# **NUTRIENT TRADING**

# In the Chesapeake Bay Watershed

## **Public Comments Summary**

January, 2001
Maryland, Virginia, Pennsylvania,
Washington D.C., Environmental
Protection Agency and the Scientific
& Technical Advisory Committee



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#### INTRODUCTION

The *Draft Chesapeake Bay Program Nutrient Trading Fundamental Principles and Guidelines* was developed by the Chesapeake Bay Nutrient Trading Negotiation Team, a group of interested stakeholders representing a wide array of interests from across the Chesapeake Bay watershed. The Guidelines document presents fundamental principles and guidelines for nutrient trading developed during detailed deliberations using a consensus-based process that extended over the course of 18 months. The Guidelines document was made available to the public for review and comment on September 8, 2000. Following its release, sixteen public meetings were collectively held throughout the watershed in each of the signatory jurisdictions. All jurisdictions received numerous public comments during the meetings as well as written comments during the review period, which ended October 30, 2000. A total of 118 written comments were received collectively. A list of the commenters may be found in Appendix A to this document.

This document is a collective summary of the comments (both during the public meetings as well as those written) received by all of the jurisdictions. The process undertaken to produce this summary included the following steps: 1) Each jurisdiction was responsible for receiving and summarizing its own comments. 2) Each jurisdiction produced its own summary of the written and public meeting comments including a list of the commenters and a code placed by each comment enabling the reader to match each comment with the commenter. 3) All jurisdictional comment summaries were compiled by the Chesapeake Bay Program into a collective summary of comments from all of the jurisdictions. This document herein is the collective watershed comment summary, summarizing comments received from all 118 commenters and the proceedings from the public meetings.

The format of this summary includes an introduction, a delineation of comments which is arranged according to the subject outline of the Guidelines document itself, and an Appendix listing all of the commenters. Commenter codes are included by each comment such that the reader can determine which commenter submitted a certain comment. The Appendix then also lists the code attached to each commenter.

Appendix B to this comments summary delineates the major issues submitted by the commenters, the responses to these comments and changes made to the guidelines as a result. This Appendix is also included in the Appendixes to the Guidelines Document.

In addition to the comments, this summary includes as Attachment 1, a printing of an article that appeared in a local Virginia newspaper on October 21, 2000. This article is not part of this comment summary but included here at the request of a member of the Nutrient Trading Negotiation Team.

Hard copies of the actual comment letters are stored at the Chesapeake Bay Program Office. Individual public meetings summaries may be found in a document entitled "Nutrient Trading in the Chesapeake Bay Watershed, Public Meetings Proceedings", January 2001.

### **Definitions**

#### **COMMENTS**

#### **Definitions**

**Comment:** The terms "baseline" and "allowance" need to be better defined. This could be defined as a reduction from a certain point in time or a reduction from a certain treatment technology or as a cost/pound of making nutrient reductions. (PA - 9/26/00)

**Comment:** How is a trade defined: Is it the entire "bundle" of credits that a source proposes to purchase, or is it each and every transaction it undertakes in order to assemble the bundle? This is particularly significant when considering the opportunities for public comment and review. (EPAWP, pg2)

**Comment:** Watershed groups throughout the Bay drainage are very skeptical about the trading program elements, in particular the scale of the geographic scope (major watersheds). No other programs in the U.S. are this large. the inter-basin issues are very sensitive, and if this is allowed then Fundamental Principal #1 is in jeopardy. (VA - 10/3/00)

#### Fundamental Principles (summarize according to #'s 1 - 8)

#### **Fundamental Principle #1:**

**Comment:** Trades should not produce negative water quality effects locally, downstream, or Baywide. The goal of trading is to improve water quality within the Bay and within each of its tributaries. Trading should not be allowed to result in degradation of water quality in a local area or downstream. (CBF Form)

**Comment:** What about degradation? How can you not call it that when someone is not meeting their load allocations? And what if I live in that place where they can't get their loadings down? (PA - 10/5/00)

**Comment:** If I am living downstream from the facility that can't meet it's standards, and upstream from the one that is, am I happy? (PA - 10/5/00)

**Comment:** Site-specific criteria should be an acceptable component of this principle. (EPGA, p. 2)

**Comment:** Fundamental Principle #1 should be rewritten to read: "that: ...<u>cause or contribute to a violation of</u> water quality standards or criteria". This addition would ensure that the net effect of prospective trades would be considered. (MAELC, and ALS, p. 1)

**Comment:** WPC strongly agrees with this principle. The goal of the trading program should be to reduce overall pollution in the Chesapeake Bay. We suggest requiring that trades must not produce negative water quality effects in tributary lakes or reservoirs either. (WPC, p. 2)

**Comment:** Clean Water Action is concerned that without proper safeguards, the nutrient trading program could, in fact, actually increase pollution and create further water quality degradation. (CWA, p. 1)

**Comment:** Clean Water Action strongly agrees with this principle. It must be the fundamental guiding principle for the entire program. (CWA, p. 1)

**Comment:** The development of nutrient trading cannot be completely separate from the development of nutrient criteria. (CBF, pg2)

#### **Fundamental Principle #2:**

**Comment:** We agree with the four concepts introduced under this principle. (WPC, p. 3)

**Comment:** We support the principle that participation should be determined by the market place. (WPC, p. 3)

#### **Fundamental Principle #3:**

**Comment:** The nutrient trading program must not be implemented until after achievement of the Chesapeake Bay Program's 40% nutrient reduction goal. (MAELC, and ALS, p. 2)

**Comment:** No nutrient trading should be allowed until after "total maximum daily loads" ("TMDLs") are established for the Chesapeake Bay. Establishing TMDLs for nutrients should be an integral part of instituting a trading program. (MAELC, and ALS, p. 2)

**Comment:** We agree with this principle. (WPC, p. 3)

**Comment:** The 40% reference isn't correct for VA's lower Bay tributaries (see Fundamental Principal #3). The guidelines should be specific to each tributary strategy and the nutrient and sediment reduction goals adopted in each. (VA - 10/3/00)

#### **Fundamental Principle #4:**

**Comment:** Each trade must achieve a reduction in nutrient loadings. Remove the feature that allows for "neutral" trades in which there is no net increase in nutrients, and no reduction. (VCU1, p. 2)

**Comment:** If one party has credits and sells to another party that isn't reaching their standard, isn't this reducing water quality? And why wouldn't that second party be forced to reach their standards? (PA - 10/5/00)

**Comment:** All trades must reduce total pollution and not reduce water quality anywhere. (PCRJ, PCFD, PCMS, PCNK, PCCM, all p. 1)

**Comment:** This principle must be redrafted to eliminate any language that allows trades that result in "no change" to nutrient loadings. This principle should be rewritten as follows: "Each trade must achieve a net reduction in nutrient loadings." (SG8, MAELC, and ALS, p. 2)

**Comment:** On what time scale does this principle apply to; It would be hard to imagine an identically equal trade when you consider time; are we talking on an annual time scale? (EPAJC, pg4)

**Comment:** Trading should not be allowed unless there is a net reduction in nutrient loadings, and thus, a net benefit to the resource. (CBF, pg2)

**Comment:** We agree with this principle but offer the following revised language: "each trade must achieve a net reduction in nutrient loadings within each major Bay tributaries". (WPC, p. 3)

**Comment:** Nutrient trading must only be permitted if the trades will achieve a net reduction in

nutrient loading. Trades must not be permitted that would only achieve "no net change" in nutrient loading. This is simply shifting nutrients around the watershed. (CWA, p. 1)

#### **Fundamental Principle #5:**

**Comment:** No one should be allowed to trade before the Chesapeake Bay Agreements 40% nutrient reduction goal has been fully met. Simply "striving" for this minimum reduction, as the guidance document proposes, is not adequate and would allow the trading program to be used to avoid responsibility. The Bay Program must require everyone to first meet their responsibilities under the current 40% nutrient reduction goal before they are allowed to trade. (CBF Form, CWA, p. 2)

**Comment:** NAHB recommends that this Fundamental Principle be explained in practical terms so sources seeking to get involved in trading understand what this means and how it effects trading credits. At a minimum, the *Guidance Document* should specify which sources are subject to the 40% reduction along with a reasonable measure for determining whether or not the 40% goal is being met. Also, the *Guidance Document* should recognize that some sources could more easily reduce their nutrient inputs than others and take this into consideration when trading credits are estimated. (NAHB, p. 2)

**Comment:** All sources should have the option of trading to reach the 40% reduction goal. (RDPU)

**Comment**: Each source facility must make a contribution toward the 40% goal, and in this case, the advantage of the program is giving each source the responsibility of finding 40% reduction at their own facility or another. But each must start with on-site reductions before seeking trades. (VCU1, p. 2)

**Comment:** An attempt to meet the goal prior to trading is imperative to ensure that individuals, industries, and commercial agencies have taken steps in the right direction toward increasing water quality. (VCU4, p. 1)

**Comment:** The vagueness of F.P. #5 raises the issue about what is every source's "part"? As a regional strategy, there is reason to believe many sources, provided they meet current regulatory discharge levels, will allow others possessing the capital or technology, to accumulate credits and keep them, inhibiting the trading process. (VCU10)

**Comment:** Every source should strive to do its part in reaching the 40% reduction goal prior to considering the nutrient trading option. Can the should be changed to must strive. If not changed to must, then the source not reaching the 40% reduction could be allowed to participate at 2x the cost. Example: XYZ company achieves a 35% reduction, and the cap is placed at 50%. This would mean XYZ needs to obtain 20 credits: 5% @2x + 10% @1x = 20. (SG9)

Comment: The Guidance Document does not address what is meant by "strive to do its part in

reaching the 40% reduction goal." (NAHB, p. 2)

