

Subpart 3-Bureau of Plant Industry  
Chapter 02- Commercial Feed

Definitions and Terms

- 100.01 The names and definitions for commercial feeds shall be the Official Definition of Feed Ingredients adopted by the Association of American Feed Control Officials, except as the Commissioner and State Chemist designate otherwise, in specific cases.
- 100.02 The terms in reference to commercial feeds shall be the Official Feed Terms adopted by the AAFCO, except as the Commissioner and State Chemist designate otherwise in specific cases.
- 100.03 The following commodities are hereby declared exempt from the definitions of commercial feed, under the provisions of Section 75-45-153 (d) of the Act: Raw meat, hay, loose salt, straw, stover, silages, cobs, husks, and hulls when unground and when not mixed or intermixed with other materials: Provided that these commodities are not adulterated within the meaning of Section 75-45-165 (a) of the Act.

Source: *Miss. Code Ann.* §75-45-157.

Label Format

- 101.01 Commercial feed, other than customer-formula feed, shall be labeled with the information prescribed in this regulation on the principal display panel of the product and in the following general format:
1. Product name and brand name if any, as stipulated in Section 102(1).
  2. If a drug is used, label as stipulated in Section 102(2).
  3. Purpose Statement as stipulated in Section 102(3).
  4. The guaranteed analysis as stipulated in Section 102(4).
  5. Feed ingredients as stipulated in Section 102(5).
  6. Directions for use and precautionary statements as stipulated in Section 102(6)
  7. Name and principal mailing address of the manufacturer or person responsible for distributing the feed as stipulated in Section 102(7)
  8. Quantity statement.
  9. The information required in Section 75-45-161(1)(a)-(e) of the Act must appear in its entirety on one side of the label or on one side of the container. The information required by Section 75-45-161(1)(f)-(g) of the Act shall be displayed in a prominent place on the label or container but not necessarily on the same side as the information required by Section 75-45-161. When the information required by Section 75-45-161(1)(f)-(g) is placed on the other side of the label or container, it must be referenced on the front side with a statement such as "see back of label or container for directions for use." None

of the information required by Section 75-45-161 of the Act shall be subordinated or obscured by other statements or designs.

101.02 Customer-formula feed shall be accompanied with the information prescribed in this regulation using labels, invoice, delivery ticket, or other shipping document bearing the following information.

1. The name and address of the manufacturer.
2. The name and address of the purchaser.
3. The date of sale or delivery.
4. The customer-formula feed name and brand name if any.
5. The product name and net weight of each commercial feed and each other ingredient used in the mixture.
6. If a drug-containing product is used:
  - a. The purpose of the medication (claim statement).
  - b. The established name of each active drug ingredient and the level of each drug used in the final mixture expressed in accordance with Section 103.04.
  - c. The directions for use and precautionary statements as required by Sections 105.01-106.03.

Source: *Miss. Code Ann.* §75-45-157.

#### Brand and Product Names

102 Commercial feed, other than customer-formula feed, shall be labeled with the information prescribed in this regulation:

1. Product and brand name if any.
  - a. The brand or product name must be appropriate for the intended use of the feed and must not be mislabeled. If the name indicates the feed is made for specific use, the character of the feed must conform therewith. A commercial feed for a particular animal class, must be suitable for that purpose.
  - b. Commercial, registered brand or trade names are not permitted in guarantees or ingredient listings but only in the product name of feeds produced by or for the firm holding the rights to such a name.
  - c. The name of a commercial feed shall not be derived from one or more ingredients of a mixture to the exclusion of other ingredients and shall not be one representing any components of a mixture unless all components are included in the name: provided, that if any ingredient or combination of ingredients is intended to impart a distinctive characteristic to the product which is of significance to the purchaser, the name of that ingredient or combination of ingredients may be used as a part of the brand name or product name if the ingredient or combination of ingredients is quantitatively guaranteed in the guaranteed analysis, and the brand or product name is not otherwise false or misleading.

- d. The word "protein" shall not be permitted in the product name of a feed that contains added non-protein nitrogen.
  - e. When the name carries a percentage value, it shall be understood to signify protein and/or equivalent protein content only, even though it may not explicitly modify the percentage with the word "protein": provided, that other percentage values may be permitted if they are followed by the proper description and conform to good labeling practice. Digital numbers shall not be used in such a manner as to be misleading or confusing to the customer.
  - f. Single ingredient feeds shall have a product name in accordance with the designated definition of feed ingredients as recognized by the Association of American Feed Control Officials unless the Commissioner and State Chemist designate otherwise.
  - g. The word "vitamin," or a contraction thereof, or any word suggesting vitamin can be used only in the name of a feed which is represented to be a vitamin as declared in Section 103.03.
  - h. The term "mineralized" shall not be used in the name of a feed, except for "TRACE MINERALIZED SALT." When so used, the product must contain significant amounts of trace minerals which are recognized as essential for animal nutrition.
  - i. The term "meat" and "meat by-products" shall be qualified to designate the animal from which the meat and meat by-products are derived unless the meat and meat by-products are made from cattle, swine, sheep and goats.
2. If a drug is used the following information must appear on the label:
- a. The word "Medicated" shall appear directly following and below the product name in type size no smaller than one half the type size of the product name.
  - b. The purpose of medication (claim statement).
  - c. An active drug ingredient statement listing the active drug ingredients by their established name and the amounts in accordance with Section 103.04.
  - d. The required directions for use and precautionary statements or reference to their location if the detailed feeding directions and precautionary statements required by Sections 105.01-106.03 appear elsewhere on the label.
3. Purpose Statement
4. Guarantees – Crude Protein, Equivalent Crude Protein from Non Protein Nitrogen, Amino Acids, Crude Fat, Crude Fiber, Acid Detergent Fiber, Calcium, Phosphorus, Salt and Sodium shall be the sequence of nutritional guarantees when such guarantee are stated. Other required and voluntary guarantees should follow in a general format such that the units of measure used to express guarantees (percentage, parts per million, International Units, as required) are listed in a sequence that provides a consistent grouping of the units of measure.
- a. Required guarantees for swine formula feeds:

- i. Animal Classes:
  - A. Pre-Starter - 2 to 11 pounds.
  - B. Starter - 11 to 44 pounds.
  - C. Grower - 44 to 110 pounds.
  - D. Finisher - 110 to 242 pounds (market).
  - E. Gilts, Sows and Adult Boars.
  - F. Lactating Gilts and Sows.
- ii. Guaranteed Analysis for Swine Complete Feeds and Supplements (all animal classes):
  - A. Minimum percentage of Crude Protein.
  - B. Minimum percentage of Lysine.
  - C. Minimum percentage of Crude Fat.
  - D. Maximum percentage of Crude Fiber.
  - E. Minimum and maximum percentage of Calcium.
  - F. Minimum percentage of Phosphorus.
  - G. Minimum and maximum percentage of Salt (if added).
  - H. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
  - I. Minimum Selenium in parts per million (ppm).
  - J. Minimum Zinc in parts per million (ppm).
- b. Required guarantees for Formula Poultry Feeds (Broilers, Layers and Turkeys):
  - i. Animal Classes:
    - A. Layer - Chickens that are grown to Produce eggs for food, e.g., table eggs.
      - 1. Starting/Growing - From day of hatch to approximately 10 weeks of age.
      - 2. Finisher - From approximately 10 weeks of age to time first egg is produced. (Approximately 20 weeks of age).
      - 3. Laying - From time first egg is laid throughout the time of egg production.
      - 4. Breeders - Chickens that produce fertile eggs for hatch replacement layers to produce eggs for food, table eggs, from time first egg is laid throughout their productive cycle.
    - B. Broilers - Chickens that are grown for human food.
      - 1. Starting/Growing - From day of hatch to approximately 5 weeks of age.
      - 2. Finisher - From approximately 5 weeks of age to market, (42 to 52 days).
      - 3. Breeders - Hybrid strains of chickens whose offspring are grown for human food, (broilers), any age and either sex.
    - C. Broilers, Breeders - Chickens whose offspring are grown for human food (broilers).
      - 1. Starting/Growing - From day of hatch until approximately 10 weeks of age.

2. Finishing - From approximately 10 weeks of age to time first egg is produced, approximately 20 weeks of age.
  3. Laying - Fertile egg producing chickens (broilers/roasters) from day of first egg throughout the time fertile eggs are produced.
- D. Turkeys:
1. Starting/Growing - Turkeys that are grown for human food from day of hatch to approximately 13 weeks of age (females) and 16 weeks of age (males).
  2. Finisher - Turkeys that are grown for human food, females from approximately 13 weeks of age to approximately 17 weeks of age; males from 16 weeks of age to 20 weeks of age, (or desired market weight).
  3. Laying - Female turkeys that are producing eggs; from time first egg is produced, throughout the time they are producing eggs.
  4. Breeder - Turkeys that are grown to produce fertile eggs, from day of hatch to time first egg is produced (approximately 30 weeks of age), both sexes.
- ii. Guaranteed Analysis for Poultry Complete feeds and Supplements (all animal classes):
- A. Minimum percentage of Crude Protein.
  - B. Minimum percentage of Lysine.
  - C. Minimum percentage of Methionine.
  - D. Minimum percentage of Crude Fat.
  - E. Maximum percentage of Crude Fiber.
  - F. Minimum and maximum percentage of Calcium.
  - G. Minimum percentage of Phosphorus.
  - H. Minimum and maximum percentage of Salt (if added).
  - I. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
- c. Required Guarantees for Beef Cattle Formula Feeds:
- i. Animal Classes:
    - A. Calves (birth to weaning).
    - B. Cattle on Pasture (may be specific as to production stage; e.g. stocker, feeder, replacement heifers, brood cows, bulls, etc.).
    - C. Feedlot Cattle.
  - ii. Guaranteed analysis for Beef Complete Feeds and Supplements (all animal classes):
    - A. Minimum percentage of Crude Protein.
    - B. Maximum percentage of equivalent crude protein from Non-Protein Nitrogen (NPN) when added.
    - C. Minimum percentage of Crude Fat.
    - D. Maximum percentage of Crude Fiber.
    - E. Minimum and maximum percentage of Calcium.
    - F. Minimum percentage of Phosphorus.

