



# DELAWARE DEPARTMENT OF AGRICULTURE

2320 South DuPont Highway, Dover, DE 19901

## To: Newsroom Directors and Assignment Editors

**For Immediate Release:**  
**June 23, 2005**

**Number of Pages: 3**

**Contact: Anne Fitzgerald**  
**(800) 282-8685 (DE only)**  
**(302) 698-4520**  
**(302) 242-4092 (Cell)**

### **Nutrient management progress announced**

Today, the Delaware Nutrient Management Commission, the University of Delaware, and the Delmarva Poultry Industry announced significant progress made in their cooperative efforts to improve Delaware's water quality and other environmental initiatives. Progress has been made in the reduction of phosphorus levels in soils, nutrient loading in waterways, and alternative uses for manure.

William Saylor, PhD, Associate Professor at the University of Delaware, in the Animal and Food Sciences Department, discussed research done by the University and others to modify poultry diets to reduce the amount of phosphorus in poultry litter. As a result of the research, phytase is being used in all poultry feed on the peninsula, and has produced a 30% - 50% reduction in poultry litter phosphorus. Phytase is an enzyme that helps chickens utilize more of the indigestible phosphorus in grains, and therefore decrease the amount of supplemental phosphorus that must be added to the feed. Dr. Saylor said "This is really good news, this is really exciting news for all of us who have been working on the front end of the chicken for all of these years trying to make some improvements that will actually help with litter management in the end."

Joe Koch, Environmental Manager, Perdue AgriRecycle spoke about the progress made in removing excess litter through the alternative use of producing pelletized fertilizer. Perdue AgriRecycle, located in Seaford, DE, has increased litter pellet production to sixty thousand tons annually, fifty thousand of which come from Delaware poultry farms. According to Koch, "We have removed over two hundred thousand tons of litter from Delmarva watersheds since the plant opened. We are excited about the marketing opportunities that are provided for our product as we go forward. We think that this is a positive for the nutrient management here on the Eastern Shore and in Delaware. Perdue AgriRecycle looks forward to continuing our strong partnership with the Nutrient Management Commission as we continue to address the challenges that are facing us with regard to the Delaware, Chesapeake, and Inland Bays."

Bill Rohrer, Delaware Nutrient Management Program Administrator, discussed the Delaware Nutrient Management Commission's Manure Relocation Program as another alternative, and the progress made in nutrient management planning and certification. The Delaware Nutrient Management Commission is funding the relocation of approximately thirty-five thousand tons of excess litter annually. This year, \$546 thousand dollars were spent to help pay for the transportation cost of exporting excess poultry litter. Excess litter is relocated within and outside of the watershed for land application where a nutrient management plan identifies low nutrient soils. This year alone, sixteen thousand and ninety eight tons of litter were exported from Delaware farms and the Delmarva Peninsula. This represents eight hundred and five tractor trailer loads of poultry litter.

**-MORE-**

Rohrer said, “Earlier announcements regarding the measurable results from Phytase and increased production from the Perdue Recycle plant are good for agriculture and good for water quality. With the current pace of Perdue AgriRecycle and the Commission funded relocation program, and the results of phytase, the annual universe of excess litter in Delaware has dwindled from one hundred and fifty thousand tons five years ago to approximately fifty thousand tons today. “

By January 2006, nutrient management regulations mandate that 80% of required nutrient management plans be in place. The program is well ahead of schedule with 84% of required nutrient management plans written and implemented. According to Rohrer, “Two thousand one hundred and eighty-nine Delaware farmers or nutrient handlers are currently certified as either a nutrient generator, a private nutrient handler, a commercial handler, or a nutrient consultant.”

