CHAPTER 33-32-02
COMMERCIAL FEED

33-32-02-01. Definition and terms.

1. 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 department designates otherwise in specific cases.

2. The terms used in reference to commercial feeds shall be the official feed terms adopted by the association of American feed control officials, except as the department designates otherwise in specific cases.

3. The following commodities are hereby declared exempt from the definition of commercial feed, under the provisions of subsection 2 of North Dakota Century Code section 19-13.1-02: raw meat, hay, 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 North Dakota Century Code section 19-13.1-07.

4. Individual chemical compounds and substances are hereby declared exempt from the definition of commercial feed under the provisions of subsection 2 of North Dakota Century Code section 19-13.1-02. It has been determined that these products meet the following criteria:

   a. There is an adopted association of American feed control officials' definition for the product.

   b. The product is either generally recognized as safe or is not covered by a specific food and drug administration regulation.

   c. The product is either a natural occurring product of relatively uniform chemical composition or is manufactured to meet the association of American feed control officials' definition of the product.

   d. The use of the product in the feed industry constitutes a minor portion of its total industrial use.

   e. Small quantities of additives, which are intended to impart special desirable characteristics shall be permitted.

   f. There is no need or problem of control of this product.

LIST OF EXEMPTED SUBSTANCES
Loose Salt

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-02

33-32-02-02. Label format.

1. 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:

   a. Net weight may be stated in metric units in addition to the required avoirdupois units.

   b. Product name and brand name if any.

   c. If a drug is used:

      (1) 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.

      (2) The purpose of medication (claim statement).

      (3) An active drug ingredient statement listing the active drug ingredients by their established name and the amounts in accordance with subsection 4 of section 33-32-02-04.

      (4) The required directions for use and precautionary statements or reference to their location if the detailed feeding directions and precautionary statements required by sections 33-32-02-06 and 33-32-02-07 appear elsewhere on the label.

   d. The guaranteed analysis of the feed as required under the provisions of subsection 3 of North Dakota Century Code section 19-13.1-04 include the following items, unless exempted in paragraph 9, and in the order listed:

      (1) Minimum percentage of crude protein.

      (2) Maximum or minimum percentage of equivalent protein from nonprotein nitrogen as required in subsection 5 of section 33-32-02-04.

      (3) Minimum percentage of crude fat.

      (4) Maximum percentage of crude fiber.

      (5) Minerals, to include, in the following order: (a) minimum and maximum percentages of calcium (Ca), (b) minimum percentages of phosphorus (P), (c) minimum and maximum percentages of salt (NaCl), and (d) other minerals.

      (6) Vitamins in such terms as specified in subsection 3 of section 33-32-02-04.

      (7) Total sugars as invert on dried molasses products or products being sold primarily for their sugar content.

      (8) Viable lactic acid producing microorganisms for use in silages in terms specified in subsection 7 of section 33-32-02-04.

      (9) Exemptions.

         (a) Guarantees for minerals are not required when there are no specific label claims and when the commercial feed contains less than six and one-half percent of calcium, phosphorus, sodium, and chloride.

(b) Guarantees for vitamins are not required when the commercial feed is neither formulated for nor represented in any manner as a vitamin supplement.

(c) 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.

(d) Guarantees for micro-organisms are not required when the commercial feed is intended for a purpose other than to furnish these substances or they are of minor significance resisting to the primary purpose of the product, and no specific label claims are made.

e. Feed ingredients, collective terms for the grouping of feed ingredients, or appropriate statements as provided under the provisions of subsection 4 of North Dakota Century Code section 19-13.1-04.

(1) 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 department.

(2) Collective terms 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:

(a) When a collective term for a group of ingredients is used on the label, individual ingredients within that group may not be listed on the label.

(b) 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.

(3) The registrant may affix the statement, "Ingredients as registered with the State" in lieu of the ingredient list on the label. The list of ingredients must be on file with the department. This list must be made available to the feed purchaser upon request.

f. Name and principal mailing address of the manufacturer or person responsible for distributing the feed. The principal mailing address must 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.

g. The information required in subsections 1 through 5 of North Dakota Century Code section 19-13.1-04 must appear in its entirety on one side of the label or on one side of the container.

2. Customer-formula feed must be accompanied with the information prescribed in this section using labels, invoice, delivery ticket, or other shipping document bearing the following information:

a. The name and address of the manufacturer.

b. The name and address of the purchaser.

c. The date of sale or delivery.

d. The customer-formula feed name and brand name if any.

e. The product name and net weight (may be stated in metric units in addition to the required avoirdupois) of each registered commercial feed and each other ingredient used in the mixture.

f. The direction for use and precautionary statements as required by sections 33-32-02-06 and 33-32-02-07.

g. If a drug-containing product is used:

(1) The purpose of the medication (claim statement).