- G. Minimum and maximum percentage of Salt (if added).
  - H. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
  - I. Minimum percentage of Potassium.
  - J. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
- iii. Guaranteed analysis for Beef Mineral Feeds (if added):
- A. Minimum and maximum percentage Calcium.
  - B. Minimum percentage of Phosphorus.
  - C. Minimum and maximum percentage of Salt.
  - D. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
  - E. Minimum percentage of Magnesium.
  - F. Minimum percentage of Potassium.
  - G. Minimum Copper in parts per million (ppm).
  - H. Minimum Selenium in parts per million (ppm).
  - I. Minimum Zinc in parts per million (ppm).
  - J. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound.
- d. Required Guarantees for Dairy Formula Feeds:
- i. Animal Classes:
    - A. Veal Milk Replacer - Milk Replacer to be fed for veal production.
    - B. Herd Milk Replacer - Milk Replacer to be fed for herd replacement calves.
    - C. Starter - Approximately 3 days to 3 months.
    - D. Growing Heifers, Bulls and Dairy Beef.
      - 1. Grower 1-3 months to 12 months of age.
      - 2. Grower 2-More than 12 months of age.
    - E. Lactating Dairy Cattle.
    - F. Non-Lactating Dairy Cattle.
  - ii. Guaranteed Analysis for Veal and Herd Replacement Milk Replacer:
    - A. Minimum percentage Crude Protein.
    - B. Minimum percentage Crude Fat.
    - C. Maximum percentage of Crude Fiber.
    - D. Minimum and maximum percentage Calcium.
    - E. Minimum percentage of Phosphorus.
    - F. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
  - iii. Guaranteed Analysis for Dairy Cattle Complete Feeds and Supplements:
    - A. Minimum percentage of Crude Protein.
    - B. Maximum percentage of equivalent Crude Protein from Non-Protein Nitrogen (NPN) when added.
    - C. Minimum percentage of Crude Fat.
    - D. Maximum percentage of Crude Fiber.

- E. Maximum percentage of Acid Detergent Fiber (ADF).
  - F. Minimum and maximum percentage of Calcium.
  - G. Minimum percentage of Phosphorus.
  - H. Minimum Selenium in parts per million (ppm).
  - I. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
- iv. Required Guaranteed Analysis for Dairy Mixing and Pasture Mineral:
- A. Minimum and maximum percentage of Calcium.
  - B. Minimum percentage of Phosphorus.
  - C. Minimum and maximum percentage of Salt.
  - D. Minimum and maximum percentage of total Sodium.
  - E. Minimum percentage of Magnesium.
  - F. Minimum percentage of Potassium.
  - G. Minimum Selenium in parts per million (ppm).
  - H. Minimum Vitamin A, other than the precursors of Vitamin A, in International Units per pound.
- e. Required Guarantees for Equine Formula Feeds:
- i. Animal Classes:
    - A. Foal.
    - B. Mare.
    - C. Breeding.
    - D. Maintenance.
  - ii. Guaranteed Analysis for Equine Complete Feeds and Supplements (all animal classes):
    - A. Minimum percentage of Crude Protein.
    - B. Minimum percentage of Crude Fat.
    - C. Maximum percentage of Crude Fiber.
    - D. Minimum and maximum percentage of Calcium.
    - E. Minimum percentage of Phosphorus.
    - F. Minimum Copper in parts per million (ppm).
    - G. Minimum Selenium in parts per million (ppm).
    - H. Minimum Zinc in parts per million (ppm).
    - I. Minimum Vitamin A, other than the precursors of Vitamin A, in International Units per pound (if added).
  - iii. Guaranteed Analysis for Equine Mineral Feed (all animal classes):
    - A. Minimum and maximum percentage of Calcium.
    - B. Minimum percentage of Phosphorus.
    - C. Minimum and maximum percentage of Salt (if added).
    - D. Minimum and maximum percentage of Sodium shall be guaranteed only when the total sodium exceeds that furnished by the maximum salt guarantee.
    - E. Minimum Copper in parts per million (ppm).
    - F. Minimum Selenium in parts per million (ppm)
    - G. Minimum Zinc in parts per million (ppm).

- H. Minimum vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
- f. Required Guarantees for Goat and Sheep Formula Feeds:
  - i. Animal Classes:
    - A. Starter.
    - B. Grower.
    - C. Finisher.
    - D. Breeder.
    - E. Lactating.
  - ii. Guaranteed Analysis for Goat and Sheep Complete Feeds and Supplements (all animal classes):
    - A. Minimum percentage of Crude Protein.
    - B. Maximum percentage of equivalent crude protein from Non Protein Nitrogen (NPN) when added.
    - C. Minimum percentage of Crude Fat.
    - D. Maximum percentage of Crude Fiber.
    - E. Minimum and maximum percentage of Calcium.
    - F. Minimum percentage of Phosphorus.
    - G. Minimum and maximum percentage of Salt (if added).
    - H. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
    - I. Minimum and maximum Copper in parts per million (ppm) (if added, or if total copper exceeds 20 ppm).
    - J. Minimum Selenium in parts per million (ppm).
    - K. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
- g. Required Guarantees for Duck and Geese Formula Feeds:
  - i. Animal Classes:
    - A. Ducks.
      - 1. Starter - 0 to 3 weeks of age.
      - 2. Grower - 3 to 6 weeks of age.
      - 3. Finisher - 6 weeks to market.
      - 4. Breeder Developer - 8 to 19 weeks of age.
      - 5. Breeder - 22 weeks to end of lay.
    - B. Geese.
      - 1. Starter - 0 to 4 weeks of age.
      - 2. Grower - 4 to 8 weeks of age.
      - 3. Finisher - 8 weeks to market.
      - 4. Breeder Developer - 10 to 22 weeks of age.
      - 5. Breeder - 22 weeks to end of lay.
  - ii. Guaranteed Analysis for Duck and Geese Complete Feeds and Supplements (for all animal classes):
    - A. Minimum percentage of Crude Protein.
    - B. Minimum percentage of Crude Fat.
    - C. Maximum percentage of Crude Fiber.

- D. Minimum and maximum percentage of Calcium.
  - E. Minimum percentage of Phosphorus.
  - F. Minimum and maximum percentage of Salt (if added).
  - G. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
- h. Required Guarantees for Fish Complete Feeds and Supplements:
- i. Animal Species shall be declared in lieu of animal class:
    - A. Trout.
    - B. Catfish.
    - C. Species other than trout or catfish.
  - ii. Guaranteed analysis for all Fish Complete Feeds and Supplements:
    - A. Minimum percentage of Crude Protein.
    - B. Minimum percentage of Crude Fat.
    - C. Maximum percentage of Crude Fiber.
    - D. Minimum percentage of Phosphorus.
- i.. Required Guarantees for Rabbit Complete Feeds and Supplements:
- i. Animal Classes:
    - A. Grower - 4 to 12 weeks of age.
    - B. Breeder - 12 weeks of age and over.
  - ii. Guaranteed analysis for Rabbit Complete Feeds and Supplements (all animal classes):
    - A. Minimum percentage of Crude Protein.
    - B. Minimum percentage of Crude Fat.
    - C. Minimum and maximum percentage of Crude Fiber (the maximum crude fiber shall not exceed the minimum by more than 5.0 units).
    - D. Minimum and maximum percentage of Calcium.
    - E. Minimum percentage of Phosphorus.
    - F. Minimum and maximum percentage of Salt (if added).
    - G. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
    - H. Minimum Vitamin A, other than precursors of Vitamin A, in International Units per pound (if added).
- j. The required guarantees of grain mixtures with or without molasses and feeds other than those described in section 102(1)(a)-(i) shall include the following items, unless exempted in subsection k in the order listed:
- i. Animal class(es) and species for which the product is intended.
  - ii. Guaranteed analysis.
    - A. Minimum percentage Crude Protein.
    - B. Maximum or minimum percentage of Crude Protein from Non-Protein Nitrogen as required in Regulation 4(e).
    - C. Minimum percentage of Crude Fat.
    - D. Maximum percentage of Crude Fiber.

- E. Minerals in formula feeds, to include in the following order:
    - 1. Minimum and maximum percentages of Calcium.
    - 2. Minimum percentage of Phosphorus.
    - 3. Minimum and maximum percentage of Salt (if added).
    - 4. Minimum and maximum percentage of total Sodium shall be guaranteed only when total Sodium exceeds that furnished by the maximum salt guarantee.
  - F. Minerals in feed ingredients, as specified by the official definitions of the AAFCO.
  - G. Vitamins in such terms as specified in Regulation 4(c).
  - H. Total Sugars, as Invert, on dried molasses products or products being sold primarily for their molasses content.
  - I. Viable lactic acid producing microorganisms for use in silages in terms specified in subsection 103.07.
  - J. A commercial feed (e.g. vitamin/mineral premix, base mix, etc.) intended to provide a specialized nutritional source for use in the manufacture of other feeds, must state its intended purpose and guarantee those nutrients relevant to such stated purpose.
- k. Exemptions.
- i. A mineral guarantee for feed, excluding those feeds manufactured as complete feeds and for feed supplements intended to be mixed with grain to produce a complete feed for swine, poultry, fish and veal and herd milk replacers, is not required when:
    - A. the feed or feed ingredient is not intended or represented or does not serve as a principal source of that mineral to the animal; or
    - B. The feed or feed ingredient is intended for non-food producing animals and contains less than 6.5% total mineral.
  - ii. Guarantees for vitamins are not required when the commercial feed is neither formulated for nor represented in any manner as a vitamin supplement.
  - iii. Guarantees for crude protein, crude fat , and crude fiber are not required when the commercial feed is intended for purposes other than to furnish these substances or they are of minor significance relating to the primary purpose of the product, such as drug premixes, mineral or vitamin supplements, and molasses.
  - iv. Guarantees for microorganisms are not required when the commercial feed is intended for a purpose other than to furnish these substances or they are of minor significance relating to the primary purpose of the product, and no specific label claims are made.
  - v. The indication for animal class(es) and species are not required on single ingredient products if the ingredient is not intended, represented, defined for a specific animal classes(es) or species.

