

(Final – 12/21/02)

## AAFCO Checklist for Best Management Practices Guidance Document for Manufacturing, Packaging and Distributing Animal Feeds and Feed Ingredients

This Checklist has been developed by the Association of American Feed Control Officials (AAFCO) to facilitate the adoption and use of its voluntary *Guidance/Framework for Best Management Practices for Manufacturing, Packaging and Distributing Animal Feeds and Feed Ingredients* (“Guidance/Framework BMPs”). The Guidance/Framework BMPs were developed by AAFCO to serve as an educational tool and informational resource for use by individual companies, industry trade associations, and feed regulatory officials to help ensure the continued quality and safety of feed for animals and food products of animal origin.

This Checklist is intended to identify practical steps currently accepted and generally practiced by the industry that should be considered for inclusion in a facility’s BMPs. Manufacturers, packagers and distributors of animal feeds and feed ingredients are encouraged to develop specific written procedures that are appropriate for their individual operation(s). For more information, contact: \_\_\_\_\_.

**Firm Name:** \_\_\_\_\_

**Facility Name (if different from Firm Name):** \_\_\_\_\_

**Facility Address:** \_\_\_\_\_

**City/State:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Name/Title of Individual Using Checklist:** \_\_\_\_\_

**Date Checklist Reviewed at plant:** \_\_\_\_\_

**Boxes marked below indicate that the respective conditions or practices at this facility are in accordance with conditions/practices as outlined in this Checklist. Use Section X on page 7 to indicate specific follow-up actions or recommendations for items not checked.**

### I) BUILDINGS AND GROUNDS

#### A) PLANT AND GROUNDS

- 1. Buildings, fixtures and other physical facilities are in good repair.
- 2. Work areas are reasonably clean, orderly and well lit.
- 3. Buildings provide adequate space for equipment, processing and orderly receipt, shipping and storage of feed and feed ingredients.
- 4. Controls are in place that minimize the potential for contamination from birds, rodents and other pests (e.g., windows or other openings are screened or closed).
- 5. Buildings used for manufacturing and storage of feed and feed ingredients provide for ease of access to structures and equipment to facilitate routine cleaning and maintenance.

- 6. Grounds are adequately drained and routinely maintained so that they are reasonably free from litter, waste, refuse, uncut weeds or grass, standing water, and improperly stored equipment, to minimize insects, rodents and other vermin.
- 7. Fertilizers, herbicides, insecticides, fungicides, rodenticides and other pesticide products or toxic substances are physically separated from feed and feed ingredients.

## **II) EQUIPMENT, MAINTENANCE AND HOUSEKEEPING**

### **A) EQUIPMENT**

- 1. Scales and metering devices used to weigh micro-ingredients and other hand-adds are appropriate for such use and are tested at least annually for accuracy.
- 2. Scales and metering devices used to weigh feed or feed ingredients are appropriate for the feed formulas being used, and are tested at least annually for accuracy.
- 3. All mixers used to manufacture feed or feed ingredients are tested periodically to verify proper mixing and mixing times, to ensure the resulting product is of uniform quality and safety.

### **B) MAINTENANCE**

- 1. A schedule exists (e.g., calendar, time table, etc.) for routine maintenance of equipment involved in handling or manufacturing of feed or feed ingredients (e.g., magnets, screens, conveyors, augers, mixers, grinders, grain rollers, pellet mills, etc.).
- 2. Equipment is constructed and maintained to minimize the potential for contamination, from substances such as lubricants or cleaning agents. Record keeping or documentation is recommended.

### **C) HOUSEKEEPING**

- 1. A housekeeping program exists that specifies the areas of the facility to be cleaned and the frequency of cleaning.
- 2. Dust is controlled to minimize the potential for contamination of feed or feed ingredients.
- 3. Feed and feed ingredient spills are appropriately managed to minimize the potential for contamination.
- 4. Lubricants and cleaning agents are appropriate for use in feed and feed ingredient operations; are used in accordance with label instructions; and, are stored in a manner that minimizes the potential for contamination of feed or feed ingredients.
- 5. Pallets used to store bagged products are clean, and are examined for pests and contaminants prior to use.
- 6. A routine pest-control program is in place to control rodents, insects and birds.
- 7. Restricted-use pesticides are applied only by certified applicators.
- 8. Only trained personnel apply non-restricted-use pesticides or fumigants.

## **III) PERSONNEL**

### **A) EDUCATION, TRAINING AND SUPERVISION**

- 1. Employees and back-up personnel involved in receiving, manufacturing and distribution of feed or feed ingredients have been provided training appropriate for their area of responsibility
- 2. Affected personnel are provided quality assurance and feed safety training incorporating the facility's standard operating procedures. Record keeping or documentation is recommended.