**Comment:** NAHB recommends that this Fundamental Principle be explained in practical terms so sources seeking to get involved in trading understand what this means and how it effects trading credits. At a minimum, the Guidance Document should specify which sources are subject to the 40% reduction along with a reasonable measure for determining whether or not the 40% goal is being met. Also, the Guidance Document should recognize that some sources could more easily reduce their nutrient inputs than others and take this into consideration when trading credits are estimated. (NAHB, p. 2)

**Comment:** Because any nutrient trading regime should only be implemented after the 40% reduction has been achieved, this Fundamental Principle should be stricken. (MAELC, and ALS, p. 2)

**Comment:** We agree with this principle. To create a mandatory provision requiring a 40% reduction in every situation prior to participation in the trading program could stifle the program and defeat the purpose of achieving the goals through the most cost-effective approach. (WPC, p. 3)

**Comment:** NAHB recommends that this Fundamental Principle be explained in practical terms so sources seeking to get involved in trading understand what this means and how it effects trading credits. At a minimum, the *Guidance Document* should specify which sources are subject to the 40% reduction along with a reasonable measure for determining whether or not the 40% goal is being met. Also, the *Guidance Document* should recognize that some sources could more easily reduce their nutrient inputs than others and take this into consideration when trading credits are estimated. (NAHB, p. 2)

**Comment:** Trading should only be used to maintain or exceed the 40% nutrient load reduction goal, and not both meet and maintain the goal. Trading to achieve the goal would be in conflict with principle 5. (CBF, pg2)

**Comment:** The 40% reduction goal of the CBP really does not exist at this point; cap loads per tributary have taken over. (EPAJC, pg4)

#### **Fundamental Principle #6:**

**Comment:** We strongly oppose trading between major tributaries (such as the Rappahannock, York, James, etc.) and prefer that trading take place among watersheds that are small enough to ensure adequate tracking of results. (HCSWCD, p. 1)

**Comment:** Trading with other jurisdictions within the Potomac watershed (e.g., DC and MD) is an option that should be considered. (LCSA, p. 1)

**Comment:** Trading should be allowed within contiguous watersheds – the ones that are

adjacent. (RDPU)

**Comment:** Geographic boundaries for trading should be smaller scale than just within the same watershed. Micromanaging pollution problems will be more effective, especially during the initial reduction phase. (VCU2, p. 3)

**Comment:** I do not think that interbasin or inter-state trading should ever be allowed, because water monitoring and trade tracking would be even more difficult. Effects in one tributary may not correspond equally to impacts in another tributary. (VCU6; VCU13)

**Comment:** The geographic scope of the plan, encompassing the entire Bay watershed, is an excellent approach in keeping with much of the current thought in conservation biology and other disciplines. Another strong point of the proposal: not allowing inter-region credit trading...this should emphasize the importance of every region addressing the problem, and produce water quality improvements at a much larger geographical scale. (VCU10)

**Comment:** Nutrient trading should only be allowed between facilities located within the same relatively small watershed. The proposed Guidelines would allow nutrient trading to occur anywhere within the watershed of a major Bay tributary. Under this scenario, a farmer in the Shenandoah Valley would be able to trade with a waste water treatment plant more than 100 miles away in Washington, DC, simply because they are both technically located within the Potomac-Shenandoah watershed. It is essential that trading be limited to a much smaller area than is currently proposed in the Guidance Document. (CBF Form)

**Comment:** Along with having tributary breakdowns, in the shore area, break down according to counties. If developed correctly, trade credits could be accumulated in one county and sold as a lump sum to adjoining counties. This would result in an improvement in a general area, with incentives for county governments to abide by and join into the agreement. (SG10)

**Comment:** FP#6 states that trading can only take place within each major tributary. How does this work with FP#1? The Susquehanna is so large; do you use water quality ratios? (PA – 10/5/00)

**Comment:** How are you going to do cross-states, but not cross watersheds? (PA - 10/5/00)

**Comment:** Trading should be strictly limited to arrangements between sources within the same small watershed. (PCSC, p. 3; SC, p. 2)

**Comment:** Trades must be in a small area so reductions and increases really offset each other. (PCFD, PCMS, PCNK, PCCM, all p. 1)

**Comment:** The inclusion of interstate trades should be considered. (PPL, p. 3)

**Comment:** The trading program should be allowed within the major Bay tributaries. We also strongly support trading across state boundaries within the watershed. (WPC, p. 4)

**Comment:** The major Bay tributaries are too large an area for trades to ensure water quality improvements. Nutrient trades must take place in a small area, within a portion of a watershed, to ensure that reductions from one polluter can offset the increase from the other. (CWA, p. 2, MAELC, and ALS, p. 2)

**Comment:** We recommend that this restriction be deleted, because there is no compelling argument presented regarding its necessity. The restriction would constrain the market, especially in MD. (MAM)

**Comment:** The term "allowance" in this principle should be defined somewhere. (EPAJC, pg4)

**Comment:** It is important to restrict trading to specific, reasonably-sized geographical areas to avoid creating pollution "hotspots". (CBF, pg2) (EPAMM)

**Comment:** TMDLs should be used to set the cap or loading limit for trades for a watershed or sub-watershed areas. (CBF, pg2)

**Comment:** Limit trades to within the same watershed – no cross-tributary trading (VA – 10/3/00).

#### **Fundamental Principle #7:**

**Comment:** It is not clear if the wording is meant to soften legal compliance, but it reads that way. Compliance with local, state, and federal laws should not be an option. (VCU1, p. 2)

**Comment:** What does substantial compliance mean? You need to put more specific criteria to this term. (PA - 9/26/00)

**Comment:** In cases where a party doesn't meet their permit requirements, can they buy credits to trade to meet those limits? (PA - 10/5/00)

**Comment:** The trading program should not be used to meet existing permit standards. Nutrient trading should be a tool to improve water quality, not to meet the minimum NPDES permit standards. (WPWPP, p. 1)

**Comment:** This principle should be rewritten to require that prospective traders be in full compliance with all local, state, and federal environmental laws. (MAELC, and ALS, p. 3)

**Comment:** We support this general principle. This principle should be expanded to include that trading should not be used to meet existing compliance standards; specifically NPDES permit

requirements unless such trade reduces nutrient loadings substantially below permit compliance. (WPC, p. 4)

**Comment:** Nutrient trading is a tool to improve water quality, not a tool to meet NPDES permit limitations. (CWA, p. 2)

**Comment:** There is no clear definition of "substantial compliance" and fear this lack of clarity might allow companies with current violations of environmental permits, or a past history of noncompliance with permits, to participate in the trading program. (CWA, p. 2)

**Comment:** This principle should include "permits" in the list of what a trader should be in compliance with. (EPAJC, pg4)

#### Fundamental Principle #8:

**Comment:** The attempt to bring all stakeholders into the program's creation and implementation is arguably the most important ingredient of this strategy. (VCU10)

**Comment:** WPC strongly supports this principle. (WPC, p. 4)

**Comment:** Involvement of a diverse group of stakeholders in the design of a trading program is critical. We also believe the public must be involved in the review of individual trades as well. All proposed trades must be published for public comment and public hearings should be held in the affected watershed to allow interested individuals and organizations the opportunity to comments on the proposal. (CWA, p. 3)

### Guidelines for Identifying Nutrient Reduction Goals

#### III. Guidelines for Identifying Nutrient Reduction Goals

**Comment:** The guidelines and the state implementation plans should encourage states to include non-like source trading (e.g., point to nonpoint)...In many cases, the best economies of scale may be realized through trading between non-like sources. (DOD, p. 1)

**Comment:** Trading among like sources -- this is a very important guideline that should be maintained for the duration of the program, not just the reduction phase. (VCU2, p. 2)

**Comment:** Agree that trading to achieve nutrient load reductions between similar source points needs to occur to meet tributary strategy load allocations initially...nonpoint sources, contributing more of the nitrogen load, may potentially buy credits from point sources without prior implementation of policies/procedures in an attempt to achieve their nutrient load allocation. (VCU4, p. 1-2)

**Comment:** Why is trading allowed between point and nonpoint sources only after reduction goals have been achieved?. (VCU10)

**Question/Comment:** When does the benchmark start for NPS to start in terms of credit generation? How to account for all voluntary BMPs? Why hold BMPs to federal standards? They all reduce loads (e.g., no-till farming). Requiring BMPs to meet stringent standards doesn't advance the state-of-the-art and doesn't foster innovation. (VA - 10/3/00)

**Question:** Why the hesitancy to allow cross-source (i.e., PS to NPS) trading from the start? (VA -10/3/00; DC -10/10/00)

**Comment:** The *Guidance Document* does not describe an innovative program. NAHB recommends that the restriction to limit trading among "like" sources be removed from the final *Guidance Document* and that the *Guidance Document* be expanded to include guidance on such trades. (NAHB, pp. 3-4)

**Comment:** When and where will the cap on nutrient loads be established. Will caps vary according to the location on the Bay? And if location does figure into the equation, is it less damaging to pollute the ocean than it is the Bay? And since people believe that a 70% reduction could be possible, and the current Bay Agreement covers 10 years, will be cap increase from 40% to 70% over a 10 year period? (SG3)

**Comment:** If the goal is a reduction in nutrient levels, make each 2 percentage points about the minimum cap sellable as 1 credit. This would mean that if I decrease my nutrient levels by 50% and the current cap is 40%, I would have a 10% reduction, or 5 nutrient credits to sell. (SG5)

**Comment:** Within several years after the implementation of a trading program the states may reexamine the success or failure of trades to date in achieving the goal and thereafter, determine if