5. Feed ingredients, collective terms used for the grouping of feed ingredients, or appropriate statements as provided under the provisions of Section 75-45-165(a)(4) of the Act.
  - a. The name of each ingredient as defined in the Official Publication of the Association of American Feed Control Officials, common or usual name, or one approved by the Commissioner or State Chemist.
  - b. Collective terms used for the grouping of feed ingredients as defined in the Official Definitions of Feed Ingredients published in the Official Publication of the Association of American Feed Control Officials in lieu of the individual ingredients; Provided that:
    - i. When a collective term for a group of ingredients is used on the label, the individual ingredients within that group shall not be listed on the label.
    - ii. The manufacturer shall provide the feed control official, upon request, with a list of individual ingredients, within a defined group, that are or have been used at manufacturing facilities distributing in or into the state.
6. The required directions for use and precautionary statements or reference to the location of the detailed feeding directions and precautionary statements as required by sections 105.01-106.03 if they appear elsewhere on the label.
7. Name and principal mailing address of the manufacturer or person responsible for distributing the feed. The principal mailing address shall include the street address, city, state and zip code; however, the street address may be omitted if it is shown in the current city directory or telephone directory.
8. Quantity statement.

Source: *Miss. Code Ann.* §75-45-157.

#### Expression of Guarantees

103.01 The guarantees for crude protein, equivalent protein from non-protein nitrogen, crude fat, crude fiber and mineral guarantees (when required) will be in terms of percentage.

103.02 Mineral Guarantees:

1. When calcium and/or salt guarantees are given in the guaranteed analysis such shall be stated and conform to the following:
  - a. When the minimum is below 2.5 percent, the maximum shall not exceed the minimum by more than 0.5 percentage point.
  - b. When the minimum is 2.5 percent, but less than 5.0 percent, the maximum shall not exceed the minimum by more than one percentage point.
  - c. When the minimum is above 5.0 percent, the maximum shall not exceed the minimum by more than 20 percent, and in no case shall the maximum exceed the minimum by more than 5 percentage points.

2. When stated, guarantees for minimum and maximum total sodium, and salt: minimum potassium, magnesium, sulfur, phosphorus and maximum fluorine shall be in terms of percentage. Other minimum mineral guarantees shall be states in parts per million (PPM) when the concentration is less than 10,000 ppm and in percentage when the concentration is 10,000 ppm (1%) or greater.
3. Products labeled with a quantity statement (e.g. tablets, capsules, granules, or liquid) may state mineral guarantees in milligrams (mg) per unit (e.g., tablets, capsules, granules, or liquids) consistent with the quantity statement and directions for use.

103.03 Guarantees for minimum vitamin content of commercial feeds shall be listed in the ordered specified and are stated on the label in milligrams per pound (mg/lb) of feed or in units consistent with those employed for the quantity statement unless otherwise specified :

1. Vitamin A, other than precursors of vitamin A, shall be stated in International or USP units per pound.
2. Vitamin D, in products offered for poultry feeding, shall be stated in International Chick Units per pound.
3. Vitamin D for other users shall be stated in International or USP units per pound.
4. Vitamin E shall be stated in International or USP units per pound.
5. Concentrated oils and feed additive premixes containing vitamins A, D, and/or E may, at the option of the distributor be stated in the units per gram instead of units per pound.
6. Vitamin B-12, in milligrams or micrograms per pound.
7. All other vitamin guarantees shall express the vitamin activity in milligrams per pound in terms of the following: menadione; riboflavin; d-pantothenic acid; thiamine; niacin; vitamin B-6; folic acid; choline; biotin; inositol; p-amino benzoic acid; ascorbic acid; and carotene.

103.04 Guarantees for drugs shall be stated in terms of percent by weight, except:

1. Antibiotics present at less than 2,000 grams per ton (total), of commercial feed shall be stated in grams per ton of commercial feed.
2. Antibiotics present at 2,000 or more grams per ton (total), if commercial feed shall be stated in grams per pound of commercial feed.
3. Labels for commercial feeds containing growth promotion and/or feed efficiency levels of antibiotics, which are to be fed continuously as the sole ration, are not required to make quantitative guarantees except as specifically noted in the Federal Food Additive Regulations for certain antibiotics, wherein, quantitative guarantees are required regardless of the level or purpose of the antibiotic.
4. The term "milligrams per pound" may be used for drugs or antibiotics in those cases where a dosage where a dosage is given in "milligrams" in the feeding directions.

103.05 Commercial feeds containing any added non-protein nitrogen shall be labeled as follows:

1. For ruminants:

- a. Complete feeds, supplements, and concentrates containing added non-protein nitrogen and containing more than 5% protein from natural sources shall be guaranteed as follows:

Crude protein, minimum \_\_\_\_\_%

(This includes not more than \_\_\_\_\_% equivalent protein from nonprotein nitrogen).

- b. Mixed feed concentrates and supplements containing less than 5% protein from natural sources may be guaranteed as follows: Equivalent Crude Protein from Non-Protein Nitrogen, minimum \_\_\_\_\_%.

- c. Ingredient sources of non-protein nitrogen such as Urea, Diammonium Phosphate, Ammonium Polyphosphate Solution, Ammoniated Rice Hulls, and other basic non-protein nitrogen ingredients defined by the Association of American Feed Control Officials shall be guaranteed as follows:

Nitrogen, minimum \_\_\_\_\_%

Equivalent Crude Protein from Non-Protein Nitrogen, minimum \_\_\_\_\_%

2. For non-ruminants

- a. Complete feeds, supplements and concentrates containing crude protein from all forms of non-protein nitrogen, added as such, shall be labeled as follows: Crude protein, minimum \_\_\_\_\_%

(This includes not more than \_\_\_\_\_% equivalent crude protein which is not nutritionally available to species of animal for which feed is intended.)

- b. Premixes, concentrates or supplements intended for non-ruminants containing more than 1.25% equivalent crude protein from all forms of non-protein nitrogen, added as such, must contain adequate directions for use and a prominent statement: "WARNING: This feed must be used only in accordance with directions furnished on the label."

103.06 Mineral phosphatic materials for feeding purposes shall be labeled with the guarantee for minimum and maximum percentage of calcium (when present), the minimum percentage of phosphorous, and the maximum percentage of fluorine.

103.07 Guarantees for microorganisms shall be stated in colony forming units per gram (CFU/g) when directions are for using the product in grams, or in colony forming units per pound (CFU/lb) when directions are for using the product in pounds. A parenthetical statement following the guarantee shall list each species in order of predominance.

103.08 Guarantees for enzymes shall be stated in units of enzymatic activity per unit weight or volume, consistent with label directions. The source organism for each type of enzymatic activity shall be specified, such as Protease (*Bacillus subtilis*) 5.5 mg amino acids liberated/minute/milligram. If two or more sources have the

same type of activity, they shall be listed in order of predominance based on the amount of enzymatic activity provided.

Source: *Miss. Code Ann.* §75-45-157.

#### Substantiation of Nutritional Suitability

104.01 A commercial feed, other than a customer-formula feed, shall be nutritionally suitable for its intended purpose as represented by its labeling.

104.02 If the Commissioner and State Chemist have reasonable cause to believe a commercial feed is not nutritionally suitable, the Commissioner or State Chemist may request the feed manufacturer to either submit an “Affidavit of Suitability” or an alternative procedure acceptable to the Commissioner and State Chemist, certifying the nutritional adequacy of the feed. The Affidavit of Suitability or alternate procedure of suitability shall serve as substantiation of the suitability of the feed.

104.03 If an acceptable Affidavit of Suitability, or alternative procedure is not submitted by the feed manufacturer within 30 days of written notification, the Commissioner and State Chemist may deem the feed adulterated under Section 75-45-165(a) of the Act and order the feed removed from distribution in the State.

104.04 The Affidavit of Suitability shall contain the following information

1. The feed company’s name;
2. The feed’s product name;
3. The name and title of the affiant submitting the document;
4. A statement that the affiant has knowledge of the nutritional content of the feed and based on valid scientific evidence the feed is nutritionally adequate for its intended purpose.
5. The date of submission; and
6. the signature of the affiant notarized by a certified Notary Public.

Source: *Miss. Code Ann.* §75-45-157.

#### Ingredients

105.01 The name of each ingredient or collective term for the grouping of ingredients, when required to be listed, shall be the name as defined in the Official Definitions of Feed Ingredients as published in the Official Publication of the American Feed Control Officials, the common or usual name, or one approved by the Commissioner and State Chemist.

105.02 The name of each ingredient must be shown in letters or type of the same size.

105.03 No reference to quality or grade of an ingredient shall appear in the ingredient statement of a feed.

105.04 The term "dehydrated" may precede the name of any product that has been artificially dried.

105.05 A single ingredient product defined by the Association of American Feed Control Officials is not required to have an ingredient statement.

105.06 Tentative definitions for ingredients shall not be used until adopted as Official, unless no official definition exists or the ingredient has a common accepted name that required no definition, (i.e. sugar).

105.07 When the word "iodized" is used in connection with a feed ingredient, the feed ingredient shall contain not less than 0.007% iodine, uniformly distributed.

105.08 Mammalian protein products are prohibited as an ingredient in catfish feed produced in Mississippi. Catfish feed, produced in Mississippi, found with mammalian protein in it shall be considered to be adulterated.

Source: *Miss. Code Ann.* §75-45-157.

#### Direction for Use and Precautionary Statements

106.01 Directions for use and precautionary statement on the labeling of all commercial feeds and customer-formula feeds containing additives (including drugs, special purpose additives, or non-nutritive additives) shall:

1. Be adequate to enable safe and effective use for the intended purposes by users with no special knowledge of the purpose and use of such articles; and,
2. Include, but not be limited to, all information described by all applicable regulations under the Federal Food, Drug and Cosmetic Act.

106.02 Adequate directions for use and precautionary statements are required for feeds containing non-protein nitrogen as specified in Section 107 of this chapter.

106.03 Adequate directions for use and precautionary statements necessary for safe and effective use are required on commercial feeds distributed to supply particular dietary needs or for supplementing or fortifying the usual diet or ration with any vitamin, mineral, or other dietary nutrient or compound.

Source: *Miss. Code Ann.* §75-45-157.