Ed Lewandowski, Director of the Center for the Inland Bays, talked about cooperation and partnerships. He said, “The Center for the Inland Bays has strongly supported the purpose and objectives of the Delaware Nutrient Management Program and especially the important emphasis it places on nutrient reduction in the inland bays watershed. Since 2002, we have been delighted to work with the three major poultry integrators to initiate programs which satisfy the memorandum of understanding that was agreed to with the Delaware Nutrient Management Commission.” In his remarks, he outlined the many benefits the Poultry Integrators Nutrient Efforts Program (PINE) has provided for the Inland Bays. According to Lewandowski, “PINE that has demonstrated the success of a collaborative effort between a non-profit organization (Center for the Inland Bays), a state agency (Delaware Department of Agriculture), and the poultry industry.”

John Chalada, Vice President for Environmental Management, Perdue Farms, affirmed Perdue’s on going commitment to protect water quality and also focused on cooperation. He said, “Perdue and, I am sure, the other poultry companies here on the Shore are extremely pleased and very excited about the advances we have made in environmental protection here on the Peninsula. The atmosphere that has been fostered here in Delaware with this cooperative approach has been an example and a model for the rest of the Nation. We are extremely pleased with what has been happening here in Delaware. We are going to continue our efforts, take those efforts nationally, and use Delaware as the model, as it should be as the First State.”

Bill Vanderwende, Chairman of the Delaware Nutrient Management Commission, closed the program and said, “We want everyone to know that the Commission is very pleased with the way that agriculture has accepted our programs and helped us develop programs. Farmers have accepted it. They want to do their part for the environment, and are doing their part. I think agriculture has stepped up to the plate and is doing what has it has been asked to do, and we hope the other businesses will do the same.”

Today’s event was held at Roland and Laura Hill’s Deerfield Farm in Lewes, DE. Deerfield Farm is a 2,600 acre farm that has a 130,000 bird capacity. The Hill’s were recipients of the 2002 Delaware Poultry Grower Environmental Stewardship Award presented by the Delaware poultry companies in cooperation with the Delaware Nutrient Management Commission.

Background information is attached.

###

## **Background information Delaware Nutrient Management Progress**

The quality of Delaware's waters is impacted by a variety of influences, including nutrient loadings, toxic sediments, temperature, and bacteria. Nutrients are substances such as nitrogen, phosphorus, organic matter, and other minerals necessary for -- or beneficial to -- plant growth. Nutrients may enter Delaware's streams and groundwater from many different sources -- point sources and non-point sources. Non-point sources of nutrients are household septic systems, agricultural operations, lawns, and golf courses, to name a few. .

Nitrogen and phosphorus are nutrients of primary concern in the nutrient loading of many Delaware waterways. Years ago, agricultural producers voluntarily implemented nutrient control strategies designed to limit nitrogen application. With better soil testing methods, growers were able to fine tune their nitrogen needs to apply only the amount the crop needed.

Phosphorus, however, has been a greater challenge. Until the early 1990s, it was not considered a problem, but advances in science have determined that it has contributed negatively to water quality through run-off and other means. One of the sources of phosphorus and nitrogen is poultry litter, which has historically been applied to agricultural fields. The continuous application of poultry litter through the years resulted in some areas with soils high in phosphorus. In 1999, the Delaware Nutrient Management Law was passed which started the process of addressing the phosphorus issue and other environmental issues. For example, land management strategies, such as placing restrictions on land application of poultry litter that have been implemented since 2001, are reducing the amount of phosphorus in the soil and reducing run-off into the waterways.

Restrictions on the land application of poultry litter created the issue of what to do with the excess litter that can no longer be used on crops.

- Alternative uses, such as pelletizing to make a fertilizer, have been developed.
- A successful manure re-location program that moves excess litter from areas of high phosphorus soil to areas in need of phosphorus has been developed.

Poultry litter is normally high in phosphorus content because chickens have difficulty digesting phytic acid, a form of phosphorus found in the corn and soybeans that are used to feed poultry. Undigested phytic acid is excreted as part of the litter and other types of more digestible phosphorus are added to the feed that can also add to the phosphorus content of the soil. Poultry diet modification research at the University of Delaware and other institutions has led to better digestion of phytic acid by poultry, which, in turn reduces the amount of phosphorus that will be excreted in the litter. Litter with lower phosphorous content benefits Delaware's water quality and the issue of excess litter.