006 for growth plus 10 % and for all life stages on NRC 2006 for growth plus 35%. In practical diets the level of essential amino acids should be at least as high as the values stated. A lower level of essential amino acids may be adequate. However, as long as minimum values stated by NRC 2006 are met and manufacturers can ensure the bioavailability of the amino acids and have biological testing to support data.
- f. Based on AAFCO 2009. There is no evidence to support increased requirement for crude fat in growing puppies, but a higher value was deemed necessary for breeding to support lactation.
- g. Based on NRC 2006 + 35% due to high cereal and cereal by product inclusions in typical products that could result in a decrease in the bioavailability of phosphorous.
- h. Calcium:Phosphorus ratio is a regulatory requirement for product validations. Maximum calcium level based on double the maximum phosphorus level to compensate for the high calcium content in local animal protein sources. This high calcium level could be harmful for puppies. Manufacturers should ensure that the calcium level does not exceed 18 g/kg for puppy diets.
- i. Studies in dogs have demonstrated that 45.5 mg/MJ (0.19 g/1 000 kcal) sodium is adequate for all life stages. Based on Czarmecki-Maulden, Deming and Izquierdo, Evaluation of practical dry dog foods suitable for all life stages. *Journal of American Veterinary Medical Association*. 1989, **195**(5), 583-590.
- j. Value based on assumption that chloride is provided as NaCl (see footnote (i)).
- k. Because of very poor bioavailability, iron from carbonate or oxide sources that are added to the diet should not be considered as components in meeting the minimum nutrient level.
- l. Based on NRC 2006 + 25%.
- m. Based on AAFCO 2009 providing adequate allowance for high cereal and cereal by product inclusions in locally produced diets.
- n. Based on Hathcock, Hattan, Jenkins et al., Evaluation of vitamin A toxicity. *American Journal of Clinical Nutrition*. 1990, 52, 183-202.

- o. Requirement depends on intake of polyunsaturated fatty acids (PUFA) and other antioxidants. A fivefold increase may be required under conditions of high PUFA intake.
- p. Vitamin K does not need to be added unless diet contains antimicrobial or antivitamin compounds.
- q. Biotin does not need to be added unless diet contains antimicrobial or antivitamin compounds.

TABLE 4
NUTRIENT REQUIREMENTS FOR COMPLETE CAT FOOD PER KILOGRAM DRY MATTER (DM)
(Based on 65 % digestibility)
(REG. 17)

Nutrient	Unit/kg (DM) ^a	Adult and senior Minimum ^b	All life stages (Kittens, junior and breeding) Minimum ^b	Maximum
Crude protein	g	275	310 ^d	
Arginine ^f	g	8.8	11.0	
Histidine ^f	g	2.6	3.3	
Isoleucine ^f	g	4.4	5.5	
Leucine ^f	g	10.6	13.2	
Lysine ^f	g	7.0	8.8	
Methionine-cystin ^f	g	6.6	8.3	
Methionine ^f	g	3.5	4.4	
Phenylalanine-tyrosine ^f	g	7.5	9.4	
Threonine ^f	g	6.2	7.7	
Tryptophan ^f	g	1.3	1.7	
Valine ^f	g	5.3	6.6	
Crude fat Total fat	g	90	90	
Linoleic acid	g	5.0	5,0	
Arachidonic acid	mg	200	200	
Crude fibre	g	Not applicable	Not applicable	45 ^c
Calcium	g	7.1	10	
Phosphorus	g	6.0	8,4	
Calcium:Phosphorus ratio ^k	Not applicable	1:1	1,5:1	2:1
Potassium	g	6.0	6,0	
Sodium	g	0.6 ^h	2,0	
Chloride	g	0.9 ⁱ	3,0	
Magnesium	g	0.3 ^j	0,5 ^e	
Iron ^k	mg	80	100 ^e	
Copper ^l	mg	5.0	10 ^m	
Manganese	mg	5.0	10 ^e	
Zinc ^{kn}	mg	75	75	2 000
Iodine	mg	0.3	1,0 ^e	
Selenium	mg	0.11	0,11	
Vitamin A	IU	3 330 ^h	9 000	400 000 ^o
Vitamin D	IU	250 ^g	750	10 000
Vitamin E ^p	IU	30	30	
Vitamin K	mg	100	100	
Thiamin ^q	mg	5.0	5,0	

