Anacostia Watershed Society * Audubon Maryland-DC * Chesapeake Bay Foundation Citizens for Pennsylvania's Future * Conservation Pennsylvania * Eastern Pennsylvania Coalition for Abandoned Mine Reclamation * Friends of Dyke Marsh James River Association * Lower Susquehanna Riverkeeper * Maryland Conservation Council * National Wildlife Federation Mid-Atlantic Office * Peach Bottom Concerned Citizens Group * Southern Environmental Law Center * Virginia Conservation Network * Virginia League of Conservation Voters

July 10, 2013

Mr. Darrell Brown
U.S. Environmental Protection Agency – Region 3
[brown.darrell@epa.gov]

Re: Comments on Draft EPA Technical Memorandum: "Accounting for Uncertainty in Offset and Trading Programs"

Dear Mr. Brown:

These comments are submitted on behalf of the undersigned organizations regarding EPA's draft Technical Memorandum "Accounting for Uncertainty in Offset and Trading Programs" (June 18, 2013) (hereinafter the "Uncertainty TM" or the "TM"). This, as you know, is one of a number of Technical Memoranda which EPA is drafting to reflect EPA's expectations of the Chesapeake Bay jurisdictions in their development and implementation of nutrient trading and offset programs under the Clean Water Act (CWA). The organizations submitting these comments share in a regional commitment to clean water and take interest in any trading and offset programs within the Chesapeake Bay region as related to water quality.

Overview

In general the draft Uncertainty TM does a good job of identifying the uncertainties which exist in any nutrient trading program, clarifying which uncertainties are and are not covered by the "uncertainty ratios" discussed, and establishing a presumptive floor of at least a 2:1 uncertainty ratio for any trades between point and nonpoint sources, as many other jurisdictions have. There are several points on which we believe the TM can be clarified or strengthened, and we set forth our recommendations in the balance of this letter.

Nature and Purpose of the TMs

EPA has previously said that these TMs are not rules, regulations or formal guidance. Page 5 of this TM says that it sets forth "EPA's expectations" that any state trading and offset programs "are expected to be consistent with and supportive of the water quality goals of the Chesapeake Bay TMDL, including its allocations and

assumptions and the common elements of Appendix S". We recommend that EPA provide greater clarity by adding a sentence stating that the TMs will be used by EPA in reviewing and evaluating state trading and offset programs for compliance with applicable TMDL and other CWA requirements.

The TM's Presumptive Requirement of an Uncertainty Ratio of At Least 2:1 In Trades Between Point and Nonpoint Sources is Sound and Should Be Strengthened

The TM does a commendable job of describing the kinds of uncertainties associated with predicting what water quality benefits are likely to result from BMPs. These uncertainties result for the most part from the fact that the results are predicted based on modeling, rather than actual end-of-pipe monitoring before and after implementation, and that implementation and maintenance of BMPs are subject to a variety of impacts to which an effluent treatment technology applied to a point source discharge is not. The TM also describes well the numerous factors which can adversely affect the ability of a BMP to deliver the predicted results, including unforeseen weather or climatic conditions, site-specific soil peculiarities, site-specific physical and chemical characteristics, seasonal variations and hydrologic variables, to name a few (TM, pp. 5-6 and 11).

To address these uncertainties, EPA rightly concluded that "EPA expects an uncertainty ratio equal to or greater than 2:1 be applied to transactions involving credits generated by nonpoint sources…" (p. 11). EPA noted that in some instances, where circumstances require, "uncertainty ratios as high as 4:1 were observed" under existing programs which EPA surveyed (id), and might be appropriate where uncertainties are greater than normal.

EPA then proposes to allow a less than 2:1 ratio, "Where direct and representative monitoring of a nonpoint source is performed at a similar level as is performed at traditional NPDES point sources and there is a consistency in operation and direct and representative monitoring of the nonpoint source, an uncertainty ratio as low as 1:1 may be appropriate…" (pp. 12-13). We are highly skeptical that any such reliable monitoring program exists, or that it could adequately account for the uncertainties which are inherent in the use of nonpoint source BMPs.