### Guidelines for Identifying Nutrient Reduction Goals

cross source trading to achieve is appropriate. Once the tributary strategy nutrient reduction goal is met, trades should be allowed within and across source types, to maintain nutrient reduction goals or further reduce nutrient levels. (SG11)

**Comment:** Why not develop a point level for point and non-point nutrients, along with points for nitrogen, phosphorus and sediment. This provides incentive for ALL to cooperate. (SG12)

**Comment:** Why limit trading to "like" sources in trading to achieve the cap? This seems to substantially limit trading opportunities until the goals are achieved. (PA - 9/26/00)

**Comment:** Trading should not be limited to "like" sources to achieve the goal. Trading should be open to the broadest application possible. (PA - 9/26/00, VA - 9/26/00)

**Comment:** Please clarify the purpose of the trading program; to gain nutrient reductions? (PA - 10/5/00)

**Comment:** The document says sources could get credits for only N or P? (PA - 10/5/00)

**Comment:** Are there goals to set up trading in the Chesapeake 2000 Agreement? (PA - 10/5/00)

**Comment:** Will the conservation district be inspecting? (PA - 9/28/00)

**Comment:** The Nutrient trade program Chesapeake Bay 2000 will cause a reduction in the bay, but will it benefit tributary areas? (PA - 9/28/00)

**Comment:** TMDLs are created when the permit is created. All waters are to be assessed by 2005. Equation for TMDLs is waste load + load margin of safety = total nutrient a stream can absorb and remain unimpaired. (PA - 9/28/00)

**Comment:** We can't meet deadline for TMDLs. (PA - 9/28/00)

**Comment:** Pennsylvania has only done (17) approved TMDLs. The model to do a whole watershed worth of TMDL segments was just approved by EPA last year. (PA - 9/28/00)

**Comment:** No source should be permitted to trade until they have first met their responsibilities under the original 40% nutrient reduction goal. New pollution reduction goals for trading arrangements should be established through total maximum daily loading calculations base on achieving water quality standards. (PCSC, SC, both p. 2)

**Comment:** It is important to implement a program with as broad a scope of participation as possible, and would recommend expansion of the current proposed trading guidelines to encourage trading between point sources and nonpiont sources. (P&G, p. 1)

### Guidelines for Identifying Nutrient Reduction Goals

**Comment:** Allowing trading only between "like sources" will eliminate the most likely pairing of buyers and sellers, and it will be difficult to evaluate an endpoint for meeting tributary load allocations (e.g. how will it be determined to begin point/nonpiont source trading if some nonpoint sources have met their obligations, but other nonpiont sources have not). (PPL, p. 2)

**Comment**: In 2003 the nutrient criteria will be reset. How does this work with nutrient trading? (DC - 10/10/00)

**Comment:** Prohibiting cross trading eliminates the primary economic advantage of trading and reduces flexibility. Opportunities for "like" trading are limited. This prohibition contradicts Fundamental Principle #2 by restricting rather than enabling the use of the market place to make the trading program successful. (EPGA, p. 2)

**Comment:** The overarching goal of the program should be strongly stated – the reduction in the amount of nutrients entering our water bodies. (WPWPP, p. 1)

**Comment:** A permanent cap on the maximum amount of pollution allowed in a watershed must be in place before trades occur. Pollution sources must first be identified and quantified before trading can occur. (WPC, p. 2)

**Comment:** CWA strongly agrees that nutrient trading should be restricted to like sources in the first few years of the program. (CWA, p. 3)

**Comment:** CWA strongly believes that a TMDL must be in place before a nutrient trade can take place. In addition, we believe that no trades should be allowed until the 40% nutrient reduction goal has been met. (CWA, p. 3)

**Comment:** The guideline recommending that trades should be restricted until the goal has been met should be deleted because of the benefits trading can offer at any time. At least, the requirement should be limited to the <u>initial</u> tributary strategy nutrient reduction goals. (MAM)

**Comment:** New nutrient goals for the Chesapeake Bay are not the only changes on the near horizon, which will affect the need to do nutrient trading. TMDLs, new WQ Criteria for nutrients, and permits are also factors. This should be noted under the preface discussion of "The Need for Reevaluation". (EPAJC, pg3)

**Comment:** What fundamental law or requirement sets the standard, which defines the trading capacity or universe? (EPAJC, pg1)

#### IV. Guidelines for Determining Eligibility

**Comment:** Guidelines for eligibility should incorporate specific guidance that will encourage state implementation plans to account for Federal agency participation in nutrient trading. (DOD, p.1)

**Comment:** The guidelines should include a more comprehensive listing of BMP standards -- not just NRCS; other non-agricultural BMPs covered by urban, forestry, homeowner, air deposition, or other current and future BMP categories. (DOD, p. 2) (HCSWCD, p. 1)

**Comment:** Delete second sentence of urban eligibility guidelines (stormwater systems not governed by permit to have comparable requirements, prior to generation of credits)...this is a major disincentive for nonagricultural trading because a buyer would have to pay for the nonregulated storm water system to become comparable to a permitted system <u>and</u> for more advanced BMPs to accomplish a trade.(DOD, p. 2)

**Comment:** Definition of point and nonpoint source – clarification of what types of urban systems constitute point sources may be necessary with the advent of new NPDES (Phase II) regulations. (DOD, p. 2)

**Comment:** Are there any guidelines for the size or specifications of BMPs that would be required to offset pollution? (VCU2, p. 3)

**Comment:** Proposed guidelines would only allow credits to be generated from nutrient improvements paid for by local dollars. Unfortunately, this will severely curtail trading and decrease the incentive for those who have the ability to generate credits to either build additional facilities or operate them at a level that will achieve a higher removal. (VAMWA)

**Comment:** Seems to assume that sources (point or nonpoint) have been assigned a load allocation as part of its tributary strategy...this is not the case for the Shenandoah and Potomac River Basins Tributary Nutrient Reduction Strategy...prefer the approach for point sources taken by Virginia where all major point sources asked to operate at the same treatment level...a similar approach should be used to develop a trading program. (LCSA, p. 1)

**Comment:** Retiring credits – or "speculative investors" – we feel that municipal public systems representing the public taxpayer should not be held captive to speculative investor control (entities that are not considered sources may purchase credits). RDPU

**Comment:** What is the point of allowing groups that do not act as a source of pollution to purchase credits? If the point is to create more of a market and more incentive to decrease a company's number of credits, why can't the state controlling agency serve that same purpose by driving its own prices up instead of allowing a middle-man to do that. In that case, the excess money can stay in the system to bring about further environmental improvements. (VCU2, p. 2)

**Comment:** The *Guidance Document* does not adequately address how trades involving point sources covered by a General Permit under the NPDES program would be done. NAHB recommends that the *Guidance Document* be modified to include information about how trades can be done that involve point sources covered by General Permits under the NPDES program and modified to include information about how trades can be done in the post-development phase. (NAHB, pp. 2-3)

**Comment:** The *Guidance Document* inaccurately portrays non-agricultural storm water sources. NAHB recommends that Guideline #9 be modified to give a clear understanding as to what kinds of sources are being addressed in it. (NAHB, p. 3)

**Comment:** Eliminating that portion of nutrients reduced through the receipt of grants severely reduces the trading potential and potential improvement to the Bay. Consider the fact grant funds are taxpayer money derived from the majority of the people who live in the area tributary to the Bay and who benefit directly from improvements to the Bay. (VA-9/26/00)

**Comment:** The additional operating costs associated with nutrient reduction should be added to the capital costs to determine the nutrient credits that can be used for trading. (VA – 9/26/00; DC – 10/10/00)

**Comment:** The most cost effective nutrient controls may be non-point sources. Trading should be allowed initially between point and non-point sources. (VA - 9/26/00)

**Comment:** How is the equitability of who can buy a credit addressed? Those who have the money in the metropolitan areas can outbid those in the rural areas who have the same if not a more pressing need. (VA - 9/26/00)

**Comment**: The goal for the Shenandoah could be reached by non-point source reductions only. The goal for the Potomac required that point sources install nutrient reduction that forced the Shenandoah point sources into nutrient reductions. This results in an uneven playing field in the future for the point sources in the Shenandoah. Credits should be allowed for these reductions when considering trading. (VA - 9/26/00)

**Comment:** If credits can only be generated through the expenditure of local dollars, then this removes an incentive. The program should be more flexible; should be allowed to generate credits using cost share. (VA - 10/3/00)

**Comment:** What about federal facilities and installations? All their control actions are funded with federal dollars. Federal "internal" trading is the likely outcome if trading is allowed (e.g., riparian forest buffers in lieu of more stringent PS controls at a base or installation). (VA - 10/3/00)

Comment: A possible disincentive is allowing public access to farm plans for certification. Not

everyone wants to make this information available. (VA - 10/3/00)

**Comment:** Need to look at standards beyond NCRS for NPS controls, e.g., forestry and urban practices have different standards. Need to recognize that non-agricultural BMPs will be employed and are valuable. (VA - 10/3/00)

**Comment:** Can land conservation serve as a trading element? For example, if active crop land is idled or put into pasture, can the utrient reduction gained be a credit? We'll need to have better administration and disclosure about conservation easements. (VA - 10/3/00)

**Comment:** Speaker was not in favor of not using cost shared operations. If you can operate better than the cost share, why can't they be included? What about loan monies? Half of the cost share is put out by the plant. Why no cross division of trades, i.e. between point sources and nonpoint sources if goals can be achieved? What if you get it to 0? (PM)

**Comment:** Are all Nutrient Management plans going to be the same among the States? (PM)

**Comment:** Are we going to penalize Maryland farmers because they have Nutrient Management plans before other State's farmers? (PM)