- 3. Responsibility for monitoring adherence to quality assurance programs is clearly assigned.
- 4. Supervisors who are knowledgeable about the quality assurance provisions applicable to their specific area of responsibility provide adequate supervision to employees.

#### B) HYGIENE

- 1. Employees working in direct contact with feed or feed ingredients utilize good hygiene practices to minimize the potential for cross-contamination.

### IV) PURCHASING AND RECEIVING PROCEDURES

#### A) PURCHASING

- 1. Feed ingredients are of merchantable quality and comply with established federal action levels or regulatory limits that apply to toxins or contaminants. This may be accomplished through one or more of the following: visits to suppliers' manufacturing plants; supplier certification; purchase contract specifications; and, monitoring of the quality of delivered product.
- 2. Feed ingredients are approved and properly labeled for use in commercial feed.
- 3. Feed ingredients that contain or may contain mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations are properly labeled with the caution statement, "***Do Not Feed to Cattle or Other Ruminants.***"

#### B) BULK INGREDIENTS

- 1. Trucks and railcars are examined for required labeling and fumigation notices prior to unloading.
- 2. Initial product discharge from trucks (*except pneumatic trucks*) and railcars is visually examined for potential contamination before/during unloading.
  - a. For pneumatic trucks, assurances are received from the supplier that the conveyance was visibly clean and free of contamination prior to loading, and the supplier agrees to retain a representative sample.
- 3. Bills of lading or other shipping documents accompanying bulk ingredients that contain or may contain mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are labeled properly with the caution statement, "***Do Not Feed to Cattle or Other Ruminants.***"
- 4. Equipment used to unload and convey ingredients that pose a risk of cross-contamination (such as prohibited mammalian proteins under FDA's BSE-prevention regulations) are cleaned using appropriate procedures (such as flushing, sequencing or physical clean-out) before unloading other ingredients.
- 5. A representative sample is obtained using appropriate sampling procedures and is retained for an appropriate time. (*Minimum of three months suggested*).
- 6. Records documenting the receipt of inbound ingredients are retained for an appropriate time. (*One year suggested*).

#### C) BAGGED INGREDIENTS

- 1. Packaging is examined visually upon receipt for any damage that could result in unsafe contamination.
- 2. Ingredients that contain or may contain mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are labeled properly with the caution statement, "***Do Not Feed to Cattle or Other Ruminants.***"

- 3. Contents of the bag are examined visually for potential contamination before being used in feed, as appropriate.
- 4. Records documenting the receipt of inbound ingredients are retained for an appropriate time. (*One year suggested.*)

## V) WAREHOUSING AND STORAGE

### A) BAGGED FEED INGREDIENTS

- 1. Mammalian proteins that are prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are stored in a manner to prevent commingling or cross-contamination.
- 2. Ingredients are stored in a manner that promotes appropriate rotation practices to minimize the potential for use of outdated inventories.
- 3. Ingredients are stored in a manner that minimizes the potential for contamination and pest infestation.
- 4. Open or torn bags are minimized.
- 5. Expired, damaged, moldy or otherwise adulterated material is discarded in an appropriate manner.
- 6. Storage area is reasonably clean and orderly.
- 7. Ingredients are stored apart from hazardous materials and unapproved feed additives (*e.g., pesticides, fertilizers, lubricants, petroleum products, caustic chemicals and cleaning agents*).

### B) BULK FEED INGREDIENTS

- 1. Feed ingredients are protected from weather damage or environmental contamination.
- 2. Storage bins and containers are clearly identified and designated for specific ingredients/commodities.
- 3. Mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are stored in a manner to prevent commingling or cross-contamination.
- 4. Receiving pits and handling equipment are cleaned using appropriate procedures (*e.g., flushing, sequencing or physical clean-out*) to minimize the potential for contamination.
- 5. Damaged, moldy or otherwise adulterated material is discarded in an appropriate manner.
- 6. Ingredients are stored in a manner that minimizes the potential for contamination and pest infestation.
- 7. Storage area is reasonably clean and orderly.
- 8. Ingredients are stored apart from hazardous materials and unapproved feed additives (*e.g., pesticides, fertilizers, lubricants, petroleum products, caustic chemicals and cleaning agents*).

## VI) FEED AND FEED INGREDIENT PRODUCTION

### A) INGREDIENT MANUFACTURING

- 1. Manufacturers of feed ingredients have suitable quality assurance programs and procedures that minimize the potential for contamination.

### B) FEED MANUFACTURING

- 1. Feed and feed ingredients, including working inventories, are properly identified.
- 2. Mixers are used according to manufacturer's specifications
  - a. Minimum and maximum capacity limits are known and observed.
  - b. Mixers and conveyors do not contain excessive buildup of old material.

