

Peter Hughes, President
Red Barn Trading Company
Chesapeake Bay Tributary Strategy

My name is Peter Hughes and I am the president of Red Barn Trading Company. I would like to take this time to thank the Senate Republican Policy Committee, and the office of Senator Vance who asked me to be here today to speak about this important issue.

Red Barn Trading Company was formed in November of 2005 to address DEP's nutrient credit trading policy. Red Barn Trading was formed by the principals of Red Barn Consulting, an agricultural engineering and consulting firm, located in Lancaster County. Red Barn Trading utilizes the consulting firm's 600 existing farm clients located across Pennsylvania's Chesapeake Bay Watershed in order to 1) identify cost effective projects; 2) quantify and prove nutrient reductions from particular farm practices (or "BMPs"); and 3) prepare credit proposals for DEP certification.

With access to 600 farms in the Watershed, Red Barn Trading is uniquely situated between generators of non-point source credits and the entities that need a large number of credits each year. Red Barn Trading has the capability to collect, or aggregate, nutrient credits in large quantities for sale to large or small purchasers on a long term basis. At this time, our Trading company has approximately 450,000 DEP-certified nutrient credits for sale in the marketplace. It is important to note that the 450,000 certified credits represent BMP's on only 21 farms. The potential for generation of nutrient credits on farms within the watershed is vast.

We have spent the last two years working with DEP, the Non-Point Source Workgroup, and the Trading Workgroup to help apply and implement the Trading Policy and shape the role of farmers within the Policy. Those efforts have resulted in 450,000 certified nutrient credits and two sales agreements to developers who needed to purchase credits in order to satisfy their NPDES permit requirements. After two long years discussing policy issues, I am happy to finally have the chance to start talking about the business specifics of the trading program.

Business Aspects of Trading:

In order for nutrient credits to be a viable economic alternative for point sources, the credit price per pound must be lower than the cost of capital improvements for one annual pound of nutrient removal. As we have seen, the price per pound of nutrient removal for capital upgrades is facility-specific, and quite frankly a moving target. Price is only one variable that is important to a point source purchaser whether they be a municipal authority or a developer.

Length of contract, contract terms, and market stability are other important factors for the sustainability of the fledgling nutrient credit trading market in Pennsylvania. These issues are market-based issues and can be easily addressed by the parties in the credit sales transaction. However, the stagnation of Pennsylvania's credit trading market is the direct result of the fact that there is no current demand today. Since DEP has agreed to an extension of the nutrient reduction requirements beyond 2010, we are essentially discussing a cap and trade market that will not have any major purchasers until 2009 or 2010. The current supply of certified credits greatly outweighs the current demand for certified credits. Because the supply outweighs the demand, we have seen little to no activity or new parties entering the market over the past year and a half.

In the past two years I have heard many positive and negative discussions surrounding the nutrient credit trading policy. At this time I would like to address two specific concerns that I commonly hear from those who are adamantly against the credit trading policy. The first criticism is: "Why rent the house when I can buy the house" and the second: "Trading nutrient credits will not reduce nitrogen and phosphorous reaching the Bay."

1. "Why rent the house when I can buy the house." This statement relates to the comparison between the installation of capitol upgrades (purchasing the house) and buying credits (renting the house). This approach is short-sighted in that it does not consider the number of ways in which nutrient credits can be utilized. We see many developers, who are traditionally very cost conscious, doing one of two things: 1) putting in 8:1 technology and purchasing credits for the balance of their nutrient reduction needs; or 2) purchasing credits for at least the first five year permit cycle with the intent to re-evaluate the technology and credit markets before the end of the cycle. The reason for these approaches is that the credit trading market and/or the technology market may change over the next five years. These approaches allow the discharger the ability to take time, evaluate the new markets, and decide what approach is most cost effective over the 5 year permit cycle. You can cost effectively rent the house and buy time while achieving compliance until you decide whether to buy a house. Bottom Line: Rate payers are not concerned whether their municipal authority is renting or owning, as long as the most cost effective alternative is chosen. An example of a successful environmental credit program is in the federal air program, which started in the 1990s. In that case, the cost of air credits decreased within the first few years of the market and has stayed down since. The air credit trading program is the most cost effective pollution reduction program in the United States.

2. "Trading nutrient credits will not reduce nitrogen and phosphorous reaching the Bay." The certification process for nutrient credits does not result in a 1 to 1 credit trade. In our experience, for every 4 pounds of nitrogen removed from the Chesapeake Bay watershed we are allowed to sell 1 pound of nitrogen equal to one nutrient credit. Many conservative ratios are applied in a layering fashion to the certified credit thus ensuring that a trade will result in real nutrient reductions.

Red Barn's Role in Credit Trading:

Red Barn Trading Company serves many different roles within the nutrient credit trading policy. We identify BMPs, calculate site-specific BMP credit reductions, and submit credit proposals to DEP for certification on behalf of our farmer clientele. Once certification is obtained we are then able to aggregate large amounts of certified credits and market them to non-point sources. Red Barn Trading's contracts with our farmers, in most cases, transfers ownership of the credits to Red Barn Trading. Since Red Barn Trading owns the credits we have the ability to guarantee the price and contract terms over a specified length of time. Through matching contracts we can offer credits for 1 to 20 years, thus being a true alternative to capital upgrade costs.

I do not believe that the nutrient credit trading policy is a panacea that will cure all of the social and economic hardships created by implementation of the 2000 Chesapeake Bay Agreement. I do believe that it can be an economically viable alternative to capital upgrades or in conjunction with point source capital improvements. I do believe that best management practices installed by non-point sources that generate nutrient credits will have a significant positive impact on the Chesapeake Bay. I do believe that *when* there is a demand for nutrient credits from the point sources that demand will be met with a robust market from the agricultural non-point sources. A capitalistic open cap and trade market is the future of environmental compliance.

Point sources will always have the option of installing capital upgrades. Nutrient credit trading is not a mandate, but another voluntary tool to allow point sources an economical way of meeting environmental requirements.