(2) The established name of each active drug ingredient and the level of each drug used in the final mixture expressed in accordance with subsection 4 of section 33-32-02-04.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-04

33-32-02-03. Brand and product names.

1. The brand or product name must be appropriate for the intended use of the feed and must not be misleading. If the name indicates the feed is made for a specific use, the character of the feed must conform therewith. A mixture labeled "Dairy Feed", for example, must be suitable for that purpose.

2. Commercial, registered brand or trade names are not permitted in guarantees or ingredient listings and only in the product name of feeds produced by or for the firm holding the rights to such a name.

3. The name of a commercial feed may not be derived from one or more ingredients of a mixture to the exclusion of other ingredients and may 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 ingredients or combination of ingredients is quantitatively guaranteed in the guaranteed analysis, and the brand or product name is not otherwise false or misleading.

4. The word "protein" is not permitted in the product name of a feed that contains added nonprotein nitrogen.

5. When the name carries a percentage value, it shall be understood to signify protein or equivalent protein, or both, 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 may not be used in such a manner as to be misleading or confusing to the customer.

6. Single ingredient feeds must 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 department designates otherwise.

7. 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 supplement, and which is labeled with the minimum content of each vitamin declared, as specified in subsection 3 of section 33-32-02-04.

8. The term "mineralized" may 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.

9. The term "meat" and "meat byproducts" shall be qualified to designate the animal from which the meat and meat byproducts is derived unless the meat and meat byproducts are made from cattle, swine, sheep, and goats.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-08

33-32-02-04. Expression of guarantees.

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

2. Commercial feeds containing six and one-half percent or more calcium, phosphorus, sodium, and chloride shall include in the guaranteed analysis the minimum and maximum percentages of calcium (Ca), the minimum percentage of phosphorus (P), and if salt is added, the minimum and maximum percentage of salt (NaCl). Minerals, except salt (NaCl), shall be guaranteed in terms of percentage of the element. When calcium or salt, or both, guarantees are given in the guaranteed analysis such must be stated and conform to the following:

   a. When the minimum is five percent or less, the maximum may not exceed the minimum by more than one percentage point.

   b. When the minimum is above five percent, the maximum shall not exceed the minimum by more than twenty percent and in no case may the maximum exceed the minimum by more than five percentage points.

3. Guarantees for minimum vitamin content of commercial feeds must be listed in the order specified and are stated in milligrams per pound unless otherwise specified:

   a. Vitamin A, other than precursors of vitamin A, in international units per pound.

   b. Vitamin D-3 in products offered for poultry feeding, in international chick units per pound.

   c. Vitamin D for other uses, international units per pound.

   d. Vitamin E, in international units per pound.

   e. Concentrated oils and feed additive premixes containing vitamins A, D, or E, or a combination thereof, may, at the option of the distributor be stated in units per gram instead of units per pound.

   f. Vitamin B-12, in milligrams or micrograms per pound.

   g. All other vitamin guarantees shall express the vitamin activity in milligrams per pound in terms of the following: menadione; riboflavine; d-pantothenic acid; thiamine; niacine; vitamin B-6; folic acid, chloline, biotin, inositol; p-amino benzoic acid; ascorbic acid; and carotene.

4. Guarantees for drugs must be stated in terms of percent by weight, except:

   a. Antibiotics, present at less than two thousand grams per ton (total) of commercial feed must be stated in grams per ton of commercial feed.

b. Antibiotics present at two thousand or more grams per ton (total) of commercial feed, must be stated in grams per pound of commercial feed.

c. Labels for commercial feeds containing growth promotion or feed efficiency, or both, 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.

d. The term "milligrams per pound" may be used for drugs or antibiotics in those cases where a dosage is given in "milligrams" in the feeding directions.

5. Commercial feeds containing any added nonprotein nitrogen must be labeled as follows:

a. For ruminants:

(1) Complete feeds, supplements, and concentrates containing added nonprotein nitrogen and containing more than five percent protein from natural sources shall be guaranteed as follows:

Crude Protein, minimum, -----%

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

(2) Mixed feed concentrates and supplements containing less than five percent protein from natural sources may be guaranteed as follows:

Equivalent Crude Protein from Nonprotein Nitrogen, minimum, -----%

(3) Ingredient sources of nonprotein nitrogen such as urea, di-ammonium phosphate, ammonium polyphosphate solution, ammoniated rice hulls, or other basic nonprotein nitrogen ingredients defined by the association of American feed control officials shall be guaranteed as follows:

Nitrogen, minimum, -----%

Equivalent Crude Protein from Nonprotein Nitrogen, minimum, -----%

b. For nonruminants:

(1) Complete feeds, supplements, and concentrates containing crude protein from all forms of nonprotein nitrogen, added as such, must 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).

