



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III
Chesapeake Bay Program Office
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ANNAPOLIS, MARYLAND 21403

MAR 25 2009

Dr. Lynton S. Land
P.O. Box 539
Ophelia, VA 22530-0539

Dear Dr. Land,

Thank you for your thoughtful letter regarding the need to address the inefficiency of agricultural fertilizers, particularly animal manure, in the Chesapeake Bay watershed. As you indicated in your letter and past Bay Journal articles, animal manure continues to be a significant source of nutrients entering the Chesapeake Bay.

Agriculture is a defining feature of our region's economy and heritage. The Environmental Protection Agency (EPA) and the Chesapeake Bay Program partnership is committed to the successful attainment of our Chesapeake Bay restoration goals, while maintaining the viability of agriculture in the watershed. We estimate that agricultural animal manure and poultry litter contribute about half of the agricultural nutrient load to the Chesapeake Bay. As agricultural animal operations become more concentrated and the acreage of cropland available for proper manure application is lost to development, the challenge of managing manure nutrients in the watershed will only intensify.

The Chesapeake Bay Program has long recognized the importance of addressing agricultural manure nutrients in our watershed. In 2004, former Virginia Secretary Tayloe Murphy called for the Chesapeake Bay Program to hold an Agricultural Summit to develop sustainable solutions for reducing nutrient pollution from animal manure and poultry litter in the Chesapeake Bay watershed. Out of this Summit arose a Chesapeake Executive Council Directive and strategy for how to build new partners and new markets for agricultural animal manure and poultry litter. A big focus of this strategy was to promote sustainable alternatives to land applying manure and to manage nutrient sources (manure, biosolids, inorganic fertilizers) on a regional basis. Based on these fruitful discussions, we are seeing some creative solutions for how to address agricultural manure nutrients in the Chesapeake Bay Watershed.

Farmers have traditionally viewed manure as a free, organic fertilizer that they prefer over importing the oftentimes more expensive inorganic fertilizers. Reducing or eliminating the use of manure on agricultural lands would take a cultural change by the farmer. Many of the advances we have made in dealing with manure nutrients in the watershed have involved providing farmers incentives to try different approaches to demonstrate that other alternatives are viable and may result in more sustainable, profitable agriculture in the watershed for the future and a healthy Bay. Some examples of our advances are:

EPA's CAFO Rule: In October 2008, EPA finalized a rule helping to protect the nation's water quality by requiring concentrated animal feeding operations (CAFOs) to safely manage manure. EPA estimates CAFO regulations will prevent 56 million pounds of phosphorus, 110 million pounds of nitrogen, and 2 billion pounds of sediment from entering our nation's streams, lakes, and other waters annually. This new regulation of animal feedlots sets a strong national standard for environmental protection, while maintaining our country's economic and agricultural vitality. EPA is working with our state partners in the watershed and U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) to ensure that farmers get the technical and financial assistance they need to comply with these regulations.

EPA's Innovative Grants Program: In 2008, EPA launched the Chesapeake Bay Innovative Nutrient and Sediment Reduction Program. Overall, the program will award approximately \$20 million for implementing better ways to reduce nutrients and sediment from agricultural and urban lands. This program goes beyond research and implements viable and innovative approaches for dealing with some of our toughest nonpoint source problems in the watershed, including improving nutrient use efficiencies on agricultural lands.

The 2008 Farm Bill: Congress has underscored the need for more agricultural conservation funding in the Chesapeake Bay watershed to keep agriculture viable while improving Bay water quality. The Farm Bill authorizes \$188 million over four years for the Chesapeake Bay Watershed Initiative. NRCS is focusing the funding in priority locations and on priority practices (many of which address nutrient use efficiency issues such as nutrient management, manure management, cover crops, crop residue and tillage practices, etc.) that have the greatest influence on the Chesapeake Bay water quality.

Alternative Use Programs:

NRCS state offices in Maryland and Delaware are launching a new Alternative Use of Poultry Litter pilot program this year, funded through the Environmental Quality Incentive Program to reimburse poultry producers not to apply litter to their cropland. This pilot program will provide incentive payments to farmers to help defray the cost of purchasing commercial fertilizer. The purpose of this pilot program is to improve nutrient efficiencies and reduce soil phosphorous levels in priority locations within the Chesapeake Bay watershed.

Government and the private sector have teamed up to fund the Perdue AgriRecycle plant in Seaford, Delaware that transports poultry litter off the Eastern Shore, pelletizes it, and markets it for alternative uses outside the watershed, such as golf courses. Technologies like this offer viable alternatives to land applying manure which will be important as farmers implement phosphorus-based nutrient management plans.

State Cost Share Programs: We are seeing a shift in many states to cost share programs that are focused on priority watersheds and/or priority practices that we have shown have the greatest potential to reduce nutrient loads to the Chesapeake Bay. For example, the EPA funded a study to develop pollution reduction efficiency measures for

a number of agricultural conservation practices. Based on the latest scientific data, scientist showed that farmers get a significant reduction in nutrient losses from their fields if they plant early cover crops. Based on this information, state cost share programs are offering higher incentive payments to farmers who plant early cover crops to deal with the inefficiencies of nutrient uptake of crops like corn.

Increasing Farmer Use of Nutrient Use Efficiency Tools: Through grant programs like the EPA innovative grants program and the NRCS Conservation Innovation Grants program we are funding a number of projects that increase farmer's use of key tools and approaches to more efficiently use nutrients. Examples include the American Farmland Trust's "BMP Challenge" which provides incentives to farmers (in the form of yield insurance payments) to apply less fertilizer on their cropland and the use of tools to adjust application rates such as the pre-sidedress soil nitrate test and corn stalk nitrate tests to better estimate nutrient needs of crops.

In addition to offering incentive programs to help farmers implement practices/approaches to improve nutrient efficiency on the farm, we will continue to work with the scientific community to ensure that our tools and information regarding nutrient uptake and application rates is scientifically defensible. The scientific community also plays a very important in helping us assess the water and air effects of alternative approaches. An example of this is the work that EPA, the Chesapeake Bay Commission, and the USDA Cooperative State Research, Education and Extension Service's Mid-Atlantic Water Program have underway to evaluate the water quality effects of various biofuel strategies on the Chesapeake Bay.

EPA has a strong commitment to an adaptive management approach where we continually evaluate our progress towards our Bay restoration goals, determine what is not working, and explore additional tools and creative solutions to our Bay restoration challenges. We appreciate committed watershed residents like you who take the time to think through these complicated issues and offer possible solutions that keep the healthy and constructive dialogue going. On behalf of the full Chesapeake Bay Program partnership, I appreciate your insights, your ideas, and your concern for the Chesapeake Bay watershed.

Sincerely,



Jeffrey Lape
Director