Riboflavin	mg	4,0	4,0	
Pantothenic acid	mg	5,0	5,0	
Niacin	mg	40 ^h	40 ^h	
Pyridoxine	mg	2,5 ^f	4,0	
Folic acid	mg	0,8	0,8	
Vitamin B12	mg	0,02	0,02	
Choline ^s	mg	2 400	2 400	
Biotin ^t	mg	70	70	
Taurine (wet)	g	2,5	2,5	
Taurine (dry)	g	1,0	1,0	

NOTE 1: Maximum values are based on American Association of Feed Control Officials (AAFCO) 2009 and the RSA regulatory requirements. Where differences exist with AAFCO 2009 explanations are provided (see note 2 and footnotes (a) to (t) of this table). Maximum values are only given for nutrients where a toxic level has been established in cats. For nutrients where no value is provided, although the nutrient may still be toxic in the cat if consumed at high levels, no data exist specifying the toxic level in this species.

NOTE 2: Vitamin K does not need to be added unless the diet contains antimicrobial or antivitamin compounds, or contains more than 25% fish on a DM basis. Based on Strieker, Morris, Feldman and Rogers, Vitamin K deficiency in cats fed commercial fish-based diets. *Journal of Small Animal Practice*. 1996, **37**(7), 322-326.

- a. Conversion of units/MJ to units/kg on dry matter (DM) basis or units/1 000 kcal shall be obtained by multiplying units/MJ by 1.6736 and 4.184 respectively. The conversion from units/MJ to units/kg DM assumes that the diet has an energy density of 16.7 MJ (4 000 kcal)/kg metabolisable energy (ME). Rations greater than 18.8MJ (4 500 kcal)/kg should be corrected for energy density. Rations less than 16.7Kj (4 000 kcal) should not be corrected for energy density.
- b. Values are suitable for products of average 65 % digestibility and availability. These values shall be increased in products of lower digestibility and bioavailability. Values in this table are principally based on published recommendations AAFCO 2009 plus 10% for protein, amino acids and certain minerals (see note 1 and note 2 and footnotes (a) to (t) of this table). The majority of AAFCO 2009 recommendations are based on National Research Council (NRC) 1986 recommendations plus 25% to allow for practical diets. Where differences exist between the RSA regulations and AAFCO 2009, explanations are provided (see note 1 and note 2 and footnotes (a) to (t) of this table). Values below the recommended minimum may still be adequate as long as minimum values stated by NRC 2006 are met and manufacturers can ensure bioavailability and have biological testing done to support data.
- c. Legal maximum crude fibre level to ensure energy density and digestibility.
- d. Based on NRC 2006 plus 10%.
- e. Based on NRC 2006.
- f. The level of essential amino acids for “adult minimum” is based on NRC 2006 minimum recommendations for growth plus 10% and for all life stages on NRC 2006 for growth plus 35%. In practical diets the level of essential amino acids should be at least as high as the values stated. A lower level of essential amino acids may be adequate. However, manufacturers should ensure that the bioavailability of minimum 72% protein and the amino acid profile satisfies the minimum values stated.
- g. Based on Morris and Earle, Vitamin D and calcium requirements of kittens. *Veterinary Clinical Nutrition*. 1996, 3, 93-96.
- h. Based on Yu and Morris, The minimum sodium requirement of growing kittens defined on the basis of plasma aldosterone concentration. *Journal of Nutrition*. 1997, **127**(3), 494-501.
- i. Values based on the assumption that the chlorine provided is as NaCl.
- j. Studies have demonstrated that 10 mg/MJ will maintain adult cats. This value has been doubled to accommodate interactions with other dietary factors. Based on Pastoor, *Interaction of dietary minerals in the cat*. 1993, Doctoral thesis. Utrecht: University of Utrecht.
- k. Because of very poor bioavailability, iron from carbonate or oxide sources that are added to the diet should not be considered as components in meeting the minimum nutrient level. Foods high in zinc, iron, or soy (or both) or other sources of phytic acid should be at a minimum of 0.9 mg/MJ.
- l. Due to its low bioavailability, copper oxide should not be considered as a copper source.
- m. Based on Facetti, Morris and Rogers, Dietary copper influences reproductive efficiency of queens. *Journal of Nutrition*. 1998, **128**(12).
- n. Based on AAFCO 2009 providing adequate allowance for high cereal and cereal by product inclusions in locally produced diets.
- o. Based on Seawright, English and Gartner, Hypervitaminosis A and deforming cervical spondylosis of