#### Non-Protein Nitrogen

107.01 Urea and other non-protein nitrogen products defined in the Official Publication of the Association of American Feed Control Officials are acceptable ingredients

only in commercial feeds for ruminant animals as a source of equivalent crude protein. If the commercial feed contains more than 8.75 percent of equivalent crude protein from all forms of non-protein nitrogen, added as such, or if the equivalent crude protein from all forms of non-protein nitrogen, added as such, exceeds one-third of the total crude protein, the label shall bear adequate directions for the safe use of feeds and a precautionary statement: "**CAUTION: USE AS DIRECTED.**" The directions for use and the caution statement shall be in type of such size so placed on the label that they will be read and understood by ordinary persons under customary conditions of purchase and use.

107.02 Non-protein nitrogen defined in the Official Publication of the Association of American Feed Control Officials, when so indicated, is an acceptable ingredient in commercial feeds distributed to non-ruminant animals as a source of nutrients other than equivalent crude protein. The maximum equivalent crude protein from non-protein nitrogen sources when used in non-ruminant rations shall not exceed 1.25% of the total daily ration.

107.03 On labels such as those for medicated feeds which bear adequate feeding directions and/or warning statements, the presence of added non-protein nitrogen shall not require a duplication of the feeding directions or the precautionary statements as long as those statements include sufficient information to ensure the safe and effective use of this product due to the presence of non-protein nitrogen.

Source: *Miss. Code Ann.* §75-45-157.

#### Drug and Feed Additives

108.01 Prior to approval of a registration application and/or approval of a label for commercial feed which contains additives (including drugs, other special purpose additives, or non-nutritive additives) the distributor may be required to submit evidence to prove the safety and efficacy of the commercial feed when used according to the directions furnished on the label.

108.02 Satisfactory evidence of safety and efficacy of a commercial feed may be found to exist:

1. When the commercial feed contains such additives, the use of which conforms to the requirements of the applicable regulations in the Code of Federal Regulations, Title 21, or which are "prior sanctioned" or "generally recognized as safe" for such use, or
2. When the commercial feed is itself a drug as defined in Section 75-45-153(g) of the Act and is generally recognized as safe and effective for the labeled use or is marketed subject to an application approved by the Food and Drug Administration under Title 21 U.S.C. 360(b).
3. When one of the purposes for feeding a commercial feed is to impart immunity (that is to act through some immunological process). The

constituents imparting immunity have been approved for the purpose through the Federal Virus, Serum and Toxins Act of 1913, as amended, or

4. When the commercial feed is a direct fed microbial product and:
  - a. The product meets the particular fermentation product definition; and
  - b. The microbial content statement, as expressed in the labeling, is limited to the following: "Contains a source of live (viable) naturally occurring microorganism." This statement shall appear on the label; and
  - c. The source is stated with a corresponding guarantee expressed in accordance with section 103.07 of this chapter.
5. When the commercial feed is an enzyme product and:
  - a. The product meets the particular enzyme definition defined by the Association of American Feed Control Officials; and
  - b. The enzyme is stated with a corresponding guarantee expressed in accordance with section 103.08 of this chapter.

Source: *Miss. Code Ann.* §75-45-157.

### Adulterants

109.01 For the purpose of Section 75-45-165(a) of the Act, the terms "poisonous or deleterious substances" include but are not limited to the following:

1. Fluorine and any mineral or mineral mixture which is to be used directly for the feeding of domestic animals and in which the fluorine exceeds 0.20% for breeding and dairy cattle; 0.30% for slaughter cattle; 0.30% for sheep; 0.35% for lambs; 0.45% for swine; and 0.60% for poultry.
2. Fluorine bearing ingredients when used in such amounts that they raise the fluorine content of the total ration (exclusive of roughage) above the following amounts: 0.004% for breeding and dairy cattle; 0.009% for slaughter cattle; 0.006% for sheep; 0.01% for lambs; 0.015% for swine and 0.03% for poultry.
3. Fluorine bearing ingredients incorporated in any feed that is fed directly to cattle, sheep or goats consuming roughage (with or without) limited amounts of grain, that results in a daily fluorine intake in excess of 50 milligrams of fluorine per 100 pounds of body weight.
4. Soybean meal, flakes of pellets or other vegetable meals, flakes or pellets which have been extracted with trichlorethylene or other chlorinated solvents.
5. Sulfur dioxide, sulfurous acid, and salts of sulfurous acid when used in or on feeds of feed ingredients which are considered or reported to be a significant source of vitamin B1 (Thiamine).

109.02 All screenings or by-products of grains and seeds containing weed seeds, when used in commercial feed or sold as such to the ultimate consumer, shall be ground fine enough or otherwise treated to destroy the viability of such weed seeds so that the finished product contains no more than 0 viable prohibited weed seeds per pound and not more than 300 viable restricted weed seeds per pound.

Source: *Miss. Code Ann.* §75-45-157.

Good Manufacturing Practices

- 110 For the purposes of enforcement of Section 75-45-165(d) of the Act the Commissioner and State Chemist adopt the following as current good manufacturing practices:
1. The regulations prescribing good manufacturing practices for medicated feeds as published in the Code of Federal Regulations Title 21, Part 225, Sections 225.1-225.115.
  2. The regulations prescribing good manufacturing practices for medicated premixes as published in the Code of Federal Regulations, Title 21, Part 226, Sections 226.1-226.115.

Source: *Miss. Code Ann.* §75-45-157.

Permitted Analytical Variations From Guaranteed Values

111.01 Pursuant to Section 75-45-165 (m) of the Act, the following set of permitted analytical variations from guaranteed values are established by the Commissioner and State Chemist as guides for determining whether a feed is adulterated within the meaning of *Miss. Code Ann.* Section 75-45-165 (m). Based on an average if two determinations for a given guaranteed component, quality, or ingredient in the feed, a feed will be considered to be deficient, high, or low in said component, quality, or ingredient when the content as determined falls outside the limits shown in the following table from that amount claimed to be present therein.

**Permitted Analytical Variations Adopted by AAFCO, 1982 - Percentage of Guaranteed Amount.**

Component or Ingredient Determination	Permitted Analytical Variation from Guarantee - (PAV)%
<b>Proximate Analyses*</b>	
<b>Determination</b>	
Moisture .....	+ 12
Protein, mixed feeds.....	- 5
Protein, vegetable oil meals .....	- 3
Fat, Ether Extraction .....	- 13
Fiber .....	+ 14
Ash .....	+ 9
Pepsin Digestible Protein.....	- 13
Total Sugars as Invert .....	- 12
NPN Protein Equivalent.....	+ 10 or - 10 as guaranteed maximum or minimum

**Minerals**

**Determination**

Calcium.....	+ 15, - 15
Phosphorous.....	- 20
Salt, maximum guarantee equal to 10 percent or less.....	+ 25, - 25*
Salt, minimum guarantee more than 10 percent .....	+ 10, - 10*
Fluorine (in minerals) .....	+ 40
Cobalt.....	- 40
Iodine .....	- 40
Copper.....	- 40
Maganese .....	- 60
Iron.....	- 30
Magnesium.....	- 20
Zinc .....	- 40
Selenium (ppm).....	- 50

**Vitamins****Determination**

Vitamin A.....	- 30
Vitamin B12.....	- 45
Riboflavin .....	- 30
Niacin.....	- 25
Choline Chloride.....	- 30
Pantothenic Acid.....	- 25

**Drugs & Antibiotics\*****Determination**

Amprolium.....	± 20
Arsanilic Acid.....	± 25
Carbarsone .....	± 25
Carbodox.....	± 20
Clopidol.....	± 30
Coumaphos .....	± 65
Ethopabate.....	± 25
Hygromycin B.....	± 35
Nicarbazin.....	± 25
Nitarsonsone (4-Nitro).....	± 30
Nithiazide.....	± 35
Nitromide .....	± 25
Piperazine.....	± 35
Phenothiazine.....	± 25
Pyrantel Tartrate.....	± 25
Roxarsone (3-Nitro) .....	± 30
Sulfamethazine.....	± 25
Sulfanitran.....	± 25
Sulfaquinoxaline .....	± 25
Thiabendazole.....	± 40
Zoalene.....	± 25
Bacitracin .....	± 40

Chlortetracycline.....	± 30
Monensin.....	± 30
Neomycin.....	± 55
Oleandomycin.....	± 35
Oxytetracycline.....	± 30
Penicillin.....	± 35
Streptomycin.....	± 45
Tylosin.....	± 30

\*(+) To be applied to maximum guarantee, (-) to be applied to minimum. If no maximum is guaranteed the (-) PAV is applicable to guarantee.

111.02 In using the listed PAV values to determine deficiencies or excesses from guaranteed quantities, the State Chemist and Commissioner shall be guided by the rationale for use of such values as published on pages 86-87, OFFICIAL PUBLICATION, 1982, Association of American Feed Control Officials, Incorporated.

Source: *Miss. Code Ann.* §75-45-157.

### Penalties

112.01 Pursuant to Sections 75-45-179(a), (b) of the Act, penalties for deviations from guarantees on commercial feeds shall be based on the following guidelines and penalty matrix. Penalties for labeling and misbranding of a feed as described in Section 75-45-163 of the Act, will also be based on the following guidelines and penalty matrix. The penalties will be levied according to procedures in Section 75-45-182.

112.02 These penalties are based on the concept that the official sample and its analyses are representative of a single lot of a given product, and the penalty actions are based on this single encounter with that feed. Repeated violations or continued deviations from the guarantee or quality for a given product are justification for holding a hearing with the distributor to show cause why his registration should not be cancelled for the remainder of the calendar year under authority given in Section 75-45-159(3) of the Act .

112.03 Other penalty action authorized in the Act under Sections 75-45-175 and 75-45-177 and other applicable sections, shall be administered by the Commissioner of Agriculture and Commerce or his representative at his discretion.

