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TIMELY INFORMATION
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The Simplest Nutrient Management Plan. . . A Soil Test

Alabama's guidelines for animal feeding operations (AFOs) and concentrated animal feeding operations (CAFOs) were adopted in 1999. These rules by the Alabama Department of Environmental Management (ADEM) changed forever the way we manage nutrients on Alabama farms. CAFOs are specifically required to have a nutrient management plan that includes soil testing at least every 3 years for every field receiving animal wastes. The smaller AFOs are only required to ". . . follow best management practices." There are close to 600 CAFOs currently registered in Alabama. Most of these are large poultry operations. However, there are an estimated 3500 smaller poultry operations (4 houses or less). These smaller AFOs do not have to file a nutrient management plan with ADEM. Regardless of whether you are an AFO, a CAFO, or a cotton farmer, the rules state, ". . . Application of waste shall be conducted in a manner that meets or exceeds NRCS technical standards and guidelines. . . ".

Alabama's NRCS technical standards clearly state that a soil test should be done on every field receiving animal wastes at least every three years. This is a best management practice. In fact, a soil test alone is a pretty good "nutrient management plan" if you keep records and follow the nutrient recommendations from Auburn University. Without a soil test, there is no plan, and (to repeat a quote I heard at a recent meeting) "failing to plan is planning to fail." Anyone caught spreading animal waste without a plan is subject to action by ADEM. At best, you'll get a warning. An AFO who is not following best management practices could be designated a CAFO by ADEM. Then the owner/operator is required to register, file a waste management system plan, and pay for annual inspections by a qualified credentialed professional among other requirements.

The following table suggests that most producers in major poultry and livestock producing counties don't use soil testing very much. The numbers are more striking considering that 24% of all samples tested by the Auburn lab are for gardens, lawns, and shrubs. . In 2005, 42% of Cullman County soil samples were for gardens, lawns, and shrubs. This leaves around 86 samples to cover all the hayfields, pasture, and cropland that could potentially receive poultry litter in Cullman County. We have no idea how many samples are submitted to private laboratories.

Apparently, row crop producers value soil testing more than AFOs. These farmers have been the traditional target of soil test promotions. However, considering that Cullman,

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Dekalb, Marshall, and Blount are also in the top 5 cattle-producing counties in Alabama, and Dekalb County is by far the leading swine producing county, then we have a serious need to promote soil testing among our smaller AFOs and forage producers. After all, when animal wastes are applied to the land, soil testing is the law!

Soil samples tested annually by Auburn University from selected Alabama counties					
	Year				
	1998 (before CAFO)	2002 (after CAFO)	2003	2004	2005
Major poultry & livestock producing counties					
Cullman #1	133	198	92	135	176
Dekalb #2	318	319	244	283	383
Marshall #3	385	212	175	221	293
Blount #4	120	119	135	200	148
Major row crop producing counties					
Limestone	634	457	398	303	535
Lawrence	786	1394	1023	1564	1909
Madison	1250	1254	1148	1071	1254
Jackson	554	343	265	229	462
Houston	928	460	561	731	814

Assuming that half of all soil samples are tested by out-of-state, private laboratories, this leaves a lot of fields untested that are receiving poultry litter. Of more concern is that these producers are spreading poultry litter with no plan. Alabama Certified Animal Waste Vendors (CAWVs) have been trained to apply litter only where there is a plan or to apply it at a much reduced rate than otherwise would be allowed. Obviously, if there is no soil test, there cannot be a plan, and a lot of Alabama AFOs are at risk. Even more important is the risk to surface and groundwater from excess application of nutrients to some fields. A current (within 3 years) soil test from each field where animal waste is to be applied is better than no plan at all.

Would you like to write your own, simplified nutrient management plan for a small poultry operation? This simple plan, if followed, will help protect your water quality and provide evidence if your environmental stewardship. It will also help protect you if your operation is ever visited by an inspector from the Alabama Department of Environmental Management.

http://www.aces.edu/pubs/docs/A/ANR-0926/

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