- the cat. *Journal of Comparative Pathology*. 1967, 77, 29-39.
- p. Add 10 IU vitamin E above minimum level per gram of fish oil per kilogram (16.7 MJ) of diet.
 - q. Because processing may destroy up to 90% of the thiamin in the diet, allowances in formulation should be made to ensure the minimum nutrient level is met after processing.
 - r. Based on Bai, Sampson, Morris and Rogers, Vitamin B-6 requirement of growing kittens. *Journal of Nutrition*. 1989, 119, 1020-1027 and Bai, Sampson, Morris and Rogers, The level of dietary protein affects vitamin B-6 requirement of cats. *Journal of Nutrition*. 1991, 12, 1054-1061.
 - s. Methionine may substitute for choline as a methyl donor at a rate of 3.75 parts for 1 part choline by mass when methionine exceeds 0.62%.
 - t. Biotin does not need to be added unless diet contains antimicrobial or antivitamin compounds.

TABLE 5
MINIMUM REQUIRED CHEMICAL ANALYSIS FOR COMPLETE PET FOOD VALIDATION
(dog and cat food only)
[REG. 17(1)(a)(iii)]

Major nutrients	*Protein (N x 6.25) *Fat (NB: acid hydrolysis for most pet foods) *Moisture (NB: Karl Fisher method for semi-moist products) *Ash *Crude fibre
Essential fatty acids	*Linoleic acid *Arachidonic acid ^a
Amino acids	Arginine Cystine Phenylalanine Leucine Histidine Tyrosine Threonine *Methionine Isoleucine *Lysine Tryptophan Valine
Minerals	*Calcium *Phosphorus Sodium Chloride Manganese Copper Magnesium *Zinc *Potassium *Iron Iodine
Vitamins	*Vitamin A *Thiamin Niacin B12 (cyanocobalamin) Vitamin D ^b Riboflavin Pyridoxine Folic acid Vitamin E Pantothenic acid Biotin
Vitamin-like substances	*Taurine ^{ac} Choline
* Analysis for nutrients with an asterisk is mandatory. a. Arachidonic acid and taurine analyses are only necessary for cat food. b. Vitamin D analysis of pet foods containing levels which are approaching the minimum recommendation, say between 500 and 1 000 IU/kg DM is difficult and unreliable. The detection limit for HPLC methods is approximately 3 000 to 5 000 IU/kg. Analysis is not required if supplementation is oxidized and it is unlikely that un-supplemented products with adequate levels of vitamins A and E will be deficient in vitamin D. c. For taurine (a kind of amino acid having a vitamin-like activity) analysis.	

TABLE 6
PRODUCT FAMILIES
[REG. 17(1)(g)]

1.	All products within a family must be of the same processing type and within the same moisture content category (less than 20%, 20% or more but less than 65%, 65% or more);
2.	All product family members must be adequate for the same or less demanding life stage as the lead family product; and
3.	The first four ingredient (exclusive of added water, vitamins, minerals, food additives and condiments) or the product family members: a. must be identical and in the same order of predominance as the first four ingredients (exclusive of added water, vitamins, minerals, food additives and condiments) of the lead family product.
4.	The product family members must meet the metabolisable energy (ME) of the lead product member and be formulated on an ME basis to: a. meet the nutrient levels of the lead family product for key nutrients (crude protein, lysine, methionine, crude fat, linoleic acid, calcium, phosphorus, zinc, vitamin A and thiamin and additionally potassium and taurine for cat food); b. meet the nutrient levels of the lead family product or the AAFCO Nutrient Profiles, whichever is lower, for all other essential nutrients; and c. not exceed the maximum levels of any nutrient or nutrient ratio established in the AAFCO Nutrient Profiles.

