



PigTales

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Swine Waste Management Alternatives Are Not Economically Feasible

A five-year study at NCSU to identify alternative waste management technologies for the N.C. swine industry has singled out a combination of technologies researchers consider “environmentally superior” to the current lagoons and spray fields in use. Smithfield Foods and Premium Standard Farms funded the initiative through an agreement reached with the North Carolina attorney general's office in 2000. Although not providing any funding, Frontline Farmers, a group of independent swine producers, agreed to assist NCSU and the attorney general to develop and implement the new environmental superior technologies.

On March 8, 2006, Dr. Mike Williams with NCSU issued a report identifying a combination of waste management technologies he had determined met environmental and economic feasibility criteria for new and expanding hog farm categories as spelled out in the agreement. No technologies have been proposed that meet both the environmental and economic feasibility criteria for current hog farms.

While the Smithfield agreement spells out what environmental criteria technologies must meet, it also stipulates technologies must be economically feasible. In reports issued over the last two years, Williams found that five technologies met environ-

mental criteria to be considered superior to the lagoon and spray field system now used by the majority of North Carolina swine farms. When those earlier reports were issued, however, an economic assessment had not been completed.



The economic assessment has now been completed, although there was disagreement among members of an advisory panel appointed by Williams as to what constitutes economic feasibility. The disagreement centered on the effect adoption of a waste management technology is likely to have on North Carolina's swine herds.

Williams decided that a technology may be considered economically feasible even if it costs more than a lagoon and spray field system and if adopting the new technology would cause North Carolina's swine herd to shrink by as much as 12 percent.

Dr. Williams has stated that the current lagoon and spray field application method costs about \$87/steady state live weight while most of the new technologies are costing more than \$200/SSLW. Farmers are quick to note that they could not absorb such costs.

According to the agreements, technologies must be technically, operationally and economically feasible and eliminate the discharge of animal waste to sur-

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CAFO Water Permit Application Deadline Extended

CAFOs will have additional time to seek water permit coverage and implement nutrient management plans as required by EPA's 2003 CAFO rule. Under a final rule, newly defined CAFO facilities will have until July 31, 2007, to seek National Pollutant Discharge Elimination System permit coverage.

The 2003 rule required newly defined CAFOs to seek NPDES permit coverage by Feb. 13, 2006, and for all CAFOs to have NMPs in place by Dec. 31, 2006. EPA will be revising the 2003 rule in response to a federal court decision; however, this revision will not be finalized by Feb. 13, 2006. Therefore, EPA is extending the deadlines.

In addition, under the revised rule, all CAFOs will have until July 31, 2007, to implement NMPs. This action will not affect other aspects of the CAFO NPDES permitting program. It solely addresses timing issues associated with the court ruling.

In North Carolina, most operations (except dry litter poultry operations) that would have fallen under the 2003 rule's requirement already have NPDES permits, because the N.C. Division of Water Quality issued these NPDES permits prior to the effective date of the 2003 rule.

North Carolina required a comprehensive animal waste management plan with a nutrient management plan to be prepared by each permitted facility, so the NMP requirements for NPDES permit holders have (mostly) been met as well.

There are a few differences in the NMP requirements in North Carolina versus those in the federal regulations and those will have to be reconciled at some point in the future. To learn more about the updated NMP requirements, please refer to <ftp://ftp-fc.sc.egov.usda.gov/NC/NCweb/Intranet/Bulletins/2004/180-4-2.pdf>.

The deadline changes came about as a result of a lawsuit against EPA brought by several environmental groups, including the Waterkeepers Alliance. American Farm Bureau, the National Pork Producers Council, and the National Chicken Council were involved to protect the interests of poultry and livestock farmers in the court proceedings. The 2nd Circuit US Court of Appeals court decision in the case established that federal NPDES permits can only be required of farms that actually discharge and that the requirements to obtain an NPDES permit cannot be based solely on the number of animals at the animal operation.

For additional information on the extension of CAFO compliance dates rulemaking, visit <http://cfpub.epa.gov/npdes/afo/caforulechanges.cfm#dates>.

Conservation Security Program

The USDA has announced that four watersheds in North Carolina will be eligible for the Conservation Security Program in FY-2006. The watersheds are the Middle Neuse, Lumber, Lower Pee Dee and Little Pee Dee.

CSP offers potential to enhance natural resources stewardship on private working lands by rewarding ongoing conservation activities and encouraging additional measures to provide greater stewardship.

To learn more about the Conservation Security Program, visit the North Carolina CSP Web page at: <http://www.nc.nrcs.usda.gov/programs/CSP/index.html>.



Thousands Sign Up for Animal Feeding Operations Air Compliance Agreement



More than 2,000 animal feeding operations have signed agreements for EPA's air compliance initiative. Many of the companies signing up have several farms that will come under the agreement.

"Thousands of farms across the country have committed to participating in the air monitoring process, and, if necessary, take whatever steps are required to come into compliance with clean air standards," said Jon Scholl, agricultural adviser to the EPA administrator. "This broad participation is a major achievement. We now will move as quickly as possible to the monitoring and implementation stages."

The two-year monitoring study, expected to begin this year, will provide EPA with the essential data needed to develop emissions estimating methods and tools, which will assist the industry and EPA in determining the air compliance status of AFOs. Participating AFOs will then be required to determine their emissions and comply with all applicable regulatory requirements. Under the agreement, EPA will not sue participating AFOs for certain violations of the Clean Air Act and the hazardous release reporting requirements of the Comprehensive Environmental Response, Compensation and Liability Act and the Emergency Planning and Community Right-to-Know Act that may have occurred during the two-year study.

For more information about the agreement, go to:
<http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html>.



We've Branded Our Pork!

Our Pork EMS logo, that is. Jesse Rademacher, a N.C. DPPEA intern, has created a new and improved logo for the Pork EMS project.

Other new and improved additions for the Pork EMS project will include a revised Web site, display and brochures. We hope to have this available online to you in the near future.



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face or groundwater in order to be designated environmentally superior. Environmentally superior technologies must also substantially eliminate the release from swine farms of ammonia, odor and disease-transmitting vectors and airborne pathogens and eliminate contamination of soil or groundwater with nutrients or heavy metals.

Seventeen technologies were evaluated. In most cases, technologies were built full-scale on hog farms, then evaluated. Williams said several technologies were close to meeting the environmental criteria to be considered environmentally superior and might be able to do so with relatively minor adjustments.

In his report, Williams suggested that technology suppliers and researchers continue efforts to bring the cost of treatment systems down to the point it would be economically feasible to retrofit existing hog farms and that a process be developed to evaluate additional technologies. Williams said the evaluation effort funded under the Smithfield Agreement is now completed.

To read Dr. Williams final report on the phase three technologies, please refer to http://www.cals.ncsu.edu:8050/waste_mgt/smithfield_projects/phase3report06/pase3report.htm.