BSE COMPLIANCE ASSISTANCE

This material has been prepared by the South Dakota Department of Agriculture, Office of Agronomy Services, for use by the feed industry and livestock producers in South Dakota. The intent of this document is to help affected parties understand, and comply with, federal and state rules prohibiting mammalian-to-ruminant feeding.

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On June 5, 1997, the Food & Drug Administration (FDA) published a final rule prohibiting the use of mammalian protein (i.e. animal protein products such as meat and bone meal) in feeds for ruminant animals. This rule is published in the Code of Federal Regulations, 21 CFR 589.2000. This rule went into effect August 4, 1997, and all products and labels were to have complied with this rule by October 3, 1997. The intent of the rule is to help ensure that bovine spongiform encephalopathy (BSE) or "mad cow disease" does not become established in the United States and spread through the feed supply to other animals.

Ruminant animals include cattle, sheep, goats, bison, deer, elk, and other related animals having a four-compartment stomach. Mammalian protein is defined as protein from all mammals, and we refer to these mammalian protein ingredients as "prohibited material".

There are some exemptions from this rule. Porcine (pork) and equine (horse) protein that originate from single-species slaughter plants have been exempted from this ban and may be used in ruminant feeds. Also exempt are blood and milk products, gelatin and processed meat products which have been cooked and offered for human consumption (such as plate waste, for example). Fat and tallow are not animal proteins and are not covered by this rule. Poultry and fish are not mammals so proteins originating from these species may continue to be used in ruminant feeds. We refer to these ingredients, including porcine and equine protein from single-species slaughter facilities, as "non-prohibited material".

This rule applies to rendering facilities, ingredient brokers, feed manufacturers, trucking companies transporting feeds and feed ingredients, and any person or business that feeds ruminant animals.

Prohibited materials also include any ingredient, premix or concentrate feed, which contain a prohibited mammalian protein. For example, a livestock producer or small
feed mill may not use meat and bone meal to manufacture feed, but instead will take a product such as a 40% hog concentrate and further process it into a finished feed. If this ingredient, premix or concentrate contains a prohibited material, the concentrate, as well as the complete feed, must be treated as prohibited material.

To further protect livestock producers, the 2001 South Dakota legislature adopted statutes, SDCL 39-14-55.1 and 39-14-60 (9), addressing BSE, and requiring the Department of Agriculture to adopt rules to implement these laws. State rules were adopted April 18 and August 8, 2001, and January 15, 2002. The state requirements are more restrictive than the federal regulation, and feed manufacturers and distributors, as well as ruminant feeders, located in South Dakota, or doing business in the state, need to be aware of the state requirements.

There are three principal areas in which compliance is needed -- labeling, equipment cleanout and recordkeeping. Each area has different requirements and will be discussed separately.

**Labeling**

The federal rule requires that any feed or ingredient (except pet foods) that contains prohibited material have the statement "Do not feed to cattle or other ruminants" placed prominently on the front of the label. This statement should be printed in a different color, or in some other way offset, from the other label information.

The state rules require the use of an additional advisory statement on the labels of all ruminant feeds, advising the purchaser that "this product was made in a feed manufacturing facility that does not handle or store products containing animal proteins prohibited in ruminant feed" if the product was made in a feed mill that does not use prohibited material to make feeds and feeds containing prohibited material are not stored with ruminant feeds and ingredients. Alternatively, if the product was made in a feed mill that uses prohibited material to make swine or poultry feeds, for example, or if they do not store feeds or ingredients containing prohibited material separately from ruminant feeds, then the advisory statement would read "this product was made in a feed manufacturing facility that handles or stores products containing animal proteins prohibited in ruminant feed".

The federal rule allows the collective term "animal protein products" to continue to be used in the ingredient statement, but ruminant feeds may not contain any of the prohibited materials. Any feed for non-ruminants (except pet foods) that contains prohibited materials will need to carry the mandatory warning statement on the label. Labels for feeds containing no prohibited materials do not need the mandatory federal warning statement.

Every shipment of feed, whether bagged or bulk, medicated or non-medicated, delivered to the customer or picked up at the feed mill, must be labeled. The federal
rule requires that anyone feeding ruminant animals must save copies of invoices and labeling of every feed they receive containing animal protein. Feed that does not have an invoice or label from the manufacturer or distributor does not comply with the law, and keeps the feed user from complying with this requirement, as well.