**Comment:** Will farms in Green Branch be able to trade credits? (PM)

**Comment:** A proposal was offered - BMPs may be installed prior to trade or put up for trade prior to installation. (PM)

**Comment:** We suggest that the Negotiation Team reconsider the proposed restriction against allowing nutrient credits to be generated from nutrient improvements funded in whole or part by federal and state dollars. (EL4)

**Comment:** The 40% goal was not achieved. Considering the fact that the trading document deals with nitrogen and phosphorus and does not include sediment, I believe that this program should be implemented with a minimum cap of 45% reduction before anyone can cooperate in the trading program. (SG4)

**Comment:** Trading should not be limited to nutrients in the Bay. It should apply to all pollutants. (PA - 9/26/00)

**Comment:** How do we calculate NPS credits? (PA - 9/26/00)

**Comment:** Please give a scenario of how a farmer can accumulate credits? (PA - 10/5/00)

**Comment:** What about a developer that has land next to a river? (10/5/00)

**Comment:** Is a farm or POTW that closes down eligible to trade? There are definite reductions. If they do get credits, how long are they valuable? (PA - 10/5/00)

**Comment:** What if a developer takes that closed farm and builds on it, but is getting an overall improvement in pollution discharges, is that amount tradable? A buy-out could be economically and environmentally sound, but how long do the credits last? (PA - 10/5/00)

**Comment:** Can trade be initiated before meeting the 40% reduction? (PA - 9/28/00)

**Comment:** How is the community dealing with non-signatory states? (PA - 9/28/00)

**Comment:** What is the reason credits will only cover reductions paid by the source? (PA - 9/28/00)

**Comment:** Eligibility should be limited to pollution sources which have a record of compliance with their permits and other legal requirements, and are not chronically in violation of permit limits. (PCSC, SC, both p. 2)

**Comment:** Companies must not be allowed to trade if they are not in compliance with their NPDES permits and any other federal, state or local environmental regulations or permits. (CWA, p. 3)

**Comment:** We strongly support the requirement that farmers participating in trading must be operating under state certified nutrient management plans as to their land that will support a trade. (MAM)

**Comment:** We question the wisdom of only allowing credits for urban stormwater systems that are not subject to federal/state permits, only to the extent that controls are implemented beyond the level that would be required if they were subject to a permit. This provides little incentive for sources outside of the permit programs to participate. (MAM)

**Comment:** Consideration should be given to allowing trading only between "same quality streams", although it is noted that flexibility is also important. (EPAMM)

**Comment:** Page 28 -- I'm unclear as to how the following would be implemented: "Grant programs should be used in such a way as to incentivize nutrient trading; for example, larger grants could be offered early in a 10-year program." The restriction on recipients of state or federal money with regard to purchase or sale of credits laid out in Guideline #6 would seem to substantially constrain the government's ability to use grant money to stimulate trading. (EPAWP, pg. 3)

**Comment:** Page 22, Urban Eligibility Guidelines (#9) -- I read this to say that if a municipal separate storm sewer system (MS4) does more than required in it's NPDES permit, then they can sell the "extra" reductions as credits. This raises a couple issues:

- a) Since the requirements in virtually all current NPDES permits for urban stormwater systems are "practices-based", and do not contain end-of-pipe limits on specific pollutants or require regular effluent monitoring, how will the amount of "extra" reductions be determined?
- b) Since the limits in NPDES permits for urban stormwater systems are not water-quality based (i.e.-not "driven by the 40% reduction goal for the Bay), might the provision as stated very possibly be allowing generation of credits for reductions less than 40%. (EPAWP, pg. 3)

**Comment:** The meaning of the term "allowance" is unclear. What does the guidance assume that a particular NPS "may" discharge? (EPAWP, pg2)

**Comment:** If the states do not intend to incorporate the 40% reductions into the effluent limits in the NPDES permits for point sources, then it would seem that a PS could argue that they "may" discharge at current levels, and if they cut their discharges by 200 lbs./week, they should be able to sell 200 lbs. worth of credits. (EPA, pg. 3)

**Comment:** Would a point source that reduced it's N by 60% have sellable credits equivalent to the full 60% or only for the 20% portion above the 40% goal? Ditto for a NPS selling to trade with another NPS in the period before the overall 40% goal has been reached. (EPAWP, pg1)

**Comment:** I'm not clear on exactly how the limitation on generating credits according to whether federal or state funds were used would work. Assume a source achieved a 60% overall reduction, but that only the 20% over and above the 40% goal was eligible for sale. Then what would the rule be if they got a 50% cost share from the state/feds? Would this mean that only half of the "top 20%" would be eligible for sale? That is, if the source started at 100 lbs., and cut it down to 40 lbs., would they:

- a) Only be able to offer 10 lbs. for sale? (Half of the 20lbs "above" the necessary 40lb reduction.)
- b) Could the source claim that they used all the cost share to move toward the 40% goal, and that none of the federal/state money was used to go beyond the 40% (also 40lbs in this hypothetical) level? If the later is the case, then they would have 20lbs of credits to sell, rather than 10%. (EPAWP, pg1)

**Comment:** It is disconcerting that the CBP is not recommending TN and TP as nutrient criteria at this point in time, which would make the calculating of potential trades, the permitting of trades, the monitoring of trades, and the public review of trades much easier. (CBF, pg2)

#### V. Guidelines for Performing Trade Administration

**Comment:** CBP's central administration function should include striving for/encouraging the continual improvement in certainty for nonpoint source BMPs, reducing the need over time for uncertainty ratios...ratios for nonpoint sources should include the option of a 1:1 ratio for those BMPs where certainty exists and data are available to support that ratio. (DOD, p. 2)

**Comment:** State implementation plans should clearly address the time period, or "shelf life", for nutrient trades...potential for nutrient trade agreement to be negated by issuance of new permit requirements is a disincentive for entering into a contract without a concurrent commitment from the state that sources will not be subject to additional state regulation or permitting during the contract period. (DOD, p. 3)

**Comment:** The plan provides for significant public access to trading documentation and we support open government, However, we caution that farm conservation plans are the property of the farmers...and are not subject to public access. (HCSWCD, p. 1)

**Comment:** Guideline 11 – replace "should" with "must" for functions of state-level oversight and management. (PCRJ)

**Comment:** Recommend that during the first and second years of the program that 100% of the available credits be available for trading (do not use "retirement" credits). (RDPU)

**Comment:** Creating a new administrative unit in the State of Virginia is a challenge with a general assembly that is reluctant to add new state employees and new administrative units. This will require time and new financial resources, especially budget authority. (VCU1, p. 2)

**Comment:** Key element of administration is enforcement. Without the support of regulatory agencies, the trading program threatens to become unjust and unequal. (VCU1, p. 2)

**Comment:** Some oversight body must be created among the several states and with external experts to make the programs equal in Virginia, Maryland and Pennsylvania. In this way, the goal of the federal Clean Water Act of providing equal water quality among the states (level playing field) can be assured for citizens who seek clean water. (VCU1, p. 3)

**Comment:** With some states already working on plans for nutrient trading, it is wise to coordinate the various state plans. This allows the states to work more closely together to achieve the goal of nutrient reduction in the Bay and to apply nutrient trading across state boundaries where appropriate. (VCU3)

**Comment:** The Chesapeake Bay Program must have oversight of the states' trading plans and nutrient loads to ensure that overall reduction goals and the fundamental principals are being met. Therefore, in the wording of guideline #10, change the word "should" to "must". (VCU3)

**Comment:** The trading plan should be consistent over the entire Bay Watershed...the states could enter into a binding agreement through the CBP thus allowing for a uniform nutrient trading plan...would make nutrient trading across state boundaries (where appropriate) much easier. (VCU3)

**Comment:** Administrative roles for Trade Administration roles are not adequately described in the Guidance Document. NAHB recommends that "Section 6.0 Guidelines for Performing Trade Administration" be expanded to include information on all the functional aspects of how the trading program might be administered that are identified in the draft *Guidance Document* and the addition of an appeals process option for entities that seek to or are involved in nutrient trading. (NAHB, p. 4)

**Comment:** Retiring credits for net water quality benefits should not be promoted in the Guidance Document without more discussion dedicated to the implications of such a move. (NAHB, p. 5)

**Comment:** NAHB recommends the phrase "including quantities retired for net water quality benefits" be deleted from guidance statement #11. NAHB further recommends that the description of retirement ratios in Appendix B be expanded to justify their usefulness and to include a discussion of the implications associated with retirement ratios, the circumstances under which it is justifiable to use them, and those when ratios should not be considered. (NAHB, p. 5)

**Comment:** NAHB recommends that the *Guidance Document* be revised to include a provision supporting retirement ratios only if there is a periodic assessment of the impact of the retirement ratios to ensure that a balance between economic growth and environmental improvement is maintained. (NAHB, p. 5)

**Comment:** I did not fully understand the idea of retirement ratios as it related to the trading program. (VCU6)

**Comment:** Would like to see a detailed explanation of the credit prices for various trades or nutrients. (VCU6)

**Comment:** If we are to follow a market-based approach to solving this environmental problem then it seems a necessary first step to quantify the worth of the environment we about to trade...we need to redefine our variables according to the cash we have on reserve in the environmental bank. (VCU5, p. 1)

**Comment:** There are bound to be conflicts between trading sources – what is the grievance process? As the CBP has the day-to-day oversight of the trading, do they also have the authority to mediate inter-state trading conflicts? (VCU10)

**Comment:** It is an interesting feature to allow environmental organizations to purchase and retire credits...are there limits to the number of credits groups such as this can acquire, yet still make the program effective? (VCU10)