TABLE 7
CALCULATION OF ENERGY VALUE OF PET FOOD
[REG. 17(1)(h)]

1. The gross energy value of foods is defined as the total combustible energy released as heat when a food is completely oxidized in a bomb calorimeter.
2. Gross energy (GE) values of individual food components are nitrogen free extracts (NFE) as follows: a) Carbohydrate (Crude fibre and NFE): 4.14 kcal/g; b) Fat: 9.40 kcal/g; and c) Protein: 5.65 kcal/g.
3. However, in practical diets not all the gross energy is available due to incomplete digestion of the various nutrients. In the absence of animal digestibility results for a particular diet, one of the methods given in 3.1 (for commercial, dry dog food), 3.2 (for commercial, moist dog food) and 3.3 (for commercial, unprocessed dog food), as relevant, to calculate metabolisable energy values of practical diets can be used. For commercial, dry cat food, use the formula given in 3.4. For commercial, moist cat food, use one of the formulae given in 3.5. For commercial, semi-moist cat food, use the formula given in 3.6. For commercial, unprocessed cat food, use the method given in 3.7. 3.1 For commercial, dry dog food, use the following formula: $\text{ME (kcal/g)} = \text{protein/g} \times 3.5 + \text{fat/g} \times 8.5 + \text{NFE/g} \times 3.5.$ 3.2 For commercial, moist dog food, use the following formula: $\text{ME (Kcal/g)} = [(4 \times \text{protein/g}) + (\text{fat/g} \times 9) + (\text{NFE/g} \times 4)]/100.$ 3.3 For commercial, unprocessed dog food, determine the GE by bomb calorimetry using the following steps: a) Step 1 i) Step 1(a) $\text{GE (Kcal)} = [(5.7 \times \text{protein/g}) + (9.4 \times \text{fat/g}) + \{4.1 \times (\text{NFE/g} + \text{fibre})\}]/100;$ ii) Step 1(b) $\text{GE (KJ)} = [(23.8 \times \text{protein/g}) + (39.3 \times \text{fat/g}) + \{17.1 \times (\text{NFE/g} + \text{fibre})\}]/100;$ b) Step 2 percentage (%) energy digestibility = $91.2 - (1.43 \times \text{percentage (\%)} \text{ crude fibre in dry matter})$; c) Step 3 Digestible energy (DE) (Kcal. g⁻¹) = $(\text{GE} \times \text{percentage (\%)} \text{ energy digestibility})/100$; d) Step 4 ME (Kcal) = $\text{DE} - (1.04 \times \text{protein/g})$. 3.4 For commercial, dry cat food use the following formula: $\text{ME (kcal/g)} = 0.99 (\text{protein/g} \times 5.65 + \text{fat/g} \times 9.4 + \text{NFE/g} \times 4.15) - 1.26.$

3.5 For commercial, moist cat food, use one of the following formulae:

a) $ME \text{ (kcal/g)} = (\text{protein/g} \times 3.9 + \text{fat/g} \times 7.7 + \text{NFE/g} \times 3.0) - 0.05$; or

b) $ME \text{ (Kcal/g)} = [(\text{protein/g} \times 4) + (\text{fat/g} \times 9) + (\text{NFE/g} \times 4)]/100$.

3.6 For commercial, semi-moist cat food use the following formula:

$ME \text{ (kcal/g)} = (\text{protein/g} \times 3.7 + \text{fat/g} \times 8.8 + \text{NFE/g}) \times 3.3$.

3.7 For commercial, unprocessed cat food, determine the GE by bomb calorimetry using the following steps:

a) **Step 1**

i) **Step 1(a)**

$GE \text{ (Kcal)} = [(5.7 \times \text{protein/g}) + (9.4 \times \text{fat/g}) + \{4.1 \times (\text{NFE/g} + \text{fibre})\}]/100$;

ii) **Step 1(b)**

$GE \text{ (KJ)} = [(23.8 \times \text{protein/g}) + (39.3 \times \text{fat/g}) + \{17.1 \times (\text{NFE/g} + \text{fibre})\}]/100$;

b) **Step 2**

$\text{percentage (\%)} \text{ energy digestibility} = 87.9 - (0.88 \times \text{percentage (\%)} \text{ crude fibre in dry matter})$;

c) **Step 3**

$DE \text{ (Kcal. g}^{-1}\text{)} = (\text{GE percentage (\%)} \text{ energy digestibility}/100)$;

d) **Step 4**

$ME \text{ (Kcal)} = DE - (0.77 \times \text{protein/g})$.