(2) Premixes, concentrates, or supplements intended for nonruminants containing more than one and one-quarter percent equivalent crude protein from all forms of nonprotein nitrogen, added as such, must contain adequate directions for use and prominently state: WARNING: This feed must be used only in accordance with directions furnished on the label.

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

7. Guarantees for micro-organisms must 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 must list each species in order of predominance.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-04

33-32-02-05. Ingredients.

1. 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 American feed control officials, the common or usual name, or one approved by the department.

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

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

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

5. A single ingredient product defined by the association of American feed control officials is not required to have an ingredient statement.

6. Tentative definitions or ingredients may not be used until adopted as official, unless no official definition exists or the ingredient has a common accepted name that requires no definition, (i.e., sugar).

7. When the word "iodized" is used in connection with a feed ingredient, the feed ingredient may contain not less than seven-thousandths percent iodine, uniformly distributed.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-03, 19-13.1-08

33-32-02-06. Directions for use and precautionary statements.

1. Directions of use and precautionary statements on the labeling of all commercial feeds and customer-formula feeds containing additives (including drugs, special purpose additives, or nonnutritive additives) must:

   a. 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

   b. Include, but not be limited to, all information described by all applicable regulations under the Federal Food, Drug, and Cosmetic Act.

2. Adequate directions for use and precautionary statements are required for feeds containing nonprotein nitrogen as specified in section 33-32-02-07.

3. 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.

History: Effective August 1, 1988.

General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-04

33-32-02-07. Nonprotein nitrogen.

1. Urea and other nonprotein 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 eight and seventy-five-hundredths percent of equivalent crude protein from all forms of nonprotein nitrogen, added as such, or the equivalent crude protein from all forms of nonprotein nitrogen, added as such, exceeds one-third of the total crude protein, the label must 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 must 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.

2. Nonprotein nitrogen defined in the official publication of the association of American feed control officials, when so indicated, are acceptable ingredients in commercial feeds distributed to nonruminant animals as a source of nutrients other than equivalent crude protein. The maximum equivalent crude protein from nonprotein sources when used in nonruminant rations may not exceed one and twenty-five-hundredths percent of the total daily ration.

3. On labels such as those for medicated feeds which bear adequate feeding directions or warning statements, or both, the presence of added nonprotein nitrogen shall not require a duplication of the feeding direction 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 nonprotein nitrogen.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-04

33-32-02-08. Drug and feed additives.

1. Prior to approval of a registration application or approval of a label, or both, for commercial feed which contain additives (including drugs, other special purpose additives, or nonnutritive 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.

2. Satisfactory evidence of safety and efficacy of a commercial feed may be:

   a. When the commercial feed contains such additives, the use of which conforms to the requirements of the applicable regulation in title 21 of the Code of Federal Regulations or which are "prior sanctioned" or "informal review sanctioned" or "generally recognized as safe" for such use;

   b. When the commercial feed is itself a drug 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 21 U.S.C. 360(b); or

   c. 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, administered by the animal and plant health inspection service, United States department of agriculture. The reason for the amendment is because of a problem encountered by feed control officials in developing the basis for evaluation of such products that have a primary purpose to impart immunity. States, in many cases, are unable to make correct

judgments on the effectiveness on such products. The committee feels that this will definitely have more uniformity and effectiveness in handling product registrations.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-04

33-32-02-09. Adulterants.

For the purpose of subsection 1 of North Dakota Century Code section 19-13.1-07, 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 twenty-hundredths percent for breeding and dairy cattle; thirty-hundredths percent for slaughter cattle; thirty-hundredths percent for sheep; thirty-five-hundredths percent for lambs; forty-five-hundredths percent for swine; and sixty-hundredths percent 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: four-thousandths percent for breeding and dairy cattle; nine-thousandths percent for slaughter cattle; six-thousandths percent for sheep; one-hundredths percent for lambs; fifteen-thousandths percent for swine; and three-hundredths percent 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 fifty milligrams of fluorine per one hundred pounds [45.36 kilograms] of body weight.

4. Soybean meal, flakes or pellets or other vegetable meals, flakes or pellets which have been extracted with trichloroethylene or other chlorinated solvents.

5. Sulfur dioxide, sulfurous acid, and salts of sulfurous acid when used in or on feeds or feed ingredients which are considered or reported to be a significant source of vitamin B-1 (thiamine).

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-07

33-32-02-10. Good manufacturing practices.

The department adopts the following as current good manufacturing practices:

1. The regulations prescribing good manufacturing practices for type B and type C medicated feeds as published in title 21, Code of Federal Regulations, part 225, sections 225.1-225.115.

