Draft Protocol for the Review of "Non-traditional" Credit Generating Approaches
A Proposal to the Chesapeake Bay Program's Trading and Offsets Workgroup

Introduction

Water quality trading is a key component of Chesapeake Bay jurisdictions' watershed implementation plans. Existing state programs provide regulated entities with options to purchase credits or offsets generated by other regulated entities or agricultural operations. In some states, "non-traditional" pollutant-removal technologies can also generate credits and offsets.

However, different approaches among states for crediting non-traditional technologies could complicate their use in trading programs and create an uneven "playing field" among states. For example, as of 2008 Pennsylvania had certified (but not implemented) 1.8 million nitrogen credits from manure conversion projects. Virginia has yet to assign credits for manure conversion/export projects and Maryland currently prohibits these types of projects from receiving credit. Because the states are likely to see more requests for nutrient credits associated with waste to energy technologies and other innovative approaches, there is an urgent need to develop a credible approach to estimate the nutrient credits associated with these projects. In addition, since ultimately these credits will be incorporated into National Pollutant Discharge Elimination System (NPDES) permits, it is critical that they be developed via a process that is consistent, transparent, and is scientifically and legally defensible.

Currently, The Mid-Atlantic Water Program has begun a project entitled: "Technical Analysis of Water Quality Crediting Procedures for Manure Conversion" spearheaded by Dr. Charlie Abdalla and Dr. Kurt Stephenson. The purpose of this project is to review manure-to-energy technologies and evaluate those technologies within the context of the state trading programs. This proposal seeks to establishes formalized ad-hoc team within the Trading and Offset Working Group that mimics the process established the Mid-Atlantic Water Program project to evaluate crediting for manure-to-energy technologies. A formalized evaluation team will be able to rapidly respond to technical evaluation needs for other non-traditional technologies proposed to generate credits.

Review Process

The objective of this proposal is to set up a process for evaluating new, non-traditional nutrient and sediment reduction technologies and creating context for how these "non-traditional" technologies might be credited within the already-established state trading programs. The benefits of this process would be to create consistency among the states in crediting methodologies for similar technologies and reducing the burden on state regulatory staff that are responsible for reviewing these approaches.

We propose the establishment of a Trading Technology Evaluation Team (TTET) under the auspices of the Trading and Offsets Workgroup (TOWG). This team would be formed in response to the need to review an approach or technology for generating nutrient credits, then dissolve once the review has been completed.

Protocol for the selection of the chairperson and ad-hoc team members for the TTET will follow guidelines similar to those for best management practice review panels in the Water Quality Goal Implementation Team's "Protocol for the Development, Review, and Approval of Loading and Effectiveness Estimates for Nutrient and Sediment Controls in the Chesapeake Bay Watershed Model". The members of the TTET will have an interdisciplinary background and regional experience and would include individuals with expertise in state trading programs and water quality policy/regulations. Members should include state/federal agency staff, as well as NGOs and industry. The appropriate geographic representation for this action team should also be considered, as will expertise, availability and willingness to participate. Recommendations for members, not to exceed 10, would be solicited from the TOWG. Ideally, the TTET will have a standing chairperson that would convene the team, as necessary, to respond to proposals. The TTET will receive technology proposals from workgroup members or other interested parties (e.g., academic institutions, local jurisdictions, NGOs, private sector industries,) and would assemble a scope of work and a small ad hoc technical work group. The TOWG will solicit recommendations for the technical experts from members and the Scientific and Technical Advisory Committee, with the TTET ultimately deciding the appropriate expertise to include.

The technical work group would, in consultation with the TTET, analyze and synthesize the current state of scientific and technical knowledge and uncertainties surrounding implementation of the proposed non-traditional technology for generating nutrient reductions and make recommendations for the conceptual framework or frameworks for calculating creditable nutrient and/or sediment reductions. The analysis of the technical group would be independent of, but informed by, the TTET. The technical work group would be drawn from relevant experts drawn largely from the land grant universities in Maryland, Pennsylvania, and Virginia. Members of the TTET will periodically review drafts of the technical report to identify relevant questions and issues in the crediting procedures. Before being finalized, the technical work group will solicit comment and input from the Scientific and Technical Advisory Committee to the Chesapeake Bay Program.

TTET will then take the recommendations of the technical workgroup and will develop a report for the TOWG that includes the following:

1. Identity and expertise of technical workgroup members;
2. Analysis and synthesis of the current state of scientific and technical knowledge and uncertainties surrounding implementation of non-traditional technologies for generating nutrient reductions based on the technical workgroup report;
3. Recommendation for a conceptual framework for states to use when determining creditable nutrient and/or sediment reductions from proposed technologies and through the lens of existing state trading programs; and
4. Appropriate documentation, data collection and other information needed to document these reductions in the context of an NPDES permit.

Parties with a vested interest in the proposed technologies could not serve as technical experts but would be consulted as needed during the review process. The TTET will convene as necessary to review proposed technologies. A goal will be to issue recommendations as quickly as possible, provided sufficient time for analyzing and synthesizing knowledge and issuing recommendations has occurred.

We anticipate this process will operate similarly to the way expert panels are convened to make recommendations for how best management practices are credited in the bay model. Although workgroup members are not typically compensated for their time, there is a precedent to provide honoraria to experts that are convened to review specific issues/proposals. As such, we expect similar levels of funding will be needed to convene the experts necessary to review trading proposals.

References

Maryland Department of Agriculture (MDA). 2008. *Maryland Policy for Nutrient Cap Management and Trading in Maryland's Chesapeake Bay Watershed Phase II-A: Guidelines for the Generation of Agricultural Nonpoint Nutrient Credits*. Draft, Annapolis. Available at http://www.mdnutrienttrading.com/docs/Phase%20II-A_Crdt%20Generation.pdf.

Pennsylvania Department of Environmental Protection (PADEP). 2011. Certified Pollutant Reduction Activities, 9/26/2011. Available at http://www.dep.state.pa.us/river/nutrienttrading/projects/docs/CertifiedProposalTracking9-26-11.pdf.