ENERGY REQUIREMENTS FOR DOGS AND CATS
[REG. 17(1)(h)]

Table 8(a)
Practical recommendation for ME requirements of dogs at different ages

Age Months	Average kcal ME/kg ^{0.75}	Range kcal ME/kg ^{0.75}
Puppies:		
1 to 6	210	Not applicable
7 to 10	175	Not applicable
10 and over	140	Not applicable
12 to 24 (1 - 2 years)	132	125 to 140
Adult dogs:		
24 to 84 (2 – 7 years)	115	100 to 130
Senior dogs:		
84 (7 years)	100	80 to 120
Obese prone adults:	≤90	Not applicable

Table 8(b)
Practical recommendation for ME requirements for dogs in relation to activity

Activity level	kcal ME/kg^{0.75}	Kj ME/kg^{0.75}
Inactive (exercised for < 1 h per day)	95	420
Active (exercised at low intensity 1 h to 3 h per day)	110	460
Moderately active (agility training - exercised at high intensity (running) 1 h to 3 h per day)	125	525
Highly active (working - exercised at high intensity 3 h to 6 h per day)	175	625 to 730

TABLE 8(c)
Metabolisable energy requirements for cats

Age	Average kcal ME/kg^{0.75}
Up to 4 months	140 to 175
4 to 9 months	122,5 to 140
9 to 12 months	105 to 122,5
Adult ^a	60 to 70
Senior	50 to 60
^a For cats, given less variation in adult body weights, the metabolisable energy needed for adult maintenance is 60 kcal/kg to 70 kcal/kg body weight/day (based on NRC:2006).	

TABLE 9
FEED INGREDIENT TERMS
[REG. 21(1)(a)(vii)]

Ingredient terms to be used on labelling
Animal protein products
*Animal by-product meal
Animal digest
Animal liver
Animal plasma
*Bloodmeal
*Bloodmeal, flash-dried
Casein
Condensed fish protein digest
Dried (dry) whey
Dried buttermilk, feed grade
Dried fish protein digest
Dried kelp
*Dried meat solubles
Dried milk, feed grade
Dried skimmed milk, feed grade
Dried whole milk, feed grade
Egg powder
Fish by-product
Fish meal
Hydrolysed poultry feathers
*Meat and bone meal
*Meat and meat by-products
*Meat meal
*Meat protein isolate
Poultry
Poultry by-product and feather meal
Poultry by-product meal
Poultry by-products (fresh)
Poultry hatchery by-product meal
Poultry meal
*Spray-dried animal blood
Whey
White fish meal
Cereal and grain products
Barley
Brewers rice
Grain sorghum
Ground or processed grain sorghum
Ground rice
Ground brown rice
Maize
Maize ground or processed
Oats

Rice
Rye
Sorghum
Triticale
Wheat
Processed grain by-products
Wheat middlings
Barley mill by-product
Brewers dried grains
Brewers wet grains
Chipped rice, broken rice, or brewers rice
Defatted wheat germ meal
Oat hulls
Distillers' dried grains
Distillers' dried grains with solubles
Distillers' dried solubles
Grain sorghum bran
Grain sorghum germ cake or grain sorghum germ meal
Grain sorghum gluten feed
Grain sorghum gluten meal
Grain sorghum grits
Grain sorghum mill feed
Ground maize-cob
Ground rough rice or ground paddy
Ground or processed grain sorghum
Ground or processed grain sorghum
Hominy chop
Maize bran
Maize flour
Processed grain by-products
Maize germ meal (dry milled, defatted)
Maize germ meal (wet milled or maize germ cake)
Maize gluten feed (Gluten 20)
Maize gluten meal (Gluten 60)
Maize grits
Maize ground or processed
Oat groats
Oat hulls
Oat meal
Pearl barley by-product
Rice bran
Rice mill by-product
Rice polishings
Maize feed meal
Sorghum flour, partially aspirated, gelatinized
Wheat bran
Wheat flour
Cereal food fines

