

## **NORTH CAROLINA INTERAGENCY NUTRIENT MANAGEMENT COMMITTEE (INMC)**

- ◆ North Carolina Cooperative Extension Service (NC CES)
- ◆ North Carolina Department of Environment & Natural Resources - Division of Soil and Water Conservation (DENR-DSWC)
- ◆ North Carolina Department of Agriculture and Consumer Services – Agronomic Division (NCDACS)
- ◆ North Carolina State University – Soils Department, Crop Science Department (NCSU)
- ◆ United State Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS)

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# **ANNOUNCEMENT**

**October 25, 2004**

**SUBJECT:** New Laboratory Certification Procedures and Guidelines for Soil Testing on Animal Waste Application Sites in North Carolina

**TO:** Laboratories That May Consider Providing Soil Test Analysis Services for Agricultural Nutrient Management Plans in North Carolina

### **Background**

During the last decade there has been much research nationwide on the potential movement of phosphorus from agricultural fields. The potential for phosphorus moving off-site is directly related to many site-specific factors, including the amount and type of phosphorus applied, the timing of application, the soil type, the erosion rate and sediment delivery, the leaching potential, the proximity to the concentrated flow of water, and other factors. To ensure its standards were scientifically credible, USDA-NRCS at the national level revised its policy on nutrient management in May 1999. In response, NRCS in North Carolina revised its nutrient management standard in 2003.

The revision to the standard requires that nutrient management plans developed for sites that will receive animal waste include an assessment of potential phosphorus loss, and a specification that phosphorus application be limited when the assessment indicates a High or Very High potential for excessive phosphorus transport off-site. The tool used to make this assessment in North Carolina is called the Phosphorus Loss Assessment Tool (PLAT). PLAT relies heavily on a soil test analysis. The soil test is a critical component for estimating phosphorus movement on all four of the transport pathways evaluated within PLAT.

The NRCS nutrient management standard (including PLAT) must be used on animal waste operations participating in Farm Bill cost-share programs. The NRCS standard must also be used for all nutrient management plans developed for the next revision to the NPDES permits for animal operations. In North Carolina, these new permits will go into place in the 2006-2007 timeframe, depending upon the type of operation. The standard is also required for nutrient management plans developed to meet North Carolina's river basin rules currently established in the Neuse and Tar-Pamlico Basins.

### **Laboratory Certification Requirements**

Because a soil test is now such a critical component for administering not only voluntary USDA programs, but also federal and state regulations as well, it is essential that farmers receive a consistent and identical analysis for certain test parameters, regardless of which laboratory they use. It is equally important that fertilization guidance provided to growers by laboratories be consistent. Accordingly, the NRCS standard requires that soil samples be collected and prepared in accordance with North Carolina State University and North Carolina Department of Agriculture and Consumer Services standards and recommendations. And for nutrient management plans developed to meet the NRCS standard, the soil test analysis must be

performed by laboratories or programs certified by the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Quality, Laboratory Section.

### **Certification Procedures and Guidelines**

Information on certification procedures and guidelines for the Animal Operations Waste Analysis Certification is available at the DENR, Division of Water Quality website:

<http://h2o.enr.state.nc.us/lab/files/cert/animalopscert.htm>

*This application is for laboratory certification for the periodic testing of waste products of animal waste management systems under article 21 of the NC general statutes [G.S. 143-215.10.C\(e\)\(6\)](#) as authorized by 1995-1996 NC Senate Bill 1217. This certification is for analysis of copper, manganese, zinc, total Kjeldahl nitrogen, soil pH, total phosphorus, soil humic matter and soil weight per volume.*

*Additionally, these methods are acceptable for certified nutrient management plans as referenced rules adopted by the Environmental Management Commission and the [Natural Resources Conservation Service \(NRCS\) 590 Nutrient Management Standard in North Carolina](#). Analytical results are to be provided using the same soil test indices and units as the NCDA Agronomic Division. Fertilizer and lime recommendations, derived from soil test results, must follow NC State University guidelines that are based on the philosophy and recommendations of the NCDA Agronomic Division as found in *Crop Fertilization Based on North Carolina Soil Tests*. This publication is available upon request and is found at <http://www.ncagr.com/agronomi/oobook.htm>.*

Information on applicable certification fees is available at the web site.

To apply for certification, complete and return the original and one copy of the application to:

**ENR/DWQ Laboratory Section  
Certification Branch  
1623 Mail Service Center  
Raleigh , NC 27699-1623**

For questions on laboratory certification procedures:	James Meyer, Branch Manager NC DENR-DWQ, Laboratory Section 1623 Mail Service Center Raleigh , NC 27699-1623 919-733-3908 ext 207 <a href="mailto:James.Meyer@ncmail.net">James.Meyer@ncmail.net</a>
For questions on soil test indices, and fertilization and lime recommendations:	David Hardy, Chief - Soil Testing Agronomic Division, NCDA&CS 4300 Reedy Creek Road Raleigh, NC 27607-6465 919-733-2655 <a href="mailto:David.Hardy@ncmail.net">David.Hardy@ncmail.net</a>
For questions on the NRCS nutrient management standard:	Roger Hansard, Water Quality Specialist USDA-NRCS 4405 Bland Road, Suite 205 Raleigh, NC 27609 919-873-2133 <a href="mailto:Roger.Handard@nc.usda.gov">Roger.Handard@nc.usda.gov</a>