### 112.04 Enforcement Factor Application Guidelines for Penalties

1. Factor 1 – History of Firm
  - a. Firm has long history of compliance
  - b. No history
  - c. Firm has had minor violations
  - d. Firm’s history shows significant violations or repeated minor violations

2. Factor 2 – Scope of Violation
  - a. Very limited quantity & distribution or single lot
  - b. Distribution limited to state, one or two products
  - c. Large distribution area, large quantities of products or effects large number of animals
3. Factor 3 – Nature of Violation
  - a. Minor labeling violation, result of human error or lack of knowledge
  - b. Significant labeling – misbranding violation
  - c. Sample analysis results – deficiency or overage
  - d. Contamination with hazardous or deleterious materials
4. Factor 4 – Impact of Violation
  - a. Minor economic impact
  - b. Animal safety concerns
  - c. Human health safety concern
5. Penalty Matrix:

**Gravity Rating**

<b>Violation Category</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Labeling and Misbranding</b>	<b>Warning Letter and/or Stop Sale</b>	<b>Warning Letter and/or Stop Sale and/or Civil Penalty of \$50-\$250</b>	<b>Condemnation and/or Seizure and/or Civil Penalty of \$250-\$500</b>	<b>Formal Hearing and/or Revoke or Suspend Permit and/or Civil Penalty of \$500-\$1,000</b>
<b>Adulteration Sample Analysis Results or Contamination</b>	<b>Warning Letter and/or Stop Sale and/or Civil Penalty of \$50-\$250</b>	<b>Warning Letter and/or Stop Sale and/or Civil Penalty of \$50-\$500</b>	<b>Stop Sale and/or Condemnation and/or Seizure and/or Civil Penalty of \$500-\$1,000</b>	<b>Formal Hearing and/or Revoke or Suspend Permit and/or Civil Penalty of \$500-\$1,000</b>

Source: *Miss. Code Ann.* §75-45-157.

Processed Animal Wastes For Animal Feed Ingredient

113.01 It is unlawful to sell or use commercial feed containing animal waste products in violation of this section.

113.02 Processed animal waste is defined as a processed product composed of total excreta, with or without litter, from poultry, ruminants, porcine, equine, or other animals. It may be safely used as a source of nutrients in the feed of livestock and poultry under the following conditions:

1. Licensing and Processing Requirements

- a. Persons or firms wishing to offer for sale, exchange or barter such processed animal waste products as a commercial feed under the Act must obtain a permit from the Commissioner of Agriculture and Commerce before engaging in the processing, manufacturing, and selling of processed animal waste products. It is unlawful to process, manufacture, or sell processed animal waste products for animal feed use without obtaining said permit.
- b. The applicant shall submit to the Commissioner and the State Chemist a description of the facilities and equipment to be used in the processing and manufacturing of animal waste products, and protocols to be followed during operation. If the Commissioner and State Chemist are satisfied that the facilities, equipment, and protocol are adequate to fulfill the requirements for the product, the Commissioner shall issue the permit, subject, however, to the condition that it may be suspended whenever the Commissioner or State Chemist have reason to believe that the approved procedures are not being complied with or that the product may contain unlawful residues as set forth in sections below.
- c. Each process approved by the Commissioner and State Chemist shall result in products conforming to standards set forth below in paragraphs (2) and (3). The Commissioner and State Chemist may require the use of recording devices and thermometers and a periodic schedule of sampling and laboratory examinations, and such other records as are indicated below, and deemed necessary.

2. Nutritional Quality Standards

The product consists of processed animal wastes and/or associated litter derived from the commercial production of livestock and poultry, as more specifically defined below in paragraph (6). The product shall have a moisture content not exceeding 12 percent. Additionally, it shall meet one or more of the following nutritional standards:

- a. 10 percent crude protein, minimum (including crude protein from NPN sources)
- b. 40 percent crude fiber, maximum
- c. 1.5 percent phosphorus, minimum
- d. 2.0 percent calcium, minimum

3. Production and Testing Requirements

The product is processed by drying, ensiling, composting, physical and chemical fractionation, or other methods to produce an ingredient meeting the following requirements:

- a. Salmonella - Less than 30 percent of 10 random samples of 100 grams each from one day's production run or other identifiable separate unit of the ingredient shall be positive for Salmonella when analyzed in accordance with AOAC or FDA "BAM" (Bacteriological Analytical Manual) methods.
- b. Mycotoxins - 10 random 2 kilogram samples from one day's production run or other identifiable separate unit of the ingredient shall be blended together and analyzed by AOAC methods. No more than 20 ppb aflatoxins shall be present.
- c. Heavy Metals - 10 random 25 gram samples from one day's production run or other identifiable separate unit of the ingredient shall be blended together and analyzed for mercury, lead, copper, cadmium, arsenic, and fluorine by AOAC methods or other applicable validated methods. Results of such analyses shall be recorded and submitted to the Commissioner and State Chemist, and kept as permanent records. The manufacturer or producer is required to submit the initial sequential testing results for heavy metals and annual analyses of the same to the Commissioner and State Chemist. These analytical data will be evaluated to assess changes in heavy metal(s) resulting from the recycling process. When necessary, limitations for heavy metals will be established if experience demonstrates that such limitations are required to assure the safety of the ingredient.
- d. Feed Medications -
  - i. The manufacturer of the ingredient shall obtain, and maintain on a current basis, a list of the drugs used in the animals from which the waste material used as a source of the ingredient is obtained.
  - ii. 10 random samples of 100 grams from one production run of the ingredient blended together shall be analyzed for residues of the drugs listed by the manufacturer under paragraph (d)(i) above. If no such list is maintained, each of the drugs listed in paragraph (d)(iii)(B) shall be analyzed for by AOAC methods or other appropriate analytical procedures. As necessary, the manufacturer or producer of the ingredient shall develop a practical method to determine the amount of drug residue(s) in the ingredient.
  - iii. The ingredient may be marketed for the following uses:
    - A. If there is no detectable residue of any drug, the ingredient may be fed to all species of livestock and poultry without a withdrawal period.
    - B. If there is a detectable residue of any drug(s), and the level of the drug in the ingredient is no greater than the use level shown in the table below, the ingredient may be fed to all species of livestock and poultry except that it
      - 1. Shall not be used within 15 days of slaughter and
      - 2. Shall not be used 15 days prior to or during the food production of dairy animals and laying hens.

3. Shall not be used at levels exceeding 25 percent of the total ration.

<u>Drug in the Processed</u> <u>Animal Waste</u>	<u>Maximum Level of Drug</u> <u>Permitted in Processed</u> <u>Animal Waste (grams/ton)</u>
Aklomide.....	220
Amprolium.....	36
Arsanilic Acid or Sodium Arsanilate.....	45
Bacitracin.....	3
Bacitracin Methylene Disalicylate.....	4
Butynorate.....	180
Zinc Bacitracin.....	3
Buquinolate.....	75
Carbarsone.....	220
Chlortetracycline.....	10
Clopidol.....	110
Coumaphos.....	0.9
Decoquinat.....	27
Dichlorvos.....	350
Dimetridazole.....	130
Erythromycin.....	4
Ethopabate.....	3.5
Hygromycin B.....	8
Ipronidazole.....	57
Levamisole Hydrochloride.....	720
Lincomycin.....	2
Melengestrol Acetate.....	0.025
Monensin Sodium.....	90
Nequinat.....	18
Nicarbazin.....	90
Nihydrazone.....	100
Nitarson.....	170
Nitromide.....	220
Nystatin.....	50
Oleandomycin.....	1
Oxytetracycline.....	5
Penicillin.....	1.5
Pryantel Tartrate.....	96
Reserpine.....	0.18
Robenidine Hydrochloride.....	30
Ronnel.....	4
Roxarsone.....	22
Streptomycin.....	7
Sulfadimethoxine.....	55
Ormetoprim.....	34

Sulfamethazine.....	100
Sulfantran.....	270
Sulfathiazole .....	100
Sulfaquinoxaline .....	130
Tylosin .....	4
Zoalene.....	36

C. If there is a detectable residue of any drug(s), and the level of the drug in the feed ingredient is greater than the lowest approved use level as shown in the table in paragraph (d)(iii)B, such ingredient shall not be marketed for animal feed use.

e. Pesticide Residues –

- i. 10 random samples of 100 grams from one day's production run or other identifiable separate unit of the feed ingredient shall be blended together and analyzed for pesticide residues by AOAC methods of appropriate analytical procedures ("Pesticides Analytical Methods", Food and Drug Administration, or methods promulgated by the Environmental Protection Agency). Multi-residue methods for testing for organochlorine and organophosphate pesticides shall be adequate for determining if the ingredient complies with the requirements for these groups of pesticides.
- ii. Action levels for pesticide residues in the feed ingredients are the same as those promulgated by the Food and Drug Administration for finished feeds.
- iii. Animal wastes to which a pesticide has been applied directly (as, for example, for fly control) shall not be marketed for animal feed use until such time as the tolerance is established by the Environmental Protection Agency or an action level established by the Food and Drug Administration.

f. Parasite Larvae and Ova-10 random samples of 100 grams from one day's production run or other identifiable separate unit of the ingredient shall be analyzed in accordance with **AOAC International** procedures, by routine flotation and microscopic examination. The material must be negative for parasite larvae and ova.

4. Sampling and Testing Frequency, Reporting and Record Keeping

The manufacturer or producer of any such ingredient shall conform to the following sample and analysis requirements:

- a. The analyses specified in paragraph (3) of this section shall be conducted on sequential production runs sufficient to establish that three consecutive daily production runs of the feed ingredient are consistently within the limitations specified.
- b. Following the initial sequential testing, periodic analyses shall be conducted sufficient to assure continued compliance with paragraph (3) of this section. The frequency of testing will be determined by the results of the analyses. This frequency may range from 0.5 to 10 percent or more of the production runs and in no event be run less than once each calendar

quarter. Less frequent testing will be required where the analytical results show continued uniformity and a wide margin of compliance, whereas more frequent tests will be required where the analytical results show a wide range or show levels close to the limitations established.

- c. Sequential testing described in paragraph (4)(a) of this section shall again be required when the periodic analyses required by paragraph (4)(b) of this section or other information available to the manufacturers of the ingredient indicates that:
  - i. The ingredient is not within the limitations established in paragraph (3) of this section.
  - ii. Changes are made in the manufacturing process.
  - iii. New or expanded sources of the raw ingredients are used.
  - iv. Changes occur in the drug or pesticide used by a supplier of the raw ingredient.
- d. All records shall be maintained for at least two years following the production of such ingredient. Such records shall document the source of waste material and levels of the drugs, pesticides, or heavy metals and these records shall contain sequential testing shall be reported to the Commissioner and State Chemist within 30 days. In December of each year, the manufacturer of the ingredient shall submit to the Commissioner and State Chemist the heavy metal analyses conducted pursuant to paragraph (3)(c) of this section.