Oils and fats
Animal fat
Corn endosperm oil
Fish oil
Greaves
Hydrolyzed fat or oil (feed grade)
Vegetable fat or oil
Plant protein products
Active dry yeast
Algae meal
Brewers dried yeast
Canola meal/cake
Chipped rice, broken rice, or brewers rice
Coconut meal or cake, mechanical extract
Coconut meal or cake, solvent extract
Cottonseed meal or cake, mechanical extract
Dried beans
Dried potato
Ground extruded whole soya - beans (full-fat soya)
Ground soya-beans
Plant protein products
Guar meal
Heat-processed soya-beans
Linseed meal
Peas
Primary dried yeast or dried yeast
Rapeseed meal or cake, mechanical extract
Safflower meal or cake, mechanical extract
Safflower meal or cake, solvent extract
Soy flour
Soya protein isolate
Soya-bean meal, dehulled, solvent
Soya-bean meal, mechanical extract
Soya-bean meal, solvent extract
Soya-beans
Wheat germ meal
Wheat germ meal, defatted
Sunflower meal or cake, dehulled, mechanical extract
Sunflower meal or cake, dehulled, solvent extract
Sunflower meal or cake, mechanical extract
Sunflower meal or cake, solvent extract
Tapioca or manioc or cassava root or both
Textured soya protein product
Torula dried yeast or candida dried yeast
Yeast culture
Yeast dried grains
Bagasse
Roughage products

Barley hulls
Barley mill by-product
Beet pulp, dried, plain
Citrus meal, dried
Dried apple pomace
Dried citrus pulp
Dried tomato pomace
Chipped rice, broken rice, or brewers rice
Oat mill by-product
Rice mill run
Roughage products
Soya - bean hulls
Soya - bean meal, mechanical extract
Sunflower hulls
Fruit
Fruit and their by-products

*Ingredients restricted to non-ruminant feeding unless the ingredient source is of avian origin.

TABLE10
NPN WARNINGS
[REG. 21(2)(c)]

Applicable to all feeds 1. Vinegar is an effective remedy against NPN poisoning. Mix with an equal amount of water. Dose half a bottle per calf or large sheep or 2-4 bottles per head of cattle. (1 bottle = 750 ml) 2. Protect this farm feed against rain. NPN is soluble and animals drinking such a solution could be poisoned. 3. Do not feed this farm feed indiscriminately with other NPN containing farm feeds. Consult an animal scientist.
Concentrates 4. Mix this concentrate thoroughly with the prescribed ingredients.
Finisher feeds 5. Adaptation: Limit the intake of the finisher feed to approximately 1% of the animals live mass during the first week in order to prevent digestive disturbances. 6. Finisher feeds are fed <i>ad lib</i> with adequate roughage or natural grazing. Feeding troughs must always be kept filled.
Complete feeds 7. During the first week additional roughage must be fed to facilitate adaptation. 8. This farm feed must be fed <i>ad lib</i>. Ensure that the feed troughs are always full.
Animal licks 9. This is a supplement and not a feed. Sufficient grazing and/or roughage must be available at all times. 10. Keep lick troughs filled and prevent gluttonous eating by hungry animals. A constant daily intake can help prevent poisoning. 11. Before feeding a NPN containing lick, feed an ordinary salt/phosphate lick for at least 7 days.
Dairy meal 12. Adaptation: When changing from a NPN-free dairy meal to a NPN-containing meal it is advisable to feed a 50/50 mixture over a period of 4-6 days. 13. Dairy meal must be fed two or more times daily. 14. The quantity of dairy meal fed depends on: (a) The quality and quantity of the available grazing and/or roughage; (b) The stage of lactation; and (c) The milk and butterfat production

TABLE 11
CATEGORIES OF INGREDIENTS WHICH MAY BE INDICATED IN PLACE OF INDIVIDUAL
INGREDIENTS FOR PET FOOD
[REG. 22(2)(I)(ii)]