- 3. Written procedures are utilized that specify appropriate clean-out procedures to minimize the potential for cross-contamination that may endanger animal or human health.
  - a. Describe below the clean-out procedures being used (sequencing, flushing, and physical):
    - Sequencing.
    - Flushing.
    - Physical.
    - Other (Describe) \_\_\_\_\_
  - b. If flushing is utilized, a sufficient quantity of flush material is used. Captured flush material is identified, stored and used in a manner that minimizes the potential for contamination of other feed or feed ingredients.
- 4. An appropriate, permitted yield variation for feed-in-process is established for each product by calculating and comparing the actual versus theoretical yield. When significant discrepancies are observed, the reason is identified prior to shipment and appropriate action is taken.
- 5. Rework material is properly identified, stored, and used in a manner that minimizes the potential for contamination of feed or feed ingredients..

### C) LABORATORY CONTROLS

- 1. Analytical results that do not meet product specifications are investigated to verify that the manufacturing process is within established limits, the product formulation is correct and/or the nutrient values used in the formulas are accurate. The review process and any corrective action are documented.

## VII) FORMULAS, LABELS AND PRODUCTION RECORDS

### A) FORMULATION

- 1. Formulas are reviewed and verified periodically for safety, regulatory compliance and appropriateness for the intended species and specific class of animal.
- 2. Formulas are identified and maintained to ensure they correspond with current labeling.

### B) LABELING

- 1. Labels are stored in a manner that minimizes the potential for errors in labeling feed or feed ingredients.
- 2. Labels are reviewed by a responsible individual prior to use.
- 3. Outdated labels are discarded.
- 4. Labels are affixed to, or accompany, all feed or feed ingredients that are distributed.
- 5. Labels comply with applicable state or federal laws and regulations.
- 6. Warning statements required by law (*e.g., statements regarding prohibited mammalian protein, NPN, and selenium*) are present and prominent).
- 7. Feeding and mixing directions are adequate for the safe, approved and intended use of the feed or feed ingredients.

### C) PRODUCTION RECORDS

- 1. Production records are maintained for feed or feed ingredients; the records include a code or lot number that identifies the specific batches or lots manufactured.
- 2. Production records are retained for an appropriate period. [*Minimum of one year suggested.*]
- 3. Acceptable deviations of actual versus theoretical batch weights are determined.

- 4. The actual production is compared against the final load weight or bag count.
- 5. Production records are reviewed daily and management is immediately notified of significant discrepancies.

## VIII) SHIPMENT AND DISTRIBUTION

### A) FEED INGREDIENTS (*Applies to manufacturers and distributors of feed ingredients*)

- 1. Feed ingredients are merchantable and comply with established federal action levels or regulatory limits that apply to toxins or contaminants.
- 2. Feed ingredients are approved for use in commercial feed.
- 3. Feed ingredients are properly labeled.
- 4. Feed ingredients that contain or may contain mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are properly labeled with the caution statement, "***Do Not Feed to Cattle or Other Ruminants.***"
- 5. Feed ingredients, *except for those being conveyed via pneumatic trucks*, are visually inspected by trained personnel).
  - a. For feed ingredients being conveyed via pneumatic trucks, a representative sample is retained by the supplier for an appropriate period.
- 6. Bills of lading or other contractual or shipping documents accompany the shipment and indicate the origin, quality, quantity and destination.
- 7. Conveyances (trucks, rail cars, etc.) are inspected for cleanliness and structural integrity prior to loading to minimize the potential for contamination.
- 8. Conveyances are loaded and unloaded in a manner that minimizes the potential for commingling or cross-contamination of feed ingredients.

### B) FINISHED FEED (*Applies to feed manufacturers and distributors*)

- 1. Identity and integrity of finished feeds are maintained from the mixer to the conveyance (*e.g., trucks and rail cars*).
- 2. Products containing mammalian proteins prohibited from being fed to cattle or other ruminants under FDA's BSE-prevention regulations [21 CFR 589.2000] are stored and transported in a manner to prevent commingling or contamination.
- 3. Finished feed products are visually inspected by trained personnel.
- 4. A representative sample is obtained using appropriate sampling procedures and is retained for an appropriate time. (*Minimum of three months suggested*).
- 5. Conveyances (trucks, rail cars, etc.) are inspected for cleanliness and structural integrity prior to loading to minimize the potential for contamination.
- 6. Conveyances are loaded and unloaded in a manner that minimizes the potential for commingling or cross-contamination of feeds or feed ingredients.

## IX) COMPLAINT AND RECALL PROCEDURES

### A) COMPLAINT AND RECALL PROCEDURES

- 1. Procedures for handling customer complaints have been developed and implemented; the procedures include investigation and documentation of the findings and how the complaint was resolved.