#### 5. Labeling

The label and labeling of the ingredient shall bear:

- a. The name of the ingredient, as specified in paragraph (6) below for the particular product involved. The phrase "For animal feed use" shall appear immediately under the ingredient name. Any product not complying with provisions of paragraph (3) (c) of this section shall not be sold as an animal feed ingredient, but may be diverted for fertilizer use or destroyed. If diverted as a fertilizer, the product shall have the statement "WARNING. DO NOT FEED TO ANIMALS. FOR FERTILIZER USE ONLY" immediately following the ingredient name at the top of the label.
- b. The minimum percentage of protein and fat and the maximum percentage of fiber and moisture.
- c. The mineral content, if the feed ingredient contains 6.5 percent or more of mineral matter or any label claim is made with respect to mineral content, or if any mineral is added to the ingredient.
- d. The vitamin content, if any claim is made with respect to vitamin content or if any vitamin is added to the ingredient.
- e. Adequate directions for use as an animal feed ingredient including any limitation required by reason of its content.
- f. If it contains any drug residue, the name of the ingredient shall immediately be preceded or followed, in at least half-size type, by the statements: "Contains drug residue(s). Do not use within 15 days of slaughter" and "Do not use 15 days prior to or during the food production period of dairy animals and laying hens."

- g. If it contains any drug residue subject to paragraph (3)(d)(iii)(B) of this section, the statement "Do not use this ingredient as more than 25 percent of the total ration" shall be prominently displayed in the directions for use.

#### 6. Specific Definitions and Limits for Allowable Products

All definitions for Recycled Animal Waste Products as listed in the current edition (2001) of the Official Publication of the Association of American Feed Control Officials, Incorporated, and those adopted thereafter by the same Association shall be deemed acceptable in Mississippi under this Regulation.

Source: *Miss. Code Ann.* §75-45-157.

### Official Pet Food Regulations

114.01 Definitions and Terms. For the purpose of this section, the following definitions apply:

1. Principal Display Panel means the part of a label that is most likely to be displayed, presented, shown or examined under normal and customary conditions of display for retail sale.
2. Ingredient Statements means a collective and contiguous listing on the label of the ingredients of which the pet food is composed.
3. Immediate Container means the unit, can, box, tin, bag, or other receptacle or covering in which a pet food is displayed for sale to retail purchasers, but does not include containers used as shipping containers.
4. All Life Stages means gestation/lactation, growth and adult maintenance life stages.
5. Family means a group of products which are nutritionally adequate for any or all life stages based on their nutritional similarity or a lead product which has been successfully test-fed according to an Association of American Feed Control Officials feeding protocol(s).

#### 114.02 Label Format and Labeling

1. Pet food and specialty pet food shall be labeled with the following information prescribed in this section:
  - a. Product name and brand name, if any, on the principal display panel as stipulated in subsection 114.03;
  - b. The species of pet or specialty pet for which the food is intended shall be conspicuously designated on the principal display panel;
  - c. Quantity statement, as defined in section 75-45-153 (v) of the Act, on the principal display panel;
  - d. Guaranteed analysis as stipulated in subsection 114.04;
  - e. Ingredient statement as stipulated in subsection 114.05;
  - f. A statement of nutritional adequacy or purpose if required under subsection 114.07;
  - g. Feeding directions if required under subsection 114.08; and
  - h. Name and address of the manufacturer or distributor as stipulated in subsection 114.11.

2. When a pet food or specialty pet food enclosed in an outer container or wrapper is intended for retail sale, all required label information shall appear on the outer container or wrapper.
3. A vignette, graphic, or pictorial representation on a pet food or specialty pet food label shall not misrepresent the contents of the package.
4. The use of the word "proven" in connection with a label claim for a pet food or specialty pet food is not permitted unless the claim is substantiated by scientific or other empirical evidence.
5. No statement shall appear upon the label or labeling of a pet food or specialty pet food which makes false or misleading comparisons between that product and any other product.
6. A personal or commercial endorsement is permitted on a pet food or specialty pet food label provided the endorsement is not false or misleading.
7. A statement on a pet food or specialty pet food label stating "Improved", "New", or similar designation shall be substantiated and limited to six (6) months production.
8. A statement on a pet food or specialty pet food label stating preference or comparative attribute claims shall be substantiated and limited to one (1) year production, after which the claim shall be removed or re-substantiated.

#### 114.03 Brand and Product Names

1. The words "100%", or "All", or words of similar designation shall not be used in the brand or product name of a pet food or specialty pet food if the product contains more than one ingredient, not including water sufficient for processing, decharacterizing agents, or trace amounts of preservatives and condiments.
2. An ingredient or a combination of ingredients may form a part of the product name of a pet food or specialty pet food:
  - a. When the ingredient(s) derived from animals, poultry, or fish constitutes at least 95% of the total weight of the product. Water sufficient for processing may be excluded when calculating the percentage, however, the ingredient(s) shall constitute at least 70% of the total product weight.
  - b. When any ingredient(s) constitutes at least 25% of the weight of the product, provided that:
    - i. Water sufficient for processing may be excluded when calculating the percentage, however, the ingredients(s) shall constitute at least 10% of the total product weight; and
    - ii. A descriptor is used with the ingredient name(s). This descriptor shall imply other ingredients are included in the product formula. Examples of descriptors include "dinner", "platter", "entree", "formula", and "recipe"; and
    - iii. The descriptor shall be in the same size, style, and color print as the ingredient name(s).
  - c. When a combination of ingredients which are included in the product name in accordance with subsection 114.03(2) meets all of the following:

- i. Each ingredient constitutes at least 3% of the product weight, excluding water sufficient for processing; and
  - ii. The names of the ingredients appear in the order of their respective predominance by weight in the product; and
  - iii. All such ingredient names appear on the label in the same size, style, and color print.
- 3. When the name of any ingredient appears in the product name of a pet food or elsewhere on the product label and includes a descriptor such as "with" or similar designation, the named ingredient(s) must each constitute at least 3% of the product weight exclusive of water for processing. If the names of more than one ingredient are shown, they shall appear in their respective order of predominance by weight in the product. The 3% minimum level shall not apply to claims for nutrients, such as, but not limited to, vitamins, minerals, and fatty acids, as well as condiments. The word "with," or similar designation, and named ingredients shall be in the same size, style, color and case print and be of no greater size than:  
 Panel Size, Max "with claim" Type Size  
 < 5 sq. in., 1/8"  
 5-25 sq. in., 1/4"  
 25-100 sq. in., 3/8"  
 100-400 sq. in., 1/2"  
 400 sq. in. +, 1"
- 4. A flavor designation may be included as part of the product name or elsewhere on the label of a pet food or specialty pet food when the flavor designation meets all of the following:
  - a. The flavor designation:
    - i. Conforms to the name of the ingredient as listed in the ingredient statement; or
    - ii. Is identified by the source of the flavor in the ingredient statement; and
  - b. The word "flavor" is printed in the same size type and with an equal degree of conspicuousness as the name of the flavor designation; and
  - c. Substantiation of the flavor designation, the flavor claim, or the ingredient source is provided upon request.
- 5. The product name of the pet food or specialty pet food shall not be derived from one or more ingredients unless all ingredients are included in the name, except as specified by paragraphs 2 and 3 of subsection 114.03 provided that the name of an ingredient or combination of ingredients may be used as a part of the product name if:
  - a. The ingredient or combination of ingredients is present in sufficient quantity to impart a distinctive characteristic to the product or is present in amounts which have a material bearing upon the price of the product or upon acceptance of the product by the purchaser thereof; or
  - b. It does not constitute a representation that the ingredient or combination of ingredients is present to the exclusion of other ingredients.

6. Contractions or coined names referring to ingredients shall not be used in the brand name of a pet food or specialty pet food unless it is in compliance with paragraphs 2-4 of subsection 114.03.

#### 114.04 Expression of Guarantees

1. The "Guaranteed Analysis" shall be listed in the following order and format unless otherwise specified in these Regulations:
  - a. A pet food or specialty pet food label shall list the following required guarantees;
    - i. Minimum percentage of crude protein;
    - ii. Minimum percentage of crude fat;
    - iii. Maximum percentage of crude fat, if required by subsection 114.10;
    - iv. Maximum percentage of crude fiber;
    - v. Maximum percentage of moisture; and
    - vi. Additional guarantees shall follow moisture.
  - b. When ash is listed in the guaranteed analysis on a pet food or specialty pet food label, it shall be guaranteed as a maximum percentage and shall immediately follow moisture.
  - c. A dog or cat food label shall list other required or voluntary guarantees in the same order and units of the nutrients in the AAFCO Dog (or Cat) Food Nutrient Profiles. Guarantees for substances not listed in the AAFCO Dog (or Cat) Food Nutrient Profiles, or not otherwise provided for in these Regulations, shall immediately follow the listing of the recognized nutrients and shall be accompanied by an asterisk referring to the disclaimer "not recognized as an essential nutrient by the AAFCO Dog (or Cat) Food Nutrient Profiles". The disclaimer shall appear immediately after the last such guarantee in the same size type as the guarantees.
  - d. A specialty pet food label shall list other required or voluntary guarantees as required by section 102(4)(j).
2. The sliding scale method of expressing a guaranteed analysis on a pet food or specialty pet food label (for example, "Minimum crude protein 15-18%") is prohibited.
3. The label of a pet food or a specialty pet food which is formulated as and represented to be a mineral supplement shall include:
  - a. Minimum guarantees for all minerals from sources declared in the ingredient statement and established by an AAFCO-recognized nutrient profile, expressed as the element in units specified in the nutrient profile; or
  - b. Minimum guarantees for all minerals from sources declared in the ingredient statement expressed as the element in units specified in section 103.02 when no species-specific nutrient profile has been recognized by AAFCO; and provided that
  - c. Mineral guarantees required by subsection 114.04(3)(a)-(b) may be expressed in milligrams (mg) per unit (e.g., tablets, capsules, granules, or liquids) consistent with those employed in the quantity statement and directions for use; and