**Comment:** Minimize the involvement of State government in the trading process. Burdensome oversight and rules will add to the administrative costs reducing the potential for trading. Let trading be truly market driven. (VA - 9/26/00)

**Comment:** Promote trading by developing a market driven system not a government-regulated program. (VA - 9/26/00)

**Comment:** Allow the market price to drive trades. (VA - 9/26/00)

**Comment:** State should fund a bank to ensure liquidity in the market place and to guarantee a ready buyer for the credits. (VA - 9/26/00)

**Comment:** Ratios should be specified. (VA - 9/26/00)

**Comment:** Should have enforceable caps to push trading. (VA - 9/26/00)

**Comment:** Restricting trade between like sources restricts potential environmental benefits. Trading should be opened up to allow trading between point and non-point sources in the beginning. (VA - 9/26/00)

**Comment:** The most cost effective nutrient controls may be non-point sources. Trading should be allowed initially between point and non-point sources. (VA - 9/26/00)

**Comment:** Can an environmental fund be created for use in a specific watershed(s) for use on watershed-based goals? Can \$ be paid ito this fund for a locality to use in widescale water quality management programs? What flexibility will be designed into the program to have the locality act as broker of the trading program rather than the state? (VA - 10/3/00)

**Comment:** VAMWA encourages the state to take the next step in forming the "market based incentives" program, referenced in the WQIF agreement provisions. (VA - 10/3/00)

**Comment:** The program may have a lot of implications on other existing programs, i.e., if the trading incentives are greater than a current cost-share program, then some may wait and put off installing controls until the trades are available to increase profit or cost-share received. (VA - 10/3/00)

**Comment:** Urban NPS – Phase II stormwater permit program is coming into play. What does this do to credits generated before a permit is issued? (VA - 10/3/00)

**Comment:** Where voluntary trades are made, and the TMDL program comes into play later, the contractural trade arrangements should be structured to be revisited and possibly voided if new allocations must be made among all sources. (VA - 10/3/00)

**Comment:** If Maryland goes forward with this, who will be the lead agency? Response was MDE would have to have a role since this involves regulatory/enforcement authority. (PM)

**Comment:** How will economical values be determined? (PA - 10/5/00)

**Comment:** Do you have numbers that you are recommending for ratios? (PA - 10/5/00)

**Comment:** What kind of enforcement mechanism would be in place if reductions were not met after annual monitoring? (PA - 10/5/00)

**Comment:** How will the loading share for property owners along a river be allocated for nonpiont source? (PA - 10/5/00)

**Comment:** Please help clarify the actual buying and selling. Would a point source give money to a nonpiont source? (PA - 10/5/00)

**Comment:** Is trade permitted between areas inside the basin? (PA - 9/28/00)

**Comment:** Will trade between point sources and nonpiont sources be permitted? (PA – 9/28/00)

**Comment:** Will farmers bring on trade themselves? (PA - 9/28/00)

**Comment:** Will there be public participation for each trade? (PA - 9/28/00)

**Comment:** How will the credit pricing be set? (PA - 9/28/00)

**Comment:** What is the cost of a credit? (PA - 9/28/00)

**Comment:** We strongly disagree with the loose provisions for administration of trading programs by the states, whereby a permit or regulatory program would be optional. A state permit or regulatory program must be mandatory for states administering nutrient trading programs. (PCSC, SC, both p. 2)

**Comment:** A retirement ratio should not be part of the trading program because it increases the overall cost of reductions and discourages trading. (P&G, p. 1)

**Comment:** We strongly urge that a reliance on bilateral buyer/seller arrangements be avoided. Healthy trading depends on a mechanism that allows buyers and sellers to easily "find" each other through a central clearinghouse or brokerage. (PPL, p. 2)

**Comment:** It is important that the state set up a regulatory authority for oversight of the trading program, so that the waters remain a public resource – not the property of traders. (WPWPP, p. 1)

**Comment:** Each state must have a mandatory permit program for trades. To maximize opportunities for public participation, this should be done using the individual NPDES program. A general permit is not sufficiently transparent, and does not include sufficient opportunities for public participation nor sufficient reporting to the public. (CWA, p. 3)

**Comment:** Trading ratios must be spelled out in more detail in the Guidance Document. Minimum ratios must be at least 5 to 1 for point-point trades and 10 to 1 for trades involving nonpiont sources. Retirement ratios should be part of every trade. (CWA, p. 4)

**Comment:** We strongly support giving states primacy over this program with an opportunity for the Bay Program and public at large to comment on state program development and implementation. (MAM)

**Comment:** We recommend that each State's central trading coordinating office do more than simply track completed trades. They should serve as an internet-based clearing house for potential trades as well as a tracking service for completed trades. (MAM)

**Comment:** EPA and the jurisdictions should strive to identify resources to capitalize the retirement of credits. (EPAMM)

**Comment:** Two of the 4 categories are **water quality ratios** and **retirement ratios.** My impression is that these terms have been used in other trading programs and in the literature to mean the same thing: adding on a "surcharge" to each trade, is aimed at generating greater net water quality benefits than would "traditional approaches". (EPAWP, pg4)

**Comment:** The explanation of "water quality ratio" on p. 42 sounds less like the way others have defined this term and much more like the definition of what some (Boise River, for example) call "delivery ratio". (EPAWP, pg4)

**Comment:** I would suggest that the Team drop items (b), (c), and (d) in the discussion of "Retirement <u>Ratios".</u> These items indeed do deal with situations in which credits could be *retired*, but they have nothing to do with *trading <u>ratios</u>*, which is the subject of Appendix B, of which this is a part. I would suggest moving discussion of these three "retirement scenarios" to another place in the document. (EPAWP, pg4)

**Comment:** I'm somewhat confounded by the notion of <u>"retiring all credits at the end of 5 years"</u>. Either buyers would lose interest in purchasing credits because they felt the price of credits did not justify getting relief for just 5 years; or, the value of credits might fall to such a level that most sources would use interest in generating credits. (EPAWP, pg5)

**Comment:** Page 28 -- Funding of the administrative cost of a trading program through participant fees is indeed one option, but the document should note that this has the potential of decreasing the attractiveness of the trading option, as it increases the per pound cost of credits. (EPAWP, pg3)

**Comment:** The use of ratios, especially in light of the uncertainty of non-point source controls, is highly supported. We are also pleased that retirement ratios, which would allow citizens to have a direct role in the reduction of nutrient pollution through the purchase and retirement of pollution credits, are recommended. (CBF, pg3)

#### VI. Guidelines for Ensuring Accountability

**Comment:** Alternatives to enforcement via a state permit should be encouraged...establish certification programs similar to those established for air emissions trading. (DOD, p. 2)

**Comment:** Guidelines should encourage ongoing implementation of nutrient reduction by recommending mechanisms for states to account for nutrient reduction efforts initiated prior to the development of state nutrient trading implementation plans. (DOD, p. 3)

**Comment:** A state permit or regulatory program for overseeing the trading program should be mandatory, not optional. Without state regulation or permitting, a public resource – the waters of the Commonwealth – becomes the private property of the traders. To ensure adequate environmental protection, any trading program must be established and enforced under a state regulation or permitting program and the state must supervise the trading program and its effectiveness. (CBF Form)

**Comment:** Guidance recommends that BMPs be inspected annually...currently a 5% random sample of cost-shared BMPs is inspected annually. Increased inspections would require additional resources for soil and water conservation districts to perform inspections. (HCSWCD, p. 1)

**Comment:** No mention made of what would be required in the periodic reports...nonpoint source credits would require periodic assessments, but concerned there will be a lack of manpower to follow through on that guideline. (VCU2, p. 3)

**Comment:** Each state must have adequate mechanisms to accomplish compliance and enforcement responsibilities. (PCRJ)

**Comment:** Recommend that in first and second years the credit price be set based on source estimate of capital upgrade savings plus some given discount to make it attractive to the source. (RDPU)

**Comment:** Nonpoint sources must be monitored to ensure that reduction of the nitrogen loading does not fall strictly on point sources. (VCU4, p. 2)

**Comment:** Financial gain is a more desired endpoint for most, compared to a safe and healthy ecosystem for all biological life. Therefore, I feel that extensive monitoring is necessary to ensure that all participants are in compliance with regulations and guidelines set forth. (VCU4, p. 2)

**Comment:** The "Guidelines for Ensuring Accountability" fail to address point sources covered by General Permits under the NPDES program. NAHB recommends that this section be revised to include accountability requirements for Stormwater point sources covered by a General Permit under the NPDES program. NAHB further recommends that the requirements be worded as

follows: "Annual account balancing periods should be used for Stormwater point sources covered by General Permits under the NPDES program." (NAHB, p. 6)

**Comment:** Ambient monitoring and discharge monitoring protocols need to be standardized. NAHB recommends that section 7.0 be revised to include a discussion of the importance of using only scientifically valid data, obtained through agreed upon monitoring methods, to assess the performance of dischargers or effectiveness of trades. (NAHB, p. 6)

**Comment:** The meanings of three assumptions that underpin the accountability guidelines, as stated in section 7.0, are unclear. NAHB recommends that section 7.0 be revised to explain what is meant by these assumptions and why they are important. (NAHB, p. 7)

**Comment:** The input of the public prior to the execution of a trade adds uncertainty to the nutrient trading process. NAHB recommends that Guideline # 24 be revised to delete the opportunity for public input prior to the execution of the trade. (NAHB, p. 7)

**Comment:** With nonpoint source pollution not previously being regulated, stricter, more precise guidelines must be formulated for permitting that kind of discharge. (VCU2, p. 3)

**Comment:** What are the exact consequences for business or localities if they don't comply? The program seems little more than paper thin if there is not a rock solid consequence, and the people willing and able to enforce that consequence. (VCU5, p. 2)

