Remarks of Senator Mike Brubaker
Chairman, Agriculture and Rural Affairs Committee, Senate of Pennsylvania
Vice-Chair, Chesapeake Bay Commission

PA Nutrient Trading Conference
April 16, 2010

Good morning! Thank you for attending today's event, especially those of you who have made the trip from outside of Pennsylvania.

I believe everyone here is involved in some way with helping to restore the Chesapeake Bay and is committed to the implementation deadline of 2025. Pennsylvania and the Chesapeake Bay Commission are committed to that deadline, but we know that it will be a challenge – requiring us to double our efforts. For Pennsylvania, we were already reducing 1.5 million pounds of nitrogen per year, so finding 3 million pounds a year will require new ideas and tools.

Best management practices will be important, especially at the scale of an individual farmer or neighborhood, but they alone will not get us to the goal. They do not address the regional imbalance of nutrients that is inherent in our national and global agricultural systems. They cannot stop our population from increasing and adding demands on our wastewater treatment systems.

To address pollution at this scale, we need to do two things:

1. Improve the overall nutrient balance of the watershed by finding viable alternatives to land application of raw manure. This is not to say that manure shouldn't be land applied – it is a cost-effective source of nutrients for farmers that also adds carbon and other benefits to the soil.

   However, in certain areas of our watershed we have regional imbalances between manure nutrients and crop needs. Alternatives to land application will keep the excess nutrients out of our waters. Technologies with by-products that can substitute for chemical fertilizer will further help the balance by reducing the demand for imported nutrients. Technologies that generate energy also provide important secondary benefits to society.

2. Help nature help itself. Natural systems have built-in pollution mitigation processes. Impairment occurs when human activities overwhelm or inhibit these systems. For example, soil is a natural filter that we undermine when we pave over it. Likewise, streams, wetlands and floodplains naturally filter surface water.

   You will hear this afternoon about the issue of legacy sediments and their impact on natural stream processes. Practices such as stream restoration or reducing impervious surfaces can

keep these natural processes functional and complement other efforts to reduce nutrient inputs.

The Chesapeake Bay Commission has long championed innovative methods to reduce the nutrient footprint of agriculture, from the use of phytase in poultry feed to policies that promote manure to energy technologies. The Commission was also one of the first to call attention to the impact of legacy sediments and the research being done to re-examine the way we view and restore our stream systems.

Even as we see technology as an important part of the solution for the Chesapeake Bay, we also know that moving a new technology or innovative practice from the demonstration phase to the commercial phase is a challenge. Scaling up often requires financial resources generated through outside investment or viable markets for the sale of products, both of which can be in short supply for those who wish to be early adopters.

However, one of the products of a new technology or innovative practice can be a nutrient credit, and trading provides a market for that product. Consequently, many more technologies that otherwise may not have gotten beyond a pilot scale, may now be able to deploy commercially.

That is not to say that trading is the final goal. Ultimately, we would hope that these technologies would eventually prove themselves to be viable without the sale of credits – and here's why.

The most likely purchasers of nutrient credits today are wastewater treatment plants or builders who wish to connect to a wastewater treatment plant. When they purchase a credit generated by agriculture, they (the WWTP or builder) are receiving credit for that reduction.

It is certainly important for municipal authorities or builders to have a supply of credits available to them. In fact, the purchase of credits will be an important tool to sustain growth in the region if we are to meet and maintain our nutrient cap loads for the Bay.

However, it is our hope that new technologies or practices could become economically viable without the sale of credits, so that agriculture could receive the full credit from associated nutrient reductions.

If technologies become less financially dependent on the sale of credits, the cost of credits would be reduced, benefiting those who wish to purchase credits.

To make this work, the process of evaluating and verifying credits must be credible and science-based. Even one instance of over-calculation of credits would harm the credibility of the program in the eyes of the public and potential buyers of the credit.

On the other hand, being overly conservative in the calculation of credits could price credits out of the market and chill investment. When faced with uncertainty in the nutrient benefit of a technology, it is better to err on the side of caution. However, we should work first to minimize that uncertainty, using the best science and expertise available.

DEP has done a very good job keeping up with the variety of credit applications they have received, and all credits are subject to public comment. However, it appears that it would be helpful to have a process that included a review by those with expert knowledge in the science or technology being evaluated. For this we would look to our university partners and our federal partners to assist us.

For those of you not familiar with Pennsylvania's program, I encourage you to get to know the many partners that are here today – from DEP, the conservation districts, local government, farmers, municipal authorities, and entrepreneurs.

Besides providing a tool for cost-effective nutrient reduction, one of the biggest benefits of our trading program has been getting different sectors to talk to each other and see Chesapeake Bay issues from a community perspective instead of just as individual sectors.

In the end, we will only achieve our goals if we work with each other instead of against each other. Trading is a tool to open communication, but the relationships that develop will also help us as we look at the more difficult issues of budgets and programs.

Thank you again for attending today's program. I look forward to the discussion and your questions.