- d. A weight equivalent (e.g., 1 fl. oz. = 28 grams) for liquid products.
- 4. The label of a pet food or a specialty pet food which is formulated as and represented to be a vitamin supplement shall include:
  - a. Minimum guarantees for all vitamins from sources declared in the ingredient statement and established by an AAFCO-recognized nutrient profile, expressed in units specified in the nutrient profile; or
  - b. Minimum guarantees for all vitamins from sources declared in the ingredient statement expressed in units specified in section 103.03 when no species-specific nutrient profile has been recognized by AAFCO; and provided that
  - c. Vitamin guarantees required by clauses (a) and (b) of this paragraph may be expressed in approved units (e.g., IU, mg, g) per unit (e.g., tablets, capsules, granules, or liquids) consistent with those employed in the quantity statement and directions for use; and
  - d. A weight equivalent (e.g., 1 fl. oz. = 28 grams) for liquid products.
- 5. When the label of a pet food or specialty pet food includes a comparison of the nutrient content of the food with levels established by an AAFCO-recognized nutrient profile, such as a table of comparison, a percentage, or any other designation referring to an individual nutrient or all of the nutrient levels, the following apply:
  - a. The nutrients shall be stated in the units of measurement used in the cited AAFCO-recognized nutrient profile The product shall meet the AAFCO-recognized nutrient profile ; and
  - b. The statement in a table of comparison of the vitamin, mineral, or nutrient content shall constitute a guarantee, but need not be repeated in the guaranteed analysis The statement of comparison shall be preceded by a statement that the product meets the AAFCO-recognized profile ; however, the statement that the product meets the AAFCO-recognized nutrient profile is not required provided that the nutritional adequacy statement as per subsections 114.07(1)(a) or 114.07(2)(b)(iii)(A) appears elsewhere on the product label ; and
  - c. The comparison may appear on the label separate and apart from the guaranteed analysis. The statement of comparison of the nutrient content shall constitute a guarantee, but need not be repeated in the guaranteed analysis; and
  - d. The statement of comparison may appear on the label separate and apart from the guaranteed analysis.
- 6. When the label of a pet food or specialty pet food includes a comparison of the nutrient content of the food with levels established by an AAFCO-recognized nutrient profile, the following apply:
  - a. The nutrients shall be stated in the units of measurement used in the cited AAFCO-recognized nutrient profile; and
  - b. The statement in a table of comparison of the vitamin, mineral, or nutrient content shall constitute a guarantee, but need not be repeated in the guaranteed analysis; and

- c. The comparison may appear on the label separate and apart from the guaranteed analysis.
7. The maximum moisture declared on a pet food or specialty pet food label shall not exceed 78.00% or the natural moisture content of the ingredients, whichever is higher. However, pet food and specialty pet food such as, but not limited to, those consisting principally of stew, gravy, sauce, broth, aspic, juice, or a milk replacer, and which are so labeled, may contain moisture in excess of 78.00%.
8. Guarantees for crude protein, crude fat, and crude fiber are not required when the pet food or specialty pet food is intended for purposes other than to furnish these substances or they are of minor significance relative to the primary purpose of the product, such as a mineral or vitamin supplement.
9. Guarantees for microorganisms and enzymes shall be stated in the format as stipulated in subsections 105.07 and 105.08 of this chapter.

#### 114.05 Ingredients

1. Each ingredient of a pet food or specialty pet food shall be listed in the ingredient statement as follows:
  - a. The names of all ingredients in the ingredient statement shall be shown in letters or type of the same size;
  - b. The ingredients shall be listed in descending order by their predominance by weight in non-quantitative terms;
  - c. Ingredients shall be listed and identified by the name and definition established by AAFCO; and
  - d. Any ingredient for which no name and definition have been so established shall be identified by the common or usual name of the ingredient.
2. The ingredients "meat" or "meat by-products" shall be qualified to designate the animal from which the meat or meat by-products are derived unless the meat or meat by-products are derived from cattle, swine, sheep, goats, or any combination thereof. For example, ingredients derived from horses shall be listed as "horsemeat" or "horsemeat by-products".
3. Brand or trade names shall not be used in the ingredient statement.
4. A reference to the quality, nature, form, or other attribute of an ingredient shall be allowed when the reference meets all of the following:
  - a. The designation is not false or misleading;
  - b. The ingredient imparts a distinctive characteristic to the pet food or specialty pet food because it possesses that attribute; and
  - c. A reference to quality or grade of the ingredient does not appear in the ingredient statement.

#### 114.06 Drugs and Pet Food Additives

1. An artificial color may be used in a pet food or specialty pet food only if it has been shown to be harmless to pets or specialty pets. The permanent or provisional listing of an artificial color in the United States Food and Drug regulations as safe for use, together with the conditions, limitations, and tolerances, if any, incorporated therein, shall be deemed to be satisfactory

- evidence that the color is, when used pursuant to such regulations, harmless to pets or specialty pets.
2. Evidence may be required to prove the safety and efficacy or utility of a pet food or specialty pet food which contains additives or drugs, when used according to directions furnished on the label. Satisfactory evidence of the safety and efficacy of a pet food or specialty pet food may be established:
    - a. When the pet food or specialty pet food contains such additives, the use of which conforms to the requirements of the applicable regulation in the Code of Federal Regulations, Title 21, or which are "prior sanctioned" or "Generally Recognized as Safe" for such use; or
    - b. When the pet food or specialty pet food itself is a drug or contains a drug as defined in section 75-45-153 (g) of the Act and is "generally recognized as safe and effective" for the labeled use or is marketed subject to an application approved by the Food and Drug Administration under Title 21, U.S.C. 360(b).
  3. When a drug is included in a pet food or specialty pet food, the format required by section 102(2) of this chapter for labeling medicated feeds shall be used.

#### 114.07 Nutritional Adequacy

1. The label of a pet food or specialty pet food which is intended for all life stages of the pet or specialty pet may include an unqualified claim, directly or indirectly, such as "complete and balanced", "perfect", "scientific", or "100% nutritious" if at least one of the following apply:
  - a. The product meets the nutrient requirements for all life stages established by an AAFCO-recognized nutrient profile; or
  - b. The product meets the criteria for all life stages as substantiated by completion of the appropriate AAFCO-recognized animal feeding protocol(s); or
  - c. The product is a member of a product family which is nutritionally similar to a lead product which contains a combination of ingredients that has been fed to a normal animal as the sole source of nourishment in accordance with the testing procedures established by AAFCO for all life stages, provided that:
    - i. The nutritional similarity of the family product can be substantiated according to the Procedures for Establishing Pet Food Product Families developed by AAFCO; and
    - ii. The family product meets the criteria for all life stages; and
    - iii. Under circumstances of reasonable doubt, the Commissioner or State Chemist may require the manufacturer to perform additional testing of the family product in order to substantiate the claim of nutritional adequacy.
2. The label of a pet food or specialty pet food which is intended for a limited purpose or a specific life stage, but not for all life stages, may include a qualified claim such as "complete and balanced", "perfect", "scientific", or "100% nutritious" when the product and claim meets all of the following:
  - a. The claim is qualified with a statement of the limited purpose or specific life stage for which the product is intended or suitable, for example,

- "complete and balanced for puppies (or kittens)". The claim and the required qualification shall be juxtaposed on the same label panel and in the same size, style and color print; and
- b. The product meets at least one of the following:
    - i. The nutrient requirements for the limited purpose or specific life stage established by an AAFCO-recognized nutrient profile; or
    - ii. The criteria for a limited purpose or a specific life stage as substantiated by completion of the appropriate AAFCO-recognized animal feeding protocol(s); or
    - iii. The requirements of a product family which is nutritionally similar to a lead product which contains a combination of ingredients which, when fed for such limited purpose, will satisfy the nutrient requirements for such limited purpose and has had its capabilities in this regard demonstrated by adequate testing, and provided that:
      - A. The nutritional similarity of the family product can be substantiated according to the Procedures for Establishing Pet Food Product Families developed by AAFCO; and
      - B. The family product meets the criteria for such limited purpose; and
      - C. Under circumstances of reasonable doubt, the Commissioner and State Chemist may require the manufacturer to perform additional testing for the family product to substantiate the claim of nutritional adequacy.
  3. Dog and cat food labels shall include a statement of nutritional adequacy or purpose of the product except when the dog or cat food is clearly and conspicuously identified on the principal display panel as a "snack" or "treat". The statement shall consist of one of the following:
    - a. A claim that the dog or cat food meets the requirements of one or more of the recognized categories of nutritional adequacy: gestation/lactation, growth, maintenance, and all life stages. The claim shall be stated verbatim as one of the following:
      - i. "(Name of product) is formulated to meet the nutritional levels established by the AAFCO Dog (or Cat) Food Nutrient Profiles for \_\_\_\_\_. ." (Blank is to be completed by using the stage or stages of the pet's life, such as, gestation/lactation, growth, maintenance or the words "All Life Stages"); or
      - ii. "Animal feeding tests using AAFCO procedures substantiate that (Name of Product) provides complete and balanced nutrition for \_\_\_\_\_. ." (Blank is to be completed by using the stage or stages of the pet's life tested, such as, gestation/lactation, growth, maintenance or the words "All Life Stages"); or
      - iii. "(Name of Product) provides complete and balanced nutrition for \_\_\_\_\_ (Blank is to be completed by using the stage or stages of the pet's life, such as gestation, lactation, growth, maintenance or the words "All Life Stages") and is comparable in nutritional adequacy to a product which has been substantiated using AAFCO feeding tests."