**Equipment cleanout/Physical Segregation**

Although the federal rule allows feed manufacturers to use both prohibited and non-prohibited materials in a single manufacturing facility, if the firm has a written cleanout procedure for their milling equipment, the state rules do not allow this practice. Feed manufacturers located in South Dakota, that make feed for ruminant animals, may not use prohibited materials in their facilities. Further, any feed or ingredient containing prohibited material, such as pet food, that a facility keeps in it’s warehouse must be physically separated from the mixing equipment and any ruminant feed or feed ingredients that will be used to manufacture ruminant feeds.

Additionally, any person or business that manufactures ruminant feed must also take care in how any feed containing prohibited material is transported and stored. The state rules require that bulk ruminant feeds and ingredients be transported or conveyed only in equipment that is not used to handle prohibited material. Bulk ruminant feeds and ingredients must be stored in a manner that does not allow cross-contamination. Feeds and ingredients containing prohibited material must be stored so they are physically separated from ruminant feeds.

In a facility that sells, but does not manufacture feed, the state rules allow packaged ruminant feed products to be stored with feed products that contain prohibited material. However, any spillage must be cleaned up immediately, and disposal of the spillage be handled in a manner that does not risk contamination of ruminant feeds.

Cleanout of mixing equipment following the manufacture of medicated feeds is still necessary.

**Ingredients from single species slaughter facilities**

Firms purchasing and using non-prohibited ingredients (horse and/or pork) only from single species slaughter facilities are not required to utilize the federal warning statement ("Do not feed to cattle or other ruminants") or special cleanout procedures. However, these firms do need to place the state-required advisory statement ("This product was made in a feed manufacturing facility...") on the label of any ruminant feed they manufacture. Firms will need records sufficient to document that they are obtaining all of their animal protein from single species slaughter facilities. These firms should also make sure that ingredient haulers are complying with the requirements for...
trucks and other conveyance equipment.

**Recordkeeping**

For firms using prohibited materials, the federal rule requires records sufficient to track ingredients and finished products from receipt, through processing and distribution. Firms not using prohibited materials will need to be able to document that they are using only non-prohibited materials, but will not necessarily need to meet the other recordkeeping requirements of this rule. Livestock producers feeding ruminant animals must keep records of the feed they purchase and use. In particular, these records must include invoices and labeling of all feeds containing animal protein.

Records must be available for inspection and copying by state and federal investigators, and must be maintained for one year after distribution of the product for feed manufacturers and distributors. Livestock producers must maintain the records for at least a year after the feed is received. In some cases, existing business records may be sufficient to comply with this rule. For example, most livestock producers already save invoices to document feed costs for tax purposes.

**Livestock producers**

Livestock producers feeding ruminant animals, in feeding operations of all sizes, need to comply with all aspects of these rules. Specifically, if producers mix their own feed, and feed both ruminants and non-ruminants, they need to comply with the state rules, and not use prohibited material in their feeding operations. Although the labeling requirements may not apply if the producer does not sell feed, sufficient records must be kept to document compliance with the rules. For example, producers mixing their own feed may wish to establish a mixer log book, in which they record the dates they mixed feed, the ingredients in that feed, and the animals to which it was fed.

Ruminant feeders purchasing feed or feed ingredients must keep copies of invoices for all feeds received that contain animal protein sources. A copy of the product label for each feed containing animal protein must also be kept. In many cases, particularly for bulk feeds/ingredients, the invoice may contain the required "label" information. If the invoice contains all of the necessary labeling information, such as the list of ingredients, withdrawal statement, etc., it is not necessary to keep an extra copy of the product label on file.

To determine if the feed contains animal proteins, look at the ingredient list for the terms *animal protein products, meat and bone meal, meat meal, bone meal, feather meal, blood meal, fish meal*, etc. Mention of any type of animal (fish, poultry) or animal product (milk or dairy product, meat) would identify the product as containing an animal
protein.

These records must be maintained for at least a year after the date the feed is received, and must be made available for inspection and copying by federal or state investigators. We recommend that the labels be attached to the corresponding invoice and filed that way. Feeds and feed ingredients not containing animal proteins are not subject to the regulation.

Ruminant feeders must also be cognizant of how feeds and ingredients are stored and used. Feed containing prohibited material, such as pet food, should not be stored or fed where these products will be confused with, or get mixed with, ruminant feed. Products containing prohibited material, such as pet food, should not be fed in a location where ruminant animals may consume them. Spilled material in storage or a vehicle should be cleaned up immediately and disposed of in a way that will not contaminate ruminant feed.

Questions

Questions may be directed to the South Dakota Department of Agriculture at 605-773-4432 or the Food and Drug Administration (FDA) at 301-594-1724.