Category	Description
Meat and animal derivatives	All the fleshy parts of slaughtered warm-blooded land animals, fresh or preserved by appropriate treatment, and all products and derivatives of the processing of the carcass or parts of the carcass of warm-blooded animals.
Milk and milk derivatives	All milk products, fresh or preserved by appropriate treatment, and derivatives from the processing thereof.
Eggs and egg derivatives	All egg products fresh or preserved by appropriate treatment and derivatives from the processing thereof.
Oils and fats	All animal and vegetable oils and fats.
Yeasts	All yeasts, the cells of which have been killed and dried.
Fish and fish derivatives	Fish or parts of fish, fresh or preserved by appropriate treatment, and derivatives from the processing thereof.
Cereals	All types of cereal, regardless of their presentation, or products made from the starch endosperm.
Cereal by products	By products resulting from the treatment of cereals.
Vegetables	All types of vegetables and legumes, fresh or preserved by appropriate treatment.
Herbal supplements	Herbs or botanicals which include phytonutrients but does not include phytomedicines or medicinal herbs, and which belong to the group of nutraceuticals.
Derivatives of vegetable origin	Derivatives resulting from the treatment of vegetable products, in particular cereals, vegetables, legumes and oil.
Vegetable protein extracts	All products of vegetable origin in which the proteins have been concentrated by an adequate process to contain at least 50 % crude protein, as related to the dry matter, and which may be restructured (textured).
Minerals	All inorganic substances suitable for pet food, macro and trace substances.
Various sugars	All types of sugars.
Fruit	All types of fruit, fresh or preserved by appropriate treatment.
Nuts	All kernels from shells.
Seeds	All types of seeds as such or roughly crushed.
Algae	Algae, fresh or preserved by appropriate treatment.
Molluscs and crustaceans	All types of molluscs, crustaceans, shellfish, fresh or preserved by appropriate treatment, and their processing derivatives.
Insects	All types of insects and their stages of development.
Prebiotics	Substances that increase the number or activity of Bifidobacterium and lactic acid bacteria; example Fructooligosaccharides (FOS) and Mannanooligosaccharides (MOS).
Probiotics	Beneficial live cultures.
Palatability enhancers	Liquid and powdered digests.
Sensory additives	Flavour enhancing compounds, colour enhancing compounds and aroma enhancing compounds.
Gelling agents and thickeners	Substances to increase viscosity or formation of a gel (or both).

Acidity regulator	Substance to adjust or maintain the pH of food.
Vegetable fibres	Natural fibres of plant origin.

TABLE 12
REQUIREMENTS TO SUBSTANTIATE URINARY TRACT HEALTH CLAIMS
[REG. 22(2)(v)]

Claim	Requirement
Low magnesium claim:	a) Mg < 1.2 g/kg DM or Mg < 25 mg/100 kcal ME. b) Proximate analysis plus Mg analysis for three (3) production runs.
Urinary pH claim:	As in the requirements for low magnesium claim plus biological trial to verify that the urinary pH is between 6.2 and 6.5.
Urinary tract health claim:	a) Proximate analysis; b) Urinary pH trial as in the requirements for urinary pH claim; plus i) Calcium: 9 g/kg DM maximum analysis for three (3) production runs; ii) Phosphorus: 7 g/kg DM maximum analysis for three (3) production runs; and iii) Magnesium: 1.2 g/kg DM maximum analysis for three (3) production runs.

Table 13(a)
ACCEPTABLE ANALYTICAL VARIATION AND SAMPLING VARIATIONS FOR MOISTURE,
PROTEIN,
FAT, FIBRE, ASH, Ca, P, Na, Cl, K, Mg AND S IN COMPLETE FEEDS

Registered Nutrient level (X), %	Variation (A) from X	Relative variation (RV) from (X), %
1	0.25	25.0
2	0.30	14.9
3	0.34	11.5
4	0.39	9.8
5	0.44	8.8
6	0.48	8.1
7	0.53	7.6
8	0.58	7.2
9	0.63	6.9
10	0.67	6.7
12	0.77	6.4
14	0.86	6.1
16	0.95	6.0
18	1.05	5.8
20	1.14	5.7
25	1.38	5.5
30	1.61	5.4
35	1.84	5.3
40	2.08	5.2
50	2.55	5.1
60	3.02	5.0
70	3.48	5.0
80	3.95	4.9
NOTE: $A = 0.046875.X + 0.203125$		$RV = A/X \times 100$

Table 13(b)
ACCEPTABLE ANALYTICAL AND SAMPLING VARIATIONS FOR MOISTURE, PROTEIN, FAT,
FIBRE, ASH, Ca, P, Na, Cl, K, Mg AND S IN INGREDIENTS

Registered Nutrient level (X), %	Variation (A) from X	Relative variation (RV) from (X), %
1	0.25	25.0
2	0.30	14.9
3	0.34	11.5
4	0.39	9.8
5	0.44	8.8
6	0.49	8.1
7	0.50	7.2
8	0.52	6.5
9	0.54	6.0
10	0.55	5.6
12	0.59	4.9
14	0.62	4.5
16	0.66	4.1
18	0.69	3.9
20	0.73	3.6
25	0.82	3.3

