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Heartland's Assessment of the Impact on Nutrient Management of Increased Feeding of Ethanol Co-products

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Abstract Text:

Heartland is a leading livestock and poultry region and it is also the epicenter of rapidly growing ethanol production. It is estimated that in late summer 2007 there were approximately 50 plants producing 3 billion gallons of ethanol in the region with 40 plants expanding or under construction. Once the current construction is complete there will be approximately 18 million tons of dry distillers grains with solubles (DGS) produced in the region. While DGS can be an excellent feedstuff for livestock and poultry, it does change animal nutrient excretion and potentially manure application rates. This presentation will:

- Discuss typical DGS feeding rates for beef and dairy cattle, swine, and poultry.
- Explain how feeding DGS impact nutrient excretion for each animal class.
- Quantify if and how manure management planning and land application may be impacted by feeding DGS.
- Share tools developed to help TSPs and producers evaluate the economics of feeding higher levels of DGS when land application cost is included.
- Evaluate environmental and economic implications of manure application policy when increased levels of DGS are fed.

Impact Statement:

Heartland regional team worked with nutritionists, soil scientists, engineers, and economists to evaluate environmental and economic implications of feeding DGS and developed tools for producers and consultants to improve on-farm decisions.