That said, we think one benefit of such an approach would be to provide an incentive to obtain more monitoring information for nonpoint source BMPs. We recommend that the TM clearly indicate that such sampling shall also take into consideration differences in performance between nonpoint and point sources by including, for example, storm events and groundwater sampling sufficient to characterize loads from nonpoint source runoff.

Preserve The Clear Delineation of What is Not Included In The "Uncertainty" Ratio

EPA does a good job of clarifying what sort of variables and policy measures are not covered by the "uncertainty ratio". These include:

1. BMP Effectiveness – which the Chesapeake Bay Program Partnership addressed through teams of experts for use with the Watershed Model and therefore need not be repeated in the context of an uncertainty ratio. (TM pp. 8-10)

2. Location Adjustments (Id., pp. 6-7 and 15)

3. Pollutant Type (Id., p.7 and 15)

4. Water Quality Improvement (Id., pp. 7, 19 and 25, citing Maryland's use of a "retirement ratio" of 5% for point sources and 10% for nonpoint sources to serve this function)

5. An "Insurance Pool" for Failed Credits (p. 12)

EPA has rightly emphasized that each of these "perform a different function and has a different policy goal", and none of them is included in the "uncertainty ratio" (p.5). EPA should maintain that position in the final document.

This otherwise clear discussion is blurred by the confusing statement in bold on p. 10 that "… it is not necessary to add an additional uncertainty factor to the BMP effectiveness values." We understand EPA's point to be that the uncertainty ratio need not consider factors which were already considered and reflected in the CBPs BMP effectiveness values. This sentence must be revised to clarify that point. For example, the words just quoted could be revised to say "…it is not necessary for an uncertainty ratio to consider factors that were already considered and incorporated into the CBPs BMP effectiveness values."

This discussion in the main TM document is also obscured by a somewhat confusing discussion in Appendix A at pp. 21-22. That discussion inappropriately blurs "reserve ratio" and "credit failure" under the heading of "Uncertainty", contrary to the main text which points out that these two items are not included in an "uncertainty ratio". The three paragraphs under "Uncertainty" on p. 21 should be either rewritten consistent with the main text or deleted as unnecessary.

One other clarification is needed: on p.3, par.3, EPA states that uncertainty regarding "implementation date and time to maturity" was considered by EPA in developing its "effectiveness values" for each BMP, but the next paragraph lists "lag time" – which sounds like the same thing – as not included in those values and apparently needing to be addressed in an uncertainty ratio. This must be clarified.

Trading Should Not Allow Exchanges Between Pollutants Types

The TM references on p. 7 and in Appendix A to "Pollutant Type" as a type of uncertainty implies that EPA will allow the exchange of nitrogen and phosphorus in

trading programs. We disagree with this position and note that the exchange rates developed to date (see attached memo dated January 2012, prepared for the Water Quality Goal Implementation Team) had the explicit caveat that they were *not* intended to be applied to state trading programs (p. 1).

Continue the Policy of Allowing Only BMPs for Which The CBP Partnership Has Established Effectiveness Values and Approved.

The TM points out that the CBP Partnership has approved over 130 BMPs for use in the watershed, and has established effectiveness values for nitrogen, phosphorus and sediment for each (TM p. 9). The TM then states that these effectiveness values are "unbiased and realistic", and that EPA expects states to use and recognize in their trading and offset programs only these approved BMPs. (Id, p. 10). This is important to maintain the quality and integrity of the programs, and should be included in the final text of the TM. This mandate also removes pressure from the state agencies from having to evaluate and approve BMPs/technologies on their own. Instead the responsibility is placed on the Partnership which has developed a BMP approvial process that is fair, transparent, and scientifically rigorous.