2. The regulations prescribing good manufacturing practices for type A medicated articles as published in title 21, Code of Federal Regulations, part 226, sections 226.1-226.115.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-09

33-32-02-11. Permitted analytical variations.

For the purpose of enforcing North Dakota Century Code section 19-13.1-07, a feed must be considered adulterated if analysis indicates the feed does not meet the tolerances shown in the table attached to this chapter as an appendix.

History: Effective August 1, 1988.
General Authority: NDCC 19-01-02, 19-13.1-10, 23-01-03
Law Implemented: NDCC 19-13.1-07

ANALYTICAL VARIATIONS (AV) BASED ON AFFCO CHECK SAMPLE PROGRAM

I. Proximate Analysis

Determination	Method[a]	AV%[b,c]	Concentration Range
Moisture	7.003,7.007 10.136	12	3 - 40%
Protein	7.015,7.021 7.025,7.033	(20/x+2)	10 - 85%
Fat	7.060,7.063 7.064	10	3 - 20%
Fiber	7.066,7.071	(30/x+6)	2 - 30%
Ash	7.009	(45/x+3)	2 - 88%
Pepsin Digest.Protein	7.053	13	
Total Sugar as Invert	7.084	12	24 - 37%
NPN Protein	7.038,7.040	(80/x+3)	7 - 60%

II. Minerals

Determination	Method	AV%	Concentration Range
Calcium	7.101	(14/x+6)	.5 - 25%
	7.096	10	10 - 25%
		12	10%
Phosphorus	7.123,7.125 Auto Anal.	(3/x+8)	.5 - 20%
Salt	7.106	(7/x+5)	.5 - 14%
	7.104	(15/x+9)	.5 - 14%
Fluorine	7.114,7.115	40	
Cobalt	7.096	25	0.01 - .16%
Iodine	7.119,7.120 33.147	40	
Copper	7.096	20	.03 - 1%
		30	.03%
Magnesium	7.096	20	.01 - 15%
Iron	7.096	25	.01 - 5%
Manganese	7.096	30	.01 - 17%
Potassium	3.013,3.044	15	.04 - 8%
Zinc	7.096	20	.002 - 6%
Selenium	3.102	25	ppm

[a] Method References are from 14th Edition, AOAC Official Methods of Analysis

[b] X = % Guarantee Example: For a 10% Protein Guarantee AV%=(20/10+2)=4% of Guarantee or 4.0%. This means the low AV is 4% of 10. Therefore, a sample below 9.6% is not acceptable.

[c] The ± signs have been removed from the AV table. The table denotes a true analytical variation and not a tolerance. They apply both above and below the guarantee and are equally correct.

III. Vitamins

Determination	Method	AV%	Concentration Range
Vitamin A	43.008	30	1200 - 218,000 IU/lb
Vitamin B_{12}	43.175	45	
Riboflavin	43.039,43.209	30	1 - 1500 mg/lb
Niacin	43.048,43.191	25	3 - 500 mg/lb
Pantothenic Acid	43.200,33.205	25	4 - 190 mg/lb

IV. Drugs

Determination	Method	AV%	Concentration Range
Amprolium	42.011	20	.01 - .014%
Arsanilic Acid	42.033	20	.01 - .05%
Carbodox	42.047	20	.005 - .5%
Ethopabate	42.069	25	.004 - .04%
Furazolidone	42.075	25	.005 - .022%
Melengestrol Acetate	42.088	30	up to .07%
Nicarbazin	42.098	25	.01 - .02%
Nitarsone	42.035	30	.01 - .02%
Phenothiazine	42.135	20	.1 - .5%
Piperazine	42.137	25	.1 - .4%
Pyrantel Tartrate	42.142	25	.01%
Roxarsone	42.035,42.160	25	.005 - .5%
Sulfamethazine	42.172	20	.01 - .033%
Sulfaquinoxaline	42.179	25	.01 - .025%
Sulfathiazole	Colorimetric	20	.008 - .034%
Thiabendazole	42.192	30	up to 1.5%
Zoalene	42.197	25	.004 -.0125%
Bacitracin	42.223	40	10 - 200g/T
Chlortetracycline	42.236,42.232	30	10 - 260g/T
Lincomycin	42.258	25	10 - 200g/T
Monensin	42.266,42.271	30	10 - 200g/T
Neomycin	42.277	45	20 - 250g/T
Oxytetracycline	42.293	30	10 - 300g/T
Penicillin	42.299	35	10 - 200g/T
Streptomycin	42.308	45	10 - 75g/T
Tylosin	42.316	30	10 - 150g/T
Virginiamycin	Plate	40	80g/T