

Livestock Feeds and the Feed Supply



Sound feeding and management practices are an integral part of raising wholesome meat and milk products for consumers. Cattle should be provided a clean, readily accessible source of water from tanks or watering devices free from bacterial or nutrient contaminants. Producers should feed nutritionally balanced diets composed of quality forages and feedstuffs harvested and stored to prevent contamination. Provide a high quality mineral to improve effectiveness of vaccines and other medications. To prevent contamination of the meat and milk produced, no harmful residues should be allowed to enter the feed supply when cattle are fed.



To prevent the spread of diseases such as Johne's, wash tractor wheels and loaders after handling manure and before feeding cattle.



Purchased Feeds

- Federal law prohibits the use of ruminant-derived animal protein in any feed fed to cattle (ruminants). At press time, an expanded version of this feed rule is under review. The producer is responsible for knowing and complying with regulations as they are amended.
- Several medicated feeds and feed additives are approved for use in cattle. However, medicated feeds must be used according to the label directions, and withdrawal times must be followed.
- Extra-label use of medicated feeds or feed additives by nutritionists or veterinarians is illegal and prohibited.
- Feeds (grain mixes as well as commodities) should be purchased from suppliers who have quality control programs in place and who stand behind their products.
- When purchasing commodities and/or by-products, ask for assurances that they do not contain contaminants (i.e., pesticides), which can cause meat residue problems.
- Maintain records of feed purchases to indicate source, date, and amount purchased for at least three years.



Separate equipment for feeding and manure handling is the best management practice to prevent the spread of diseases.

Feed Storage and Handling

- Do not use pesticide or insecticide containers to store feed or to feed cattle.
- Do not store crop chemicals, petroleum products, or other hazardous material in areas where feed is stored, mixed, or processed.
- Do not allow cattle access to areas where chemicals or other hazardous materials are stored.
- Do not allow moisture, rodents, and birds to contaminate the feed supply.
- Do not contaminate feeds with manure during feeding.

Pesticide- and Petroleum-Based Products

To avoid residue problems in cattle, pesticides (both insecticides and herbicides) need to be used according to the directions on the label. These labels contain directions on the time that must elapse before the crop is harvested, as well as the crops and intended purpose of those crops (i.e., grazing, forage, or grain crop). Be especially careful during years with drought, hail, or flood damage when grain crops are used as forages to feed to cattle.

If feeds are purchased, ask if pesticides were used and at what time in the growing/harvesting season they were applied. A producer is responsible for making sure all feeds are of high quality and are residue-free.

- Do not store full or empty pesticide containers in areas accessible to cattle.
- Do not store pesticide containers where feed is stored, mixed, or fed.
- Do not use pesticide containers to store feeds or to feed cattle.
- Do: Routinely check equipment for leaks of hydraulic fluid.

Ruminant Feed Ban Regulation

Purpose and Scope

The U.S. Food and Drug Administration (FDA) adopted the “Animal Proteins Prohibited from Ruminant Feed” regulation to prevent the establishment of Bovine Spongiform Encephalopathy (BSE) in the United States through feed with the goal of minimizing any risk to animals and humans. The final rule went into effect on August 4, 1997. The regulation establishes certain requirements for renderers, protein blenders, feed manufacturers, distributors (including haulers), and individuals and establishments that are responsible for feeding ruminant animals.

The Ruminant Feed Ban regulation prohibits the use of proteins from ruminants in feeds intended for ruminant consumption. There are, however, certain exceptions to the rule at this time, including:

- Pure porcine or pure equine protein
- Blood and blood by-products
- Gelatin
- Milk products (milk and milk protein)
- Inspected meat products that have been cooked and offered for human food and further heat processed for animal feed use

Birds and rodents not only consume feed but can spread disease by contaminating feed with their droppings.

Be especially careful during years with drought, hail, or flood damage when grain crops are used as forages to feed to cattle.



The producer is responsible for knowing and complying with any changes to the regulations of the Ruminant Feed Ban



Federal law prohibits the use of ruminant-derived animal protein in any feed fed to cattle (ruminants).

Requirements for Producers Feeding Animal Proteins

This regulation applies to establishments, both large and small feeding operations, and to individuals who are responsible for feeding ruminants.

Producers are required to keep the following records for 36 months:

1. Copies of all purchase invoices for all feeds received that contain animal protein. If a feed intended for ruminants contains animal protein, the protein can consist only of non prohibited material. The regulation requires maintenance of invoices for all feeds containing animal protein so that the FDA can verify, if necessary, that the animal protein contained in the ruminant feed is from non prohibited sources.
2. Copies of labeling for feeds received, which contain permissible animal protein products. The agency recognizes that bulk shipments of feed are commonplace and that labeling information typically is contained in the invoices for bulk shipments. In those instances, maintenance of the invoice is sufficient.
 - If the only labeling for a bulk product is on a placard, the placard for each shipment should be retained.
 - Feed may also be received in bags or other containers that have attached labeling. In those instances, the labeling should be removed and retained. However, maintenance of only one such labeling piece is necessary from each shipment that represents a different product.
 - If the labeling cannot be removed from the bag or other container, maintenance of a representative bag or a transposed copy of the labeling information from a container that cannot feasibly be stored will suffice.

Records should be legible and easy to retrieve. Producers must make copies of both invoices and labeling available for inspection and copying by the FDA if audited. Requirements for Manufacturers Producing Feed with Animal Proteins

Following are the requirements for protein blenders, feed manufacturers, and distributors that separate prohibited material and non prohibited material.

“Distributor” is defined as any firm or individual that distributes or transports feeds or feed ingredients intended for animals. Haulers are included in this definition. Haulers, who haul both prohibited and nonprohibited material, including blended animal protein products, are subject to the same separation procedures as manufacturers. Haulers of complete and intermediate feeds are “distributors.”

All equipment, including that used for storage, processing, mixing, conveying, and distribution that comes in contact with feeds containing prohibited material and non prohibited protein must use reasonable and effective procedures to prevent contamination of manufactured feed. The steps used to prevent contamination of feeds include one or more of the following or equally effective procedures:

- Physical means—vacuuming, sweeping, or flushing and/or sequential production of feeds.
- If flushing is utilized, FDA recommends that the flush material be properly identified, stored, and used in a manner to prevent contamination of other feeds. The volume of flushed material should be sufficient to equal the operating volume of the shared equipment.
- If sequential production is utilized, FDA recommends that it be on a predetermined basis designed to prevent unsafe contamination of ruminant feeds. An example of appropriate sequencing would be swine feed containing prohibited material, followed by a swine or poultry feed not using prohibited material, followed by a ruminant feed containing non prohibited material. For FDA Guidance Documents and Federal Register Notices, reference FDA’s BSE homepage at <http://www.fda.gov/cvm/bsetoc.html>.