

**NC INTERAGENCY NUTRIENT MANAGEMENT COMMITTEE
MINUTES
JANUARY 31, 2008**

Attendees:

NCSU
John Havlin
Deanna Osmond

NCDA&CS
Kent Messick

DSWC
Vernon Cox

NRCS
Lane Price

Others present: John Classen (NCSU)
Mark Rice (NCSU)

Discussion items:

1. Osmond reported that starter P research conducted by N C State University indicates that at very high soil test P levels, there is no significant increase in yields, regardless of whether start P is used. Modifying the NRCS 590 standard to reflect this latest research was discussed. The current standard reads:

Starter Fertilizers - When starter fertilizers are used, they shall be included in the overall nutrient budget, and applied in accordance with NC State University or NCDA&CS recommendations. (page 3)

On all sites, regardless of the PLAT rating, starter fertilizers may be recommended in accordance with NCSU guidelines or recommendations. (page 4)

On all sites, regardless of the PLAT rating, starter fertilizers containing nitrogen, phosphorus, and potassium may be recommended in accordance with North Carolina State University guidelines or recommendations. (page 5)

Action: It was agreed that to ensure that nutrient management planners were sufficiently aware of the latest NCSU recommendations regarding start P, additional clarification would be added to the 590 standard, following the above statements on pages 4 and 5.

Based on recent research data, NCSU does not recommend the use of starter phosphorus on sites where a soil test indicates High or Very High levels of phosphorus exist. (Reference: Website? Document?)

It was agreed this issue would be discussed at the upcoming P Technical Committee prior to implementing this change in the standard.

2. John Classen, BAE, reported on a study & comparison of the ASABE manure production data (March 2005) and the existing manure production data from the NRCS 633 standard. The comparison was limited to swine, and looked at nursery and grow-finish classes. Changes in the industry have resulted in differences in animal sizes and finishing times (driven by markets), but the actual manure production was similar between the 633 standard and ASABE tables.

Action: The INMC will ask Josh Spencer to take a similar look at the other animal types and classes to determine where changes may be needed to reflect more current industry practices (clean out cycles, feed efficiency, diet, and other factors). John Classen agreed to work with Josh to complete this analysis.

Action: The INMC also agreed to utilize the results of this analysis, along with data from NCDACS waste analysis and prepare a revised set of tables for the major animal types and classes, then distribute this draft information to industry, agency, and other organizations for review and comment.

3. Mark Rice, BAE, discussed the results of a study that evaluated changes in lagoon N concentration when permeable and impermeable lagoon covers are used. Results presented:

Permeable Cover (Onslow County)

Initial lagoon TN conc (n=1): 575mg/l

Avg TN conc. After cover (n=7, over 6 years, high 1146, low 769) TN 940 mg/l

Greater than a 60% increase in lagoon N conc since cover installed.

Control lagoon (same farm, same herd size, no cover, different style barns)

Avg TN conc (n=6, over 6 years): 444 mg/l

Slightly over 50% increase in N conc compared to similar lagoon.

Impermeable Cover

Barham Farm

Digester (Covered Lagoon)

	Influent (mg/l)	Effluent (mg/l)	Removal (from liquid stream)
TKN	2156	1546	28%
NH3-N	1354	1401	-3.4%

It was agreed that improving our understanding of nutrient concentration in covered lagoons is critical for the development of valid waste management plans for operations that install covers. Technical specialists must be able to assist operators understand their land application requirements at the planning stage. Some options for funding further study included utilizing some funds from nutrient management earmarks in USDA's budget, and utilizing a research assistant in NCSU Soils to further study this issue.

Action: Lane Price and Vernon Cox will evaluate the language in the 2008 earmark to determine if the use of these funds is appropriate to improve our understanding of this issue. Deanna Osmond will check on the use of the research assistant to assist in data collection and analysis.

4. Price discussed the need to provide editorial and technical comments back to NCSU Forestry on their draft publication encouraging the application of poultry litter in forest land.

Action: The INMC has reviewed the publication, and is asking Josh Spencer to finalize INMC response as follows:

- a. Rewrite the paragraph on application rates to be consistent with the 590 standard, eliminating competing recommendations.
- b. Add a criteria that waterways, riparian areas, and wetlands be avoided to reduce off site transport. This is especially important since often the understory vegetation may be sparse on some sites (nothing to trap off site transport), and incorporation is not really likely.
- c. Add considerations for the possible introduction of invasives, and/or the possible encouragement of invasives through increasing the fertility on a naturally infertile site.
- d. Add a consideration that increasing fertility on some sites may have an undesirable side effect of enhancing the ability of introduced species to thrive in the understory, where native plants adapted to these conditions previously thrived.

5. John Havlin discussed the latest distribution of a document that included recommended nutrient application rates for various sod species in the southeast. A draft document has been prepared at the request of the 1217 committee to provide guidance for waste application on sod turf sites.

Action: The INMC is asking Josh Spencer to finalize the INMC guidance, including a single recommendation from North Carolina. The data should be converted to a per-acre basis, limited to nitrogen only, eliminating ranges (provide the maximum application rate), and integrate rates from Florida and South Carolina for species where North Carolina has no current recommendation. Provide INMC a final opportunity for review via email.

6. Lane Price discussed the need for NRCS to evaluate the Manure Management Planner software recognized by NRCS nationally for nutrient management planning. NRCS's ECS section will be evaluating this application in 2008. The INMC is invited to participate in this evaluation.

Action: A demonstration of MMP will be set up for the INMC this winter. A meeting was set up for Cox, Osmond, Price, and Spencer to discuss nutrient management software/tools on February 22, 2008, at 8:30 am at NRCS (suite 205).

Next meeting, March 27, 2008 1:00 pm