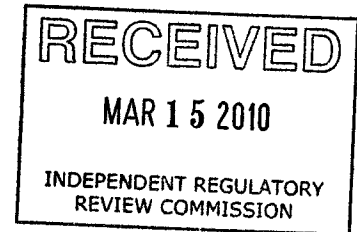


**From:** Douglas Beegle [dbb@psu.edu]  
**Sent:** Friday, March 12, 2010 11:54 AM  
**To:** EP, RegComments  
**Subject:** Comments on Proposed Chapter 96.8 Rulemaking

**Comments on Proposed Chapter 96.8 Rulemaking  
Water Quality Standards Implementation – Use of Offsets and Tradable Credits**

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Section 96.8 (c) (2) – Methodology

(2) Credits and offsets may be calculated by use of pollutant removal efficiencies for BMPs, and edge of segment and delivery ratios addressing fate and transport of pollutants, approved by the EPA Region III Chesapeake Bay Program Office for use with the Chesapeake Bay Watershed Model Version 4.3 or any subsequent versions.

Comment

Use of the Bay model EOS factor to calculate nutrients delivered to a stream segment from a specific operation and management is improper use of this parameter. As I understand it, the EOS factor maybe a valid tool in the watershed model where it has been calibrated to integrate the landscape features, land use, and management, etc. within the entire stream segment watershed. The only legitimate use of this factor on a specific farm field would be if that field happened to exactly represent the integration of all of the landscape, land use, and management factors that went into calibrating the EOS factor for that segment. By integrating these factors for example, a nutrient application on a slope adjacent to water is counter balanced in the EOS factor by other nutrient applications that are in upland areas far removed from water. Or a surface manure application on a bare soil in the winter on some acreage may be counter balanced by manure injected into a cover crop in the spring somewhere else. When situations are integrated into the EOS factor for the entire segment watershed it is possible to get a reasonable estimate of overall nutrient delivery to the segment. However, if this same factor is applied separately to a specific proposed credit generating activity which may include for example, nutrient application on a slope adjacent to water or another nutrient applications in an upland areas far removed from water the factor would be wrong for both individual situations.

Section 96.8 (d) (2) (i) – Baseline requirements to generate credits

(i) For nonpoint sources, baseline shall be the current requirements in regulations applicable to the sources at the location where the credits or offsets are generated, and the pollutant load associated with that location. For agricultural operations, this includes compliance with the erosion and sedimentation requirements for agricultural operations in Chapter 102 (relating to erosion and sediment control), the requirements for agricultural operations under § 91.36 (relating to pollution control and prevention at agricultural operations) and the requirements for agricultural operations under Chapter 83 Subchapter D (relating to nutrient management), as applicable.

### Comment

The baseline requirements, while logical, could result in unintended consequences due to the details of compliance with current regulations. For example in the Chapter 83 regulations there is a wide range in management that can be used to meet the requirements of this chapter. An example would be manure incorporation. Plans with all surface application of manure or alternatively with all injection of manure could be written for the same farm that both comply with these regulations. Which is the management that would meet baseline compliance? This question has major implications for calculating credits. If the plan with all surface application is the baseline, it could be modified to all injection plan and in the process generate nutrient credits for this management change while the plan, for the same farm, that calls for injecting the manure could not be used to generate these credits. However, if the plan that already includes injection is the baseline this plan could be amended to change to all surface application and still be in compliance with the regulations and then modify the plan again to go back to injection to generate credits. This second scenario would not generate any actual additional nutrient reductions. Therefore in addition to simply requiring compliance with current regulations additional criteria may be required such as using the existing compliance management on a certain date as the baseline.

Some have proposed that the baseline should be best possible management to comply with current regulations. This would not be productive because there would be very few options for improving management to reduce nutrient losses and generate credits if the operations is already following the best possible management practices. This would reduce the incentive to meet this baseline compliance because there would be little opportunity to generate credits once the farm was at baseline. Greater benefit in reducing nutrient losses would be achieved by encouraging farms that are in compliance with current regulations but doing less than best possible management to comply with the regulations to go beyond the minimum and thus generate credits to pay for this activity and to serve as an incentive to go beyond just meeting minimum requirements.

### Section 96.8 (a) – Definitions

*Baseline* (ii) The term includes allocations established under this chapter, in a TMDL or similar allocation, for those pollutants.

More guidance is needed on how a Total Maximum Daily Load (TMDL) may affect baseline. It was not clear if an operation fell under more than two TMDLs (local, Chesapeake Bay wide, or other) which TMDL would take precedence. It was also not clear if an operation needed to meet the TMDL requirements before they could be considered in baseline, or if they only needed to meet their state regulatory requirements for baseline before they start trading.