**Comment:** Under a state permit, criminal penalties could be assessed for illegal or non-compliant trading; therefore, the use of state permits may be more useful for enforcement. On the other hand, industry and farmers tend to shy away from more permits, so contracts would provide a more voluntary atmosphere. (VCU6)

**Comment:** With nonpoint sources emitting a majority of the nutrients...I believe more emphasis should be placed upon restrictions and monitoring of those sources...maintenance of BMPs and frequent monitoring should be the NUMBER ONE PRIORITY of the state's enforcement. (VCU7)

**Comment:** Would like to see some assurances that the public will be allowed a reasonable amount of time prior to the transaction in order to better understand the issues involved in the trade. (VCU8)

**Comment:** To address the state's responsibilities in performing an overall assessment of the program's effectiveness, information should be made available to the public (possibly on DEQ's website) and presented in a manner that is comprehensible to the general public. This would facilitate the public's understanding and input regarding individual trades. (VCU8)

**Comment:** Of concern is the voluntary, unenforceable nature of the program. With 10 years remaining until the goal achievement date, if the plan is only partially effective or ineffective,

valuable time will have been lost in repairing the Bay, which will be under even greater stress from population growth. I recommend that allowances be fully enforceable under state law with EPA guidance. (VCU8)

**Comment:** We should not have a command-and-control approach...traders should be allowed to trade according to their specific circumstances, provided they do not exceed their allowance. (VCU11)

**Comment:** I am concerned about the nonpoint source guidelines for assessing performance and account balancing. There is too much flexibility in these two sections for nonpoint sources. (VCU11)

**Comment:** On-site assessments for nonpoint source controls should be conducted at least once every six months. I understand that nonpoint sources are more difficult to regulate than point sources, but nonpoint sources do account for approximately half the nutrient loading...therefore, should be assessed with great importance and to the best ability of the state. (VCU11)

**Comment:** Reporting requirements for nonpoint sources – annual report will not suffice for such an involved program...suggest quarterly monitoring report be included in nonpoint source guidelines for account balance. (VCU11)

**Comment:** Who will enforce these provisions for sources that do not achieve compliance or meet minimum expectations? (VCU12, p. 1)

**Comment:** Do not agree with individual states being responsible for setting up their own tracking programs. This is because states may ultimately develop different tracking regulations if it is left up to each to determine these guidelines. Instead, one regulating agency or committee can determine guidelines and oversee trades in all states, placing representatives in each of the participating states to track trades. (VCU13)

**Comment:** Too many rules and stipulations will drive off more businesses and productivity than will anything else by confusing participants and raising overall trading costs. Keep it specific but fairly straightforward. (VCU13)

**Comment:** If this is a voluntary program with no legal parameters, how will those who choose not to participate be held accountable? (SG2)

**Comment:** Monitoring 12 times per year or more is burdensome and not cost effective. (VA - 9/26/00)

**Comment:** Trading with the Shenandoah Valley point and non-point sources should not be allowed. (VA - 9/26/00)

**Comment:** Value of a credit should be set Basin wide. (VA - 9/26/00)

**Comment:** In developing this trading program, consideration should be given to how air source trading is conducted. It is a more regulatory based approach and makes the seller of the credits directly accountable. Joe Goffman of EDF was a big player in developing the air-trading program in Pennsylvania and should be contacted. (PA - 9/26/00)

**Comment:** The numbers are annual, are there seasonal fluctuations that will be considered? (PA -10/5/00)

**Comment:** In Pennsylvania, will there be an evaluation of a pilot program before expansion and implementation? (PA - 10/5/00)

**Comment:** If New York doesn't join, will they be held accountable? (PA - 9/28/00)

**Comment:** A state-trading program must provide for regular and thorough monitoring to assure compliance with trading arrangements and address compliance issues. The permittee should bear the added costs to the state for monitoring and surveillance, through permit fees set accordingly. (PCSC, p. 3; SC, p. 2-3)

**Comment:** Our experience with the regional nitrogen oxide air emissions trading program to achieve ambient air quality standards leads us to believe that a "cap and trade" program, with a specific source budget, accurate measurement of reductions, and third party trading facilitations is a more effective model to pursue. (P&G, p. 2)

**Comment:** Sources will be less willing to participate in a trading program, which holds them accountable, via contract enforcement, for compelling other sources to meet discharge requirements (point sources) or install and maintain specific controls (nonpiont sources). (P&G, p. 2)

**Comment:** Permits must be requires and trades must be strictly enforced to ensure that promised reductions really happen. (PCFD, PCMS, PCNK, PCCM, p. 1)

**Comment:** Water quality in streams or rivers with trades must be closely monitored to make sure that no problems occur. (PCFD, p.2; PCMS, PCNK, PCCM, all p. 1)

**Comment:** Short duration credits are likely to be a deterrent to buyers. In addition, it is not clear whether the five-year limitation applies to the contract only or also to the credit being purchased. There should be a provision for renewing credits for BMPs or other treatment infrastructure that is meeting nutrient goals, without associated costs. (PPL, p. 2)

**Comment:** Buyer protection should be identified more precisely. More specificity is needed in defining how much time the buyer has to provide alternative reductions, what options exist if the

alternative credit is not available, and whether the point source credit buyer be penalized through Clean Water Act provisions, despite a good faith effort to meet NPDES permit requirements. (PPL, p. 2)

**Comment:** There would necessarily be the need for expanded water quality monitoring on trading streams within a watershed. (WPWPP, p. 1)

**Comment:** To ensure accountability, a state permitting system for overseeing the trading program should be mandatory. Such a system should be administered and organized within the existing framework of the NPDES permit program. (MAELC, and ALS, p.3)

**Comment:** The Guidance must require the establishment of a water quality monitoring program that will determine the effectiveness of trades. This monitoring program should consist of specific monitoring requirements to be conducted by the permittee as well as area-wide watershed monitoring by the state. (MAELC, and ALS, p. 3)

**Comment:** The guidance should include a provision requiring expanded monitoring and reporting in watersheds where trading occurs. (WPC, p. 2)

**Comment:** Sources should be carefully monitored so that they are held accountable for any failure to meet the required reductions. (WPC, p. 2)

**Comment:** Trading partners must disclose discharges and failures to meet their promised reductions. If a trading violation does occur, the violator's allowable pollution discharge must be reduced in the amount of the violation and a penalty should be levied. (WPC, p. 2)

**Comment:** Ambient water quality monitoring in any stream with a trade must be required in addition to self-reporting by point source dischargers. (CWA, p. 4)

**Comment:** Nonpoint source accountability needs to be strengthened. Account balances are not sufficient. Some system of measuring flows from the stream bank must also be required, particularly during high flow. (CWA, p. 4)

**Comment:** Annual account balances are not frequent enough. They should be done at least seasonally. Particularly on impaired streams, trading partners must be required to meet permit conditions at all times and at all flows, not just on an annual average basis. (CWA, p. 4)

**Comment:** The requirements for enforcement of trades must be strengthened. Trading partners must be held accountable for any failure to meet trading goals, and states must be required to enforce trades strictly, with trading privileges revoked and s significant fines imposed if promised reductions are not achieved. (CWA, p. 4)

**Comment:** To pay for increased monitoring, trading partners must pay a special fee to cover the

cost of implementing the trading program, including the extra monitoring and enforcement cost. (CWA, p. 5)

**Comment:** We believe non-regulatory options can offer significant advantages in achieving water quality objectives in a more timely and cost-effective manner than through regulatory approaches. (MAM)

**Comment:** We support the <u>scheduled</u> spot checks and inspections for non-point source controls. Even though point sources have routinely been subject to unscheduled inspections, we believe scheduled checks are more appropriate for non-point sources. (MAM)

**Comment:** Traders must continue to meet local TMDL limits or put trades in the NPDES permit and limit it to local watershed TMDLs. (EPAMM).

**Comment:** For local water quality, trades should be in an NPDES permit. (EPAMM)

**Comment:** Trading between states needs to be considered in more detail, especially with respect to situations where standard stringencies may differ. We should ensure that the most stringent standard of the trading relationship applies. (EPAMM)

**Comment:** It may be appropriate for EPA, instead of the states, to administer trades between states. In the case of the Chesapeake Bay, Region 3 may be the administering authority. (EPAMM)

**Comment:** States have found it necessary to develop state regulations for air trading which will most likely be the case for nutrient water trading. (EPAMM)

**Comment:** Guideline 24 is good. EPA needs to flag a potential concern though about the enforceability of contracts or grant documents in an NPDES mode. These probably will not meet the test of equivalent to permits or CWA enforcement documents. (EPAJC, pg6)

**Comment:** Regarding Guideline 20: the accounting period I believe should be based on the temporal requirements of the permit, and may not always be annual in nature. There may be local impacts from seasonal discharges, versus annual loadings. (EPAJC, pg6)

**Comment:** How does the requirement for point source self monitoring and reporting relate to NPDES permit self-monitoring and reporting? (EPAJC, pg. 5)

**Comment:** The integration of successful trades into NPDES point source permit language needs to be addressed somewhere: how does a facility maintain compliance with its permit after striking a trade deal? (EPAJC, pg 1)

**Comment:** Page xi, guideline 24 -- This states ".....the public will be provided opportunity for

input prior to the execution of a trade". This sounds like "case-by-case" trading, but up to this point--and at later points--this was not made clear. I was thinking a form of "dynamic" trading (where credits are made available on the open market to buy at any time in any combination) was being proposed. This is a key point, and should be "brought forth" and highlighted in some way. It's just too easy to miss, buried in the middle of a guideline that is 7 lines long. (EPAWP-pg1)