Application of Uncertainty Ratio at Point of Generation

EPA states that to ensure consistency of practice and clarity to buyers, the "uncertainty factor" should be applied at the point of generation. (TM, p. 11). Presumably in a situation where there is a 2:1 uncertainty ratio applied to a nonpoint source to point source trade, for example, the entity that generates 10 credits only gets to treat them as 5 for purposes of sale, banking or registration of them. This seems reasonable (though not the only way to apply the uncertainty ratio) so long as all parties understand that the resulting credit has already been reduced for uncertainty. EPA needs to clarify exactly how this works to avoid confusion.

Failed Credit Generation

The TM rightly states that the subject of what happens if a credit fails should be addressed in a written agreement between the buyer and seller of the credit, and that enforcement in case of credit failure should be against the buyer as a violation of his NPDES permit (TM p. 12). EPA should add for clarity that, where one or more credits are used by an NPDES permittee to achieve compliance with the permit requirements, EPA expects the NPDES permit to either attach the agreement or expressly reference it. It would have to be submitted with any NPDES permit application, and reviewed and approved by the permitting agency.

Permit conditions addressing inspection, monitoring and compliance assurance regarding the performance of BMPs on which the credits are based would also appear to be appropriate and necessary, to provide the verification of actual implementation called for at p. 13. Such permit conditions should be in addition to,

and not in lieu of, agency compliance inspections. This subject should be addressed either in this TM or the forthcoming TM on Verification Measures (the latter seems more appropriate).

Urge Consistent Terminology Among States

Appendix C discusses the existing trading and/or offset programs in Virginia, Maryland and Pennsylvania. There are significant differences among them as to both substantive content and terminology. The group of TMs which EPA is developing is designed to bring some measure of substantive consistency among the programs, in terms of meeting EPA's expectations under the CWA. EPA should strongly urge the states to use common terms and definitions where possible so as to facilitate discussions among states and across state lines, and to promote consistent understanding in the regulated community.

Clarify the Treatment of Stormwater Discharges (Including MS4s and Nonpoint Source Loads from New Development) and CAFOs Under the "Accounting for Uncertainty" Regime

The TM needs to specify what uncertainty ratio will be applied to stormwater sources – notably MS4s, nonpoint source loads from new development, and any other permitted sources of stormwater discharge, and CAFOs. At the top of page 11 the TM comments that: "Loads from… sources where the loads are generated from diffuse locations (e.g., stormwater from municipal separate storm sewer systems (MS4s) are not as easily measured [as at WWTPs]". However the TM does not say how or if uncertainty ratios are to be applied to such sources.

In response to a question during the June 19, 2013, Trading and Offsets Workgroup conference call on this you replied to the effect that the 2:1 uncertainty ratio is applicable where the load is modeled rather than monitored. This is normally the case with urban sources and CAFOs, whose measures to reduce their pollutant loadings consist of BMPs whose effects are modeled, and not the installation of treatment technology at or near the discharge, whose results are routinely and frequently monitored. The TM should specifically include this point. Clear guidance from EPA here will be helpful to all concerned.

Appendix C – State Summary

The summary of Virginia's program should include its 5% retirement ratio.

Conclusion

We appreciate the opportunity to submit these comments, and would be happy to answer any questions you may have. We look forward to completion of EPA's action on this and the other TMs under development, which will be most helpful to Bay states which already have trading and offset programs, or are considering

developing them, as well as to the regulated and environmental communities and the general public. Please feel free to reach out to any of us directly or contact Tanya Dierolf of the Choose Clean Water Coalition at dierolft@nwf.org or 717-991-3017 with any questions.

Sincerely,

Anacostia Watershed Society
Audubon Maryland-DC
Chesapeake Bay Foundation
Citizens for Pennsylvania's Future
Conservation Pennsylvania
Eastern Pennsylvania Coalition for Abandoned Mine Reclamation
Friends of Dyke Marsh
James River Association
Lower Susquehanna Riverkeeper
Maryland Conservation Council
National Wildlife Federation Mid-Atlantic Office
Peach Bottom Concerned Citizens Group
Southern Environmental Law Center
Virginia Conservation Network
Virginia League of Conservation Voters