



**NATIONAL RENDERERS ASSOCIATION, Inc.**

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March 12, 2007

Docket No. 050-15-1  
Regulatory Analysis and Development, PPD, APHIS  
Station 3A-03.8  
4700 River Road Unit 118  
Riverdale, Maryland 20737-1238

**Re: Docket No. APHIS-2006-0041, Bovine Spongiform Encephalopathy;  
Minimal-Risk Regions; Importation of Live Bovines and Products  
Derived from Bovines.**

To Whom It May Concern:

The National Renderers Association (NRA) references APHIS's Docket No. APHIS-2006-0041, the agency's proposed rule to import cattle and products.

NRA is the international trade association for the industry that safely and efficiently recycles animal agriculture by-products into valuable ingredients for the livestock, pet food, chemical and consumer product industries. NRA represents its members' interests to Congress, regulatory and other government agencies, promotes greater use of rendered products, and fosters the opening and expansion of trade between North American exporters and foreign buyers. NRA's membership represents more than 98% of the rendering capacity in both the U.S. and Canada.

In the proposed rule the USDA details the criterion necessary for the importation of bovine blood products. Specifically the USDA explain:

“For all the above three manners of collection, we would require that the blood be collected in a closed system or in an otherwise hygienic manner that prevents contamination of the blood with SRMs.”

With current line speeds in U.S. beef slaughter facilities a closed collection system (as described by the USDA in the proposed rule) is not practical and would be cost prohibitive for production of the feed ingredients spray dried bovine plasma or blood meal. Requiring such a collection system would effectively eliminate the supply of feed grade bovine plasma and blood meal. Restricting these products by requiring blood to be collected by a closed system would result in significant damage to the livestock industry both domestically and around the world. Traditional closed collection systems as suggested in the Proposed Rule may be appropriate for the collection of Fetal Calf Serum and other specialized blood products but are impractical for collection of blood used for feed application.

The infective agent responsible for BSE has not been identified in bovine blood (USDA's reference, OIE 2005). However, the North American Spray Dried Blood and Plasma Producers and the NRA recognized the potential for contamination of raw materials with SRM during collection and subsequent processing and have developed a series of Manufacturing Guidelines and a Code of Practice designed to minimize the risk of contamination. These programs include third party audits by the Facilities Certification Institute to ensure compliance with the manufacturing guidelines. These Manufacturing Guidelines have been successfully implemented at the spray dried blood facilities (including Canada) and the Code of Practice has been certified at more than 35 high volume rendering plants in the U.S. so far with many more underway. Many Canadian rendering plants operate under equally effective HACCP programs.

Spray dried plasma is a unique feed ingredient. There are no effective substitutes for spray dried plasma. It is important that animal agriculture industry continues to have an adequate supply of this critical feed ingredient. A number of recognized academic and industry organizations agree that continued access to adequate supplies of spray dried bovine blood products is critical.

Bovine blood meal represents a very valuable feed ingredient especially for the rations of the lactating dairy cow. It provides high levels of lysine that does not degrade in the rumen. High levels of lysine are necessary to maintain optimum levels of milk production. If bovine blood meal were removed from use in rations, the price of porcine blood meal will continue to increase, placing an additional financial burden on the dairy industry among others.

In 2001, the Sparks Company evaluated the impact of prohibiting cattle derived blood meal in ruminant diets on behalf of the NRA. In 2000, 1.48 billion pounds of blood were generated from the slaughter of cattle. A resulting 121.9 million pounds of cattle blood meal and 49.8 million pounds of mixed species blood meal were manufactured. Total ruminant containing blood meal produced was 171.7 million pounds, 70% of which was utilized in ruminant diets. The study determined if the use of blood meal were prohibited in cattle diets, a *product loss of \$45.3 million would be realized by the cattle sector*. Additional indirect losses from reduced animal productivity at the farm level were not considered by the report and are estimated below.

[[http://www.renderers.org/economic\\_impact/index.htm](http://www.renderers.org/economic_impact/index.htm)]

The unique nutritional properties of blood meal, primarily a high level of non-degradable lysine, provide a high return when used by dairy producers. Lysine is considered the first limiting amino acid vital to high milk production. Unlike poultry and swine, high producing dairy cows can't utilize synthetic lysine, thus milk production will drop if this ingredient is removed. Typically 0.5 pounds/day of dried blood meal is fed to a dairy cow. A reduction of 4 pounds of milk/cow/day would be expected if blood meal were no longer utilized in these diets. Using the figure from the Sparks report that 70% of ruminant blood meal was utilized in dairy rations, an overall drop in milk production of 9.6 million hundredweight would occur. At \$12/cwt this loss in milk production would reduce dairy farm income by \$115.4 million. *Thus, combined losses to the U.S. beef cattle and dairy sectors would total \$160.7 million.*

It is critical the dairy industry continues to have access to bovine blood and bovine blood fractions. Over 41% of the heifer calves raised in the U.S. suffer from failure of passive transfer due to inadequate colostrum Ig intake. Approximately 11% of heifer calves died before weaning, and half of this mortality can be attributed to inadequate supply of quality colostrum (NAHMS, 1992, 1996). Colostrum is also recognized as a vector for transmission of a number of disease-causing organisms, including *Mycobacterium paratuberculosis* (Johne's disease). Published studies indicate bovine serum and fractions thereof are the only effective alternatives for colostrum (Arthington, et al., 2000 a,b; Quigley et al., 1998, 2000, 2001; McCoy et al, 1997; Holloway et al, 2002; Poulsen et al, 2003). If access to these proteins is restricted, there is no effective alternative to reduce calf mortality or to break these disease cycles. For a more complete review see the review of Quigley et al. (2004).

Many studies from the involved sectors have been shared with FDA on the economic and environmental impacts of banning the use of bovine blood meal in feed, especially representatives from blood processors and the poultry industry. Collectively, the dual impacts (economic and environmental) could be very great on the industries. If these products are prohibited from animal feed, there is reduced market for such products and their disposal costs increase. This could lead to improper disposal, disposal in landfills, or by land application on farms. If feeding of blood meal were prohibited for cows, farmers would either feed higher protein levels and/or milk additional cows to maintain milk production. Either course of action would result in increased nitrogen and methane release into the environment.

There is no need to stop the feeding of ruminant blood products to ruminants or any other animals because there is no science to support such a restriction. There is no scientific or peer reviewed literature linking the feeding of bovine blood in the form of blood meal or other blood products in feed to any risk of BSE transmission in cattle and other ruminants. Bovine blood has never been implicated in bovine-to-bovine transmission of either natural or experimental BSE.

If there are concerns that some collection methods could allow small amounts of neural tissue to be collected with the blood, technology can be employed to remove neural tissue

from blood without requiring the closed system or sterile procedures. The possibility was considered in the Harvard Risk Analysis and not deemed a significant risk to spread BSE. Products resulting from processes such as filtering or centrifuging should be allowed to be imported because these steps would remove any particles or tissue residue.

Any unnecessarily restrictive regulation imposed on minimum risk regions by the U.S. could easily be applied to U.S. products globally and cause severe problems with the marketing of blood products which are safe and extremely valuable to livestock and aquaculture production. The NRA urges the USDA to resume the import of blood products from minimal risk regions for use in feed applications when those products are produced in a manner consistent with the current manufacturing guidelines.

Sincerely,

A handwritten signature in black ink, appearing to read "David L. Meeker". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David L. Meeker, Ph.D., MBA  
Vice President, Scientific Services  
National Renderers Association