**Comment:** Monitoring by the states, as opposed to the individual sources, at more reasonable timeframes is essential to ensure that trades are reducing nutrient pollution in actuality and not just on paper. Specifically, CBF recommends that non-point source assessments and account balances be performed on a seasonal, rather than annual, basis in order to better account for storm events and periods of wet weather. Furthermore, edge-of-field monitoring of non-point source pollution is not only possible, but also necessary, for trades involving non-point sources. (CBF, pg3)

**Comment:** A state general permit or regulation is the essence of an accountable and enforceable trading program and therefore should be essential, and a Fundamental Principle. (CBF, pg3)

**Comment:** Legally, in the absence of state regulation or permit programs, trades would be a purely contractual issue between two private parties, and enforcement of those trades by the state – which has the final responsibility to its citizens for water quality – would be a lengthy and expensive process through the state court system and the third party, the state, would bear these legal costs. (CBF, pg. 3)

**Comment:** The guidance recommends that states manage the trades, from development of the framework to monitoring and enforcement. Oversight and management of a trading program by state water quality agencies are also essential to an accountable and enforceable trading program, and as such, should be required as a Fundamental Principle. (CBF, pg3)

**Comment:** The guidance lacks several essential elements for nutrient trading programs, predominantly the establishment of a regulatory framework which includes water quality standards for nutrients, a cap or load limit for nutrient pollution, and a permit program for both point and non-point sources which has both monitoring and enforcement mechanisms. (CBF, pg1)

### **Guidelines for Assessing Progress**

#### **VII.** Guidelines for Assessing Progress

**Comment:** Nonpoint source monitoring <u>must</u> (rather than <u>should</u>) be conducted to provide sufficient data. (PCRJ)

**Comment:** A committee with representatives from each state should be established to oversee the baywide program to ensure that each state is meeting its goals and that each is using similar means to do so. (VCU6)

**Comment:** Monitoring frequencies of nonpoint source runoff, when added to the cost of the credits, may in time become too expensive and make the program less effective. (VCU13)

**Comment:** Virginia's current monitoring programs are not designed to assess the effectiveness of a nutrient trading program. The guidance document should require implementation of a water quality monitoring program that is specifically designed to monitor the effectiveness of trades. Without such monitoring, particularly after rainfall events, we have no method to document if trades are actually resulting in reduced pollution and improved water quality. The monitoring requirements must be a regulatory or permit condition of the trade. (CBF Form)

**Comment:** If a sewage plant builds a wetland to offset their loads, how many years is that permissible? (PA - 10/5/00)

**Comment:** Will the proposed nutrient trade produce results sooner than without trade? (PA - 9/28/00)

**Comment:** Ambient and point source monitoring will assess changes in ambient conditions and in point sources of nutrients, but will not necessarily assess the effect of nonpiont source pollutants or the overall effect of the trading program. The assessment approach described appears to place a risk on the buyer of nutrient credits which is considerable given the buyer is responsible for performance of the seller's credits. (PPL, p. 2)

**Comment:** Long-term monitoring needs to be in place to accurately quantify the actual loadings from nonpiont sources over time both before and after improvements are made. (WPC, p. 2)

**Comment:** Assessing the success or failure of the trading is crucial. An initial assessment must be done before any point-to-nonpoint trades are allowed, and the public must be involved in this assessment process. (CWA, p. 5)

**Comment:** EPA should require the states to reconvene the stakeholders to review the report based on the first year's of experience with the program before any point to nonpoint trades are authorized. (CWA, p. 5)

**Comment:** We urge the workgroup to keep the regulatory and programmatic barriers to a

### **Guidelines for Assessing Progress**

minimum for everyone involved. (MAM)

**Comment:** Page 31 -- The 2nd paragraph under **Assessing Performance** starts with "Monthly monitoring is suggested to enable adequate tracking of nutrient reduction through trading and to provide sufficient time to take corrective action in the event that trading contracts are not being honored or anticipated results are not being achieved." Does the call for monthly monitoring in this sentence apply to all the types of monitoring listed in the previous paragraph:

- a) ambient water quality monitoring,
- b) facility discharge monitoring,
- c) facility contractual compliance, and
- d) proper BMP implementation and maintenance?

If not all, which ones? Also, who would be expected to do each of these categories of monitoring--besides the state doing the ambient? (EPAWP, pg3)

**Comment:** bottom of p. 31, top of p. 32 -- The guidance says that if a seller defaults (fails to generate the reductions they had sold as credits), they would "stand to lose its state certification, as well as being required to repay the buyer......".Regardless, my question is whether the idea being expressed on p 31/32 is that a source could possibly be banned from ever selling credits in the future, or at least for some specified period of time. (EPAWP, pg. 4)

**Comment:** Why aren't the buyers being required to submit evidence showing that their acquisition of credits will not result in localized WQ impacts? Absence such a requirement, the state and/or the public will need to do such analysis de novo, in order to determine whether localized effects could result. (EPAWP, pg1)

#### Guidelines for Stakeholder Involvement

#### VIII Guidelines for Stakeholder Involvement

**Comment:** Does the Commonwealth have a developed timeline (for state implementation plan)? (RDPU)

**Comment:** Implementation of this in the State of Virginia will require more effort and energy than is suggested in this brief paper. The state has, in fact, a history of excluding citizens from the legal process – in the form of denying standing to the citizens…the state has now little experience with a new attitude and approach toward citizen involvement and more work remains, with dedicated staff needed in the appropriate state agency offices. (VCU1, p. 3)

**Comment:** Agree that citizen groups, along with the state committee should serve an important role in determining which trades are permitted. (VCU6)

**Comment:** NAHB recommends that the Guidance Document be revised to include a discussion of the role the builders and developers could play in the success of the overall goal of reducing and then stabilizing nutrient loading to the Chesapeake Bay and to ad "builders and developers" to the list of stakeholders in the "Stakeholder Process" diagram. (NAHB, p. 8)

**Comment:** NAHB recommends that the *Guidance Document* be revised to include a discussion of outreach methods beyond that of simply forming a stakeholder group. (NAHB, p. 8)

**Comment:** Recommend a more direct dialogue with local governments, planning departments, and developers about revitalizing existing urban zones to promote economic development in the form of tax credits to homeowners or businesses that move into the older areas. (VCU12, p.1-2)

**Comment:** It should be mandatory for local watershed organizations to receive timely notices of anticipated trades. It should also be mandatory that anticipated trades be announced in local/community newspapers. Local residents may be aware of violations that have not been noted by officials monitoring the trades. (SG13)

**Comment:** There is public participation in the design of a program, but will there be for individual trades? (PA - 10/5/00)

**Comment:** Will there be public hearings like with NPDES permits? (PA - 10/5/00)

**Comment:** The stakeholder group in Pennsylvania will be a large group with representatives from many points of view: Industry, Environmental groups, Watershed groups, Agriculture, Local government, etc. (PA - 9/28/00)

**Comment:** The public must be actively involved in both the development of a trading program in each state and the review of every proposed trade. (CWA, p. 5)

#### Guidelines for Stakeholder Involvement

**Comment:** A stakeholder process with broad public involvement and a series of public hearings should be required before states adopt a trading program. (CWA, p. 5)

**Comment:** The process of developing trades must be transparent and allow public review and comment on the proposed trade. Use of a general permit scheme for trading, instead of a NPDES permit, does not allow for the necessary public participation. (CWA, p. 5)

**Comment:** Page xii, guideline 34 -- The statement that, "States should provide broad public notification of trades as they occur...." seems to possibly contradict what was said in guideline 24 about providing "opportunity for input prior to the execution of a trade". (EPAWP, pg1)

**Comment:** if you can set up a credible system for determining when someone has generated a legitimate sellable credits, then you wouldn't need to go through public comment/state approval every time someone wants to obtain some credits. You'd just have to go in one time for public comment/state approval on the issue of "Is it OK for me to buy this many credits?" This provides a way of ensuring that localized WQ effects will not result from the buying of a certain number of credits by a particular source located in a particular locale, while keeping the "transaction costs of trading" relatively low. (EPAWP, pg. 2)

#### IX. General Comments

**Comment:** The proposed nutrient trading program does not satisfy all these criteria (which apply to the sulfur dioxide emission credit market) and should be modified to account for them: a) a cap on the regional levels and emissions; b) measurable progress toward the goal and measurable emissions; c) enforceable requirements in the operations of facilities; d) each facility must make contributions toward the goal. (VCU1, p. 1)

**Comment:** To be successful, the program must be market driven. If excessive regulatory oversight and procedures are put in place, which result in unreasonable and burdensome cost, the program will die under its own weight and the Chesapeake Bay will be the loser. (VAMWA)

**Comment:** Certainly, a nutrient trading program for Virginia, Maryland, Pennsylvania, and Washington D.C. offers a tool for use in the Bay cleanup effort, which has our total commitment. A trading program may also be a useful tool in the future to facilitate the implementation of TMDLs throughout Virginia. (VAMWA)

**Comment:** Generally agree with most of the ideas expressed in the document...believe that all stakeholders in Virginia must work together to implement a fair and equitable program...hope that DEQ utilizes the same fair and open framework used in developing the Shenandoah and Potomac River Basins Tributary Nutrient Reduction Strategy. (LCSA, p. 1)

**Comment:** NAHB is concerned with the lack of input form builders and developers in the development of the Draft Chesapeake Bay Program Nutrient Trading Guidance Document, and the lack of attention to this group of dischargers in the Draft Chesapeake Bay Program Nutrient Trading Guidance Documents. (NAHB, p. 1)

