Spreading Manure in Winter
Have the Rules Changed?

Alabama's 1999 AFO/CAFO Rules for Animal Feeding Operations (AFOs) and Concentrated Animal Feeding Operations (CAFOs) established that the Alabama Department of Environmental Management would enforce NRCS technical guidelines for best management practices (BMPs) when dealing with animal waste issues. Until then, these BMPs were recommendations that had to be followed only if the farm received some type of assistance or cost-share from the NRCS for some conservation practice.

In 2001, NRCS "Nutrient Management Code 590" was modified, under USDA mandate, to treat animal manure as fertilizer and to follow each state's Land Grant University fertilizer recommendations. These modifications had been presented in farmer meetings as much as 18 months before it occurred.

A figure showing a line drawn across the upper 1/3 of the State indicating no animal manure land application allowed above this line from November 15 to February 15 was included. This figure was an interpretation of the rule that "animal manure would be spread only on actively growing crops". This figure gave producers the idea that animal manure management recommendations for North Alabama had completely changed. This was not the case. Extensive research over the last 10 to 20 years indicated a high risk of leaching and runoff for any nutrients over-applied during the winter in Alabama. This is especially true in North Alabama where very little growth occurs on fescue, orchardgrass, ryegrass, rye, wheat, and clovers during the winter.

This fertilizer modification put a particular burden on poultry breeder operations that are required by their integrators to clean out after every flock. Poultry litter removed from houses during this 15 Nov. - 15 Feb. winter minimum-crop-growth period should, in most cases, be temporarily stored until Auburn University crop fertilizer recommendations allow litter application at recommended fertilizer rates. Breeder litter can sometimes be wetter and more difficult to store and transport than traditional broiler litter. Some estimates were that as many as 200 operations were impacted by this new rule.

An NRCS State Conservationist letter dated 7 October 2002 (see copy below) recently modified NRCS Nutrient Management Code 590. The supposed effects of this letter made headlines in...
some North Alabama papers. While the letter may ease tensions over the included figure with the line across the upper third of the state, it should have little effect on best management practices. The AFO/CAFO rules still require that all animal feeding operations follow these BMPs to protect water quality from nutrient discharges. Please become familiar with the NRCS Nutrient Management Code 590 and this recent change which will be incorporated into these rules.

http://www.aces.edu/department/aawm/NutrientManagemental590.pdf

Producers, integrators, county agents, consultants, and Certified Animal Waste Vendors should keep these main points in mind when responding to producers questions about these changes.

1) ACTIVELY GROWING CROPS. Animal manures should be applied in the late fall and late winter only to actively growing crops that can utilize the nutrients. The Nutrient Management Code 590 states, "Timing and method of nutrient application shall correspond as closely as possible with plant nutrient uptake characteristics." Our most productive winter annual, e.g., cereal rye, takes up very little nutrients during the winter months.

2) AUBURN UNIVERSITY’S RECOMMENDATIONS. Nutrient application rates and timing should be based on a current Auburn University soil test report and recommendations (see Table 5 in NRCS Code 590). Auburn University and the Cooperative Extension System have NEVER recommended early- or mid-winter application of nutrients anywhere in Alabama.

3) EXCEEDING RECOMMENDED RATES. Nitrogen application rates should not exceed 10% of recommended rates (NRCS Code 590, p.3). Since none is recommended in early- or mid-winter, 10% of zero is still zero. Where nutrients have already been fall-applied, an early- or mid-winter application will grossly exceed the recommended rate.

4) NUTRIENT MANAGEMENT PLANS. All animal feeding operations, regardless of size, must show that they meet or exceed NRCS's best management practices (ADEM's CAFO/AFO Rules). Following a nutrient management plan is the best way to assure compliance. Few plans would include early- or mid-winter applications except under very specific circumstances. Not having a plan or records while spreading during the winter is clearly not a BMP.

5) WINTER STORAGE. Early to mid-winter storage either temporarily or in a dry stack facility is still the best BMP for North Alabama poultry producers.

Producers should realize that the new changes DO NOT constitute a wholesale lifting of the ban on winter applications. Producers such as breeder operators who absolutely must spread in the winter must PLAN to do so. This would include having a comprehensive nutrient management plan from the district NRCS office or from a qualified, credentialed professional (QCP) and following that plan. It may include planting a winter annual such as rye that could utilize some nutrients during the winter. Limit fall application to reduce the chance that a following winter application may result in an over application of nutrients. Winter applications would be limited to around 1 ton of wet breeder litter per acre. A ton of wet breeder litter contains around 30 pounds of N. A ton of broiler litter could contain as much as 60 pounds of N.

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Effective immediately, the technical standard for Nutrient Management (Code 590) will be modified.

Wording in the section entitled Nutrient Application Method and Timing will read as follows: Livestock and poultry manure will not be applied in the fall or winter unless applied on an actively growing crop/forage.

The dates recommending no manure spreading in North Alabama will be inserted in the Considerations portion of the standard under the heading for Application Method and Timing. The following sentence will be added to this section: Generally, animal manure and related organic by-products will not be applied between November 15 and February 15 in North Alabama (See Figure 1)

The revised technical standard will be distributed in the near future. Retain this memorandum until you receive the revision for your field office technical guide.

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