30	0.90	3.0
35	0.99	2.8
40	1.08	2.7
45	1.16	2.6
50	1.25	2.5
60	1.42	2.4
70	1.60	2.3
NOTE 1: 6 to 80 % $A = 0.01738.X + 0.3810$ $RV = A/X \times 100$		
NOTE 2: 1 to <6% $A = 0.046875.X + 0.203125$ $RV = A/X \times 100$		

Table 13(c)
ACCEPTABLE ANALYTICAL AND SAMPLING VARIATIONS FOR MINERALS, VITAMINS,
MEDICATIONS AND MICRO ELEMENTS (0-1000 MG/KG) IN COMPLETE ANIMAL FEED AND
INGREDIENTS

Registered level (X)		Variation (A) from X	Relative variation (RV) From X
%	mg/kg		
0.10	1000	0.040	40.0
0.25	2500	0.075	30.0
0.50	5000	0.133	26.7
0.75	7500	0.192	25.6
1.00	10000	0.250	25.0
NOTE 1: $A = 0.233333.X + 0.016667$ $RV = A/X \times 100$			
NOTE 2: Values < 0.10 % (1000 mg/kg) relative variation (RV) from X = 50%			

ANNEXURE 1

Department of Agriculture, Forestry and Fisheries
 Private Bag X 250
 Pretoria
 0001

**CERTIFICATE IN RESPECT OF THE TAKING OF SAMPLES IN TERMS OF SECTION 15 OF ACT
 36/1947**

Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947)
(To be completed in duplicate)

I here by certify that the accompanying sample of an animal feed identified by the above serial number, was taken by me onday..... of20.....
 At.....in the presence of.....
 *(Name of owner/person in charge of stocks/witness)
 From the stock of.....
 (Name and address of seller)

PARTICULARS OF ANIMAL FEED FROM WHICH SAMPLE WAS TAKEN

1. Name of registration holder.....
 2. Trade name†.....
 3. Name of product†.....
 4. Animal feed class†.....
 5. Registration number†.....Act 36/1947
 6. Manufacturer details.....
 7. Composition of farm feed†
 - 7.1 Chemical composition.....
 (List chemicals which appear on the label)

 - 7.2 Physical properties.....

 7. Conditions of container from which sample was taken.....
 8. Estimated quantity of animal feed from which sample was taken:
 - 8.1 Number of containers.....8.2 Capacity of containers.....
 - 8 Remarks.....

-
 Signature of witness Registrar

† Shall be particulars as indicated on the affixed label to the containers from which the sample was taken or as it is marked on such containers, or if the animal feed which is sampled, is not sold in containers, as it appears on the invoice which is supplied together with that animal feed.

‡ One copy shall accompany each of the three parts of the sample and the forth copy shall be kept by the officer who took the sample

ANNEXURE 2

Analyst address.....

**CERTIFICATE OF RESULTS OF ANALYSES OR TEST OF A SAMPLE OF FARM FEEDS BY
 ANALYST
 Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947)
 (To be completed in duplicate)**

I (full name) _____

Of _____

A duly appointed analyst in terms of section 14 of the Fertilizer, Farm Feeds, Agricultural Remedies and Stock remedies Act, 1947 (Act 36 of 1947) do hereby make oath and state:

(a) that on _____ I received a sample of * _____
 from _____

for analyses and/or test;

(b) that the sample was labelled, sealed and marked as

(c) that I have analysed and/ or tested the said sample and as a result of the analyses and/or test I found it to be constituted as follows:

1. Chemical composition _____

2. Physical properties _____

 Signature of analyst

(a) state name of farm feed as specified on label/insert name of person supplying the sample and state whether it was "by hand", "by post" or by courier.

(b) Insert distinguishing mark or number of sample.

(c) State names of particular chemical constituents and physical properties

**DECLARATION TO BE MADE IN THE PRESENCE OF JUSTICE OF PEACE/ COMMISSIONER OF
 OATHS**

..... TEL NO.
DATE INITIALS AND SURNAME

.....
SIGNATURE OF THE DESPONDENT

I certify that the despondent has acknowledged that he/she know and understands the contents of this declaration which was sworn to/affirmed before me and the despondents signature/thumb print/mark was placed thereon in my presence.

.....
JUSTICE OF PEACE/ COMMISSIONER OF OATHS

Full first name and
surname:.....
(BLOCK LETTERS

Designation (rank):..... Ex Officio Republic of South Africa.....

Business
address:.....
(street address must be stated)

Date:.....

Place.....