- b. A nutritional or dietary claim for purposes other than those listed in paragraphs (1) or (2) of subsection 114.07 if the claim is scientifically substantiated; or
  - c. The statement: "This product is intended for intermittent or supplemental feeding only", if a product does not meet the requirements of paragraphs (1) or (2) of subsection 114.07 or any other special nutritional or dietary need and so is suitable only for limited or intermittent or supplementary feeding.
4. A product intended for use by, or under the supervision or direction of a veterinarian shall make a statement in accordance with paragraphs (3)(a) or (3)(b) of subsection 114.07.
  5. A signed affidavit attesting that the product meets the requirements of paragraphs (1) or (2)(b) of subsection 114.07 shall be submitted to the Commissioner or State Chemist \_\_\_\_\_ upon request.
  6. If the nutrient content of a product does not meet those nutrient requirements established by an AAFCO-recognized nutrient profile, or if no requirement has been established by an AAFCO recognized nutritional authority for the life stage(s) of the intended species, the claimed nutritional adequacy or purpose of the product shall be scientifically substantiated.
  7. The following AAFCO-recognized nutritional authority, nutrient profile, and/or animal feeding protocol shall be acceptable as the basis for a claim of nutritional adequacy:
    - i. As an AAFCO-recognized nutrient profile or nutritional authority:
      - A. For dogs, the AAFCO Dog Food Nutrient Profiles;
      - B. For cats, the AAFCO Cat Food Nutrient Profiles;
      - C. For specialty pets, the nutrient recommendations approved by the Committee on Animal Nutrition of the National Research Council of the National Academy of Sciences, provided that, this nutrient recommendation is recognized only for the specific specialty pet for which the profile is intended.
    - ii. As an AAFCO-recognized animal feeding protocol(s), the AAFCO Dog and Cat Food Feeding Protocols.

#### 114.08 Feeding Directions

1. Dog or cat food, including snacks or treats, labeled as complete and balanced for any or all life stages, as provided in subsection 114.07(3)(a), except those pet foods labeled in accordance with subsection 114.07(4), shall list feeding directions on the product label. These directions shall be consistent with the intended use(s) indicated in the nutritional adequacy statement, unless a limited use or more limited life stage designation is declared elsewhere (e.g., "adult formula"). These directions shall be expressed in common terms and shall appear prominently on the label. Feeding directions shall, at a minimum, state "Feed (weight/unit of product) per (weight only) of dog (or cat)". The frequency of feeding shall also be specified.

2. When a dog or cat food is intended for use by or under the supervision or direction of a veterinarian, the statement: "Use only as directed by your veterinarian" may be used in lieu of feeding directions.
3. Specialty pet food, including snacks or treats, labeled as complete and balanced for any or all life stages, as provided in subsection 114.07(1), shall list feeding directions on the product label. These feeding directions shall be adequate to meet the nutrient requirements of the intended species of specialty pet as recommended by the AAFCO-recognized nutritional authority. These directions shall be expressed in common terms and shall appear prominently on the label. The frequency of feeding shall also be specified.

114.09 Statements of Calorie Content:

1. Except as required in Section 114.10, the label of a dog or cat food may bear a statement of calorie content when the label meets all of the following:
  - a. The statement shall be separate and distinct from the "Guaranteed Analysis" and shall appear under the heading "Calorie Content";
  - b. The statement shall be measured in terms of metabolizable energy (ME) on an "as fed" basis and must be expressed as "kilocalories per kilogram" ("kcal/kg") of product, and may also be expressed as kilocalories per familiar household measure (e.g., cans, cups, pounds); and
  - c. The calorie content is determined by one of the following methods:
    - i. By calculation using the following "Modified Atwater" formula:  

$$\text{ME(kcal/kg)} = 10[(3.5 \times \text{CP}) + (8.5 \times \text{CF}) + (3.5 \times \text{NFE})]$$
 Where: ME = Metabolizable Energy  
 CP = % crude protein "as fed"  
 CF = % crude fat "as fed"  
 NFE = % nitrogen-free extract (carbohydrate) "as fed"  
 and the percentages of CP and CF are the arithmetic averages from proximate analyses of at least four production batches of the product, and the NFE is calculated as the difference between 100 and the sum of CP, CF, and the percentages of crude fiber, moisture and ash (determined in the same manner as CP and CF); or
    - ii. In accordance with a testing procedure established by AAFCO.
  - d. An affidavit shall be provided upon request to the \_\_\_\_\_, substantiating that the calorie content was determined by:
    - i. subsection 114.09(1)(c)(i) in which case the results of all the analyses used in the calculation shall accompany the affidavit; or
    - ii. subsection 114.09(1)(c)(ii) in which case the summary data used in the determination of calorie content shall accompany the affidavit.
  - e. The calorie content statement shall appear as one of the following:
    - i. The claim on the label or other labeling shall be followed parenthetically by the word "calculated" when the calorie content is determined in accordance with subsection 114.09(1)(c)(i); or
    - ii. The value of calorie content stated on the label which is determined in accordance with subsection 114.09(1)(c)(ii) shall not exceed or

- understate the value determined in accordance with subsection 114.09(1)(c)(i) by more than 15%.
2. Comparative claims shall not be false, misleading, or given undue emphasis and shall be based on the same methodology for the products compared.

#### 114.10 Descriptive Terms

##### 1. Calorie Terms

###### a. "Light"

- i. A dog food product which bears on its label the terms "light", "lite", "low calorie", or words of similar designation shall:

- A. Contain no more than 3100 kcal ME/kg for products containing less than 20% moisture, no more than 2500 kcal ME/kg for products containing 20% or more but less than 65% moisture, and no more than 900 kcal ME/kg for products containing 65% or more moisture; and

- B. Include on the label a calorie content statement:

- I. In accordance with the format provided in subsection 114.09; and

- II. Which states no more than 3100 kcal ME/kg for products containing less than 20% moisture, no more than 2500 kcal ME/kg for products containing 20% or more but less than 65% moisture, and no more than 900 kcal ME/kg for products containing 65% or more moisture; and

- III. Include on the label feeding directions which reflect a reduction in calorie intake consistent with the intended use.

- ii. A cat food product which bears on its label the terms "light", "lite", "low calorie", or words of similar designation shall:

- A. Contain no more than 3250 kcal ME/kg for products containing less than 20% moisture, no more than 2650 kcal ME/kg for products containing 20% or more but less than 65% moisture, and no more than 950 kcal ME/kg for products containing 65% or more moisture; and

- B. Include on the label a calorie content statement:

- I. In accordance with the format provided in subsection 114.09; and

- II. Which states no more than 3250 kcal ME/kg for products containing less than 20% moisture, no more than 2650 kcal ME/kg for products containing 20% or more but less than 65% moisture, and no more than 950 kcal ME/kg for products containing 65% or more moisture; and

- C. Include on the label feeding directions which reflect a reduction in calorie intake consistent with the intended use.

###### b. "Less" or "Reduced Calories"

- i. A dog or cat food product which bears on its label a claim of "less calories", "reduced calories", or words of similar designation, shall include on the label:

- A. The name of the product of comparison and the percentage of calorie reduction (expressed on an equal weight basis) explicitly stated and juxtaposed with the largest or most prominent use of the claim on each panel of the label where the term appears; and
  - B. The comparative statement printed in type of the same color and style and at least one-half the type size used in the claim; and
  - C. A calorie content statement in accordance with the format provided in subsection 114.09; and
  - D. Feeding directions which reflect a reduction in calories compared to feeding directions for the product of comparison.
- ii. A comparison between products in different categories of moisture content (i.e., less than 20%, 20% or more but less than 65%, 65% or more) is misleading.
2. Fat Terms
- a. "Lean"
    - i. A dog food product which bears on its label the terms "lean", "low fat", or words of similar designation shall:
      - A. Contain no more than 9% crude fat for products containing less than 20% moisture, no more than 7% crude fat for products containing 20% or more but less than 65% moisture, and no more than 4% crude fat for products containing 65% or more moisture;
      - B. Include on the product label in the Guaranteed Analysis:
        - I. A maximum crude fat guarantee immediately following the minimum crude fat guarantee in addition to the mandatory guaranteed analysis information as specified in subsection 114.04(1)(a); and
        - II. A maximum crude fat guarantee which is no more than 9% crude fat for products containing less than 20% moisture, no more than 7% crude fat for products containing 20% or more but less than 65% moisture, and no more than 4% crude fat for products containing 65% or more moisture.
    - ii. A cat food product which bears on its label the terms "lean", "low fat", or words of similar designation shall:
      - A. Contain a maximum percentage of crude fat which is no more than 10% crude fat for products containing less than 20% moisture, no more than 8% crude fat for products containing 20% or more but less than 65% moisture, and no more than 5% crude fat for products containing 65% or more moisture; and
      - B. Include on the product label in the Guaranteed Analysis:
        - I. A maximum crude fat guarantee immediately following the minimum crude fat guarantee in addition to the mandatory guaranteed analysis information as specified in subsection 114.04(1)(a); and
        - II. A maximum crude fat guarantee which is no more than 10% crude fat for products containing less than 20% moisture, no more than 8% crude fat for products containing 20% or more

but less than 65% moisture, and no more than 5% crude fat for products containing 65% or more moisture.

b. "Less" or "Reduced Fat"

i. A dog or cat food product which bears on its label a claim of "less fat", "reduced fat", or words of similar designation, shall include on the label:

A. The name of the product of comparison and the percentage of fat reduction (expressed on an equal weight basis) explicitly stated and juxtaposed with the largest or most prominent use of the claim on each panel of the label on where the term appears; and

B. The comparative statement printed in type of the same color and style and at least one-half the type size used in the claim; and

C. A maximum crude fat guarantee in the Guaranteed Analysis immediately following the minimum crude fat guarantee in addition to the mandatory guaranteed analysis information as specified in subsection 114.04(1)(a).

ii. A comparison on the label between products in different categories of moisture content (i.e., less than 20%, 20% or more but less than 65%, 65% or more) is misleading.

114.11 Manufacturer or Distributor; Name and Address

1. The label of a pet food or specialty pet food shall specify the name and address of the manufacturer or distributor. The statement of the place of business shall include the street address, city, state, and zip code; however, the street address may be omitted if such street address is shown in a current city directory or telephone directory for the city listed on the label.
2. When a person manufactures or distributes a pet food or specialty pet food in a place other than the principal place of business, the label may state the principal place of business in lieu of the actual place where each package of such pet food or specialty pet food was manufactured or package or from where each package is to be distributed.

Source: *Miss. Code Ann.* §75-45-157.