**Comment:** NAHB recommends that the Guidance Document be revised to include a discussion of how other methods (beyond the watershed model) can be used to calculate nutrient credits. (NAHB, p. 9)

**Comment:** NAHB supports the concept of a Chesapeake Bay Program Nutrient Trading Program as a potential tool to reduce nutrient loading to the Chesapeake Bay, but the Guidance Document falls short of describing an innovative and realistic tool. (NAHB, p. 9)

**Comment**: Urge creation of a task force that will specifically address trades between point and nonpoint sources. (VCU1, p. 3)

**Comment**: The issue of neutral trades is <u>most</u> serious, and opens the entire program to fraud, abuse and failure. The only mechanism for achieving the program goal of reducing nutrients by 40% is that each and every activity makes a contribution toward that goal. (VCU1, p. 3)

**Comment:** This nutrient trading program, like any other pollution trading program, is simply

another time-wasting "compromise" between business and the environment, no more, no less. Such a compromise really only serves the interests of business, again. Such a compromise only diverts and postpones responsibility for one's own actions, again. Such a compromise only lets polluters off the hook one more time, again...It sets a bad precedent for business, by saying it's fine to pass off a pollution problem to the guy next door, if you have the cash to do so. (VCU5, p. 1)

**Comment:** What was the reasoning behind deciding on a 40% reduction goal? If I was a potential trader, I would want to know what benefit a 40% reduction will have as opposed to a 30 or 50% reduction. (VCU7)

**Comment:** Question the data used as the foundation for the program. Why was the year 1985 chosen as the baseline, and how was the 40% reduction goal selected? (VCU10)

**Comment:** Concern #1 is the proposal seems to be a classic "engineering" approach to ecosystem management by applying certain conservative mathematical models such as those used by stock traders. In fact, it is well established that ecosystems are dynamic and undergo constant change. (VCU12, p. 1)

**Comment:** Recommend more ambitious efforts by targeting a net 45-50% reduction by YR 2010. (VCU12, p. 1)

**Comment:** What is being done to address urban sprawl issues that invariably affect point source pollution? (VCU12, p. 1)

**Comment:** We should be content with most participants involved taking an economic approach to nutrient trading – money is made while the Bay and its tributaries are gradually cleaned up. This "achieves equal or greater reductions for the same or less costs" (VCU13)

Comment: If the Bay Program is about to commence a program of trading, which I oppose completely, then it must set crystal clear rules that guarantee to dramatically reduce nutrients...trading is a bad idea because the Bay Program's assumptions will be proven unwise, and the states will be forced to direct huge resources to weed out cheaters. It won't be worth it. Nevertheless, if trading is inevitable, this document has several flaws that should be evident to anyone who places the health of the Bay as the priority over purported savings to businesses. (CBF Form, D.A.)

**Comment:** Why isn't millions of pounds broken down into acres? (PM)

**Comment:** When you determine point source, does it include such things as sewage spills? (PM)

**Comment:** Focus removal systems rather than filtering. Oysters eat algae. Can oyster beds get credit for the filtering they do? Need to replenish oysters and filtering, feeding fish. (PM)

**Comment:** It takes 1 pound of nutrients to raise a bushel of corn. Using what corn uses vs what farmer applies, corn will take out more than put on. Can difference be sold as a credit? What farmers have to sell? (PM)

**Comment:** Bottom line - Nutrient is completely voluntary? (PM)

Comment: What is time-frame to implement if Bay Program blesses it? Response was

approximately 2 years. (PM)

**Comment:** Might want to put in point source before ag is entered into it. (PM)

**Comment:** MAMWA is pleased to support the draft guidance and trading principles that have been so ably developed. (EL1)

**Comment:** We believe nutrient trading, consistent with the proposed trading guidance, will be a critical tool for local and state governments throughout the Bay watershed to affordably, cost-effectively, and expeditiously achieve the nutrient reduction goals of the Bay Agreement today and in the future. In addition to offering cost-effective and expeditious nutrient reductions, a meaningful trading option will serve to minimize any planning and permitting disruptions that would almost certainly otherwise occur. (EL2)

**Comment**: While accountability is critical, almost equally important is the need for a streamlined program with low transactional barriers.(EL3)

**Comment:** Growth of plants in an open environment cannot be controlled by nutrient reduction. Sure, the crop to be grown may be somewhat controlled (it will be poor), BUT if there is no control over the unwanted weedy vegetation/algae either by animal life or by herbicides nature has made provision that the unwanted growth "weeds" will always get enough nutrients to make it. (MFC1)

**Comment:** IS ANYONE, or HAS ANYONE testing(ed) the Chesapeake Bay and/or any of the tributaries to determine if what is out there compares with WHAT IS NEEDED?? Which species of algae are "weeds" and which are needed for nourishment of the aquatic life? How can nutrient control/trading be achieved in order to not eliminate the needed algal species whilst eliminating the "weeds"?? (MFC1)

**Comment:** The fact that this is to be a Guidance Document for voluntary participation concerns me. Ideally, there should be Federal, State and Local Legislation for this program. Then, when the Chesapeake Bay Program monitors the participation, violators could and would be prosecuted by the EPA, which is the funding source for CBF. (SG1)

**Comment:** I also believe that the construction industry should be required to cooperate in some way. With construction run-off, more impervious surfaces, increased demands on sewage

treatment plants, tidal and non-tidal wetlands lost, riparian forests gone, and local agencies not abiding by shoreline buffer areas, I believe this compounds the problem of nutrient loads. (SG6)

**Comment:** I also believe that this program should be mandatory, considering that 13 years of guidelines and suggestions have not resulted in the 40% reduction predicted, and moving forward to an ultimate goal of 60-70% reduction is necessary for the Bay to recover to a healthier status. (SG7)

**Comment:** If each jurisdiction is confronting the issue of TMDL and in varying stages of implementing TMDL, then why does the 2010 Agreement have a goal of precluding the need to develop TMDL? Isn t this like saying that my county has a law against speeding, but I only suggest my household try to avoid speeding? (SG14)

**Comment:** In conclusion, I can see how this program could benefit the environment and the business factor along the bay. I wish more consideration would go into it, and I wish more communities would have been represented. We are the ones that live with the results of these decisions and policies. (SG15)

**Comment:** The point that trading will save money for ordinary citizens, either through lower cost of manufactured products or through lower user fees for municipal sewage treatment customers, should be better emphasized. (PA - 9/26/00)

**Comment:** How does this relate to toxic problems in our area? (PA - 9/26/00)

**Comment:** Are there dams on the Susquehanna River filling up with sediment and what will that do to the trading program? (PA - 9/26/00)

**Comment:** Doesn't trading provide a disincentive for nutrient control? (PA - 9/26/00)

**Comment:** What are the incentives/circumstances to purchasing credits? (PA - 10/5/00)

**Comment:** When Pennsylvania develops their program, will it have to satisfy the EPA framework for trading document? (PA - 10/5/00)

**Comment:** What is the driving force behind trading? Unless there are TMDLs, there are no regulations in place. (PA - 10/5/00)

**Comment:** Who will want to buy credits, offsets? (PA - 9/28/00)

**Comment:** Pertaining to the pie chart, what is the relationship between agriculture and air? (PA -9/28/00)

**Comment:** Ratio – is it a portion of credit? (PA - 9/28/00)

**Comment:** Will the questions and the answers, from all the meetings, be distributed to everyone who attended a meeting? (PA - 9/28/00)

**Comment:** Is NT tied into Carbon Trading? (PA - 9/28/00)

**Comment:** There was not enough detail about the report and the subject of Nutrient Trading in the announcement of the meeting. (PA - 9/28/00)

**Comment:** There is a big discrepancy between states; such as, terminology. Where we have NPS as our major issue, other states have PS and large population growth. (PA - 9/28/00)

**Comment:** We are very concerned that the guidance, if finalized in its present form, may actually discourage aggressive and prompt nutrient pollution reduction in the Bay and its tributaries, and may not ensure that there is full and fair participation in the effort. (PCSC, SC, both p. 1)

**Comment:** We strongly support the use of nutrient trading throughout the Chesapeake Bay watershed as an effective means of achieving the Bay program nutrient reduction objectives. (P&G, p. 1)

**Comment:** The Chesapeake Bay Nutrient Trading Program needs more safeguards to protect our water. (PCFD, PCMS, PCNK, PCCM, all p. 1)

**Comment:** We hope this program will facilitate the development of a water quality trading program for parameters other than nutrients. (PPL, p. 1)

**Comment:** The EPGA strongly supports the concept of water quality trading. (EPGA, p. 1)

**Comment:** These guidelines will be precedent setting in the area of water quality trading. (EPGA, p. 2)

**Comment:** Thank you, for your efforts to create a Nutrient Trading Guidance Document for the Chesapeake Bay. (WPC, p.1)

**Comment**: The document is written a little "fuzzy" because states need to develop individual programs. The guidelines are kept general to cover differences between states. (DC - 10/10/00)

**Comment:** A provision to trade with another state needs to be added in to the document (for example, in the Potomac basin). (DC - 10/10/00)

**Recommendation**: Develop model regulations that the states can use. Each state has ideas for a pilot. Is there a market in Maryland? Pennsylvania? Hire an organization to pilot trades in the basin. There needs to be consistency across the region. (DC -10/10/00)

**Comment:** The Trading Workgroup's efforts are wholeheartedly supported to develop an efficient trading framework. The principles and trading guidance is well written and provides an excellent overview. (MAM)

**Comment:** Environmental Justice factors and considerations should be addressed in the guidance. (EPAMM)

**Comment:** EPA should search out opportunities for demonstrating trading - such as for Supplemental Environmental Projects. (EPAMM)

**Comment:** The lessons we have learned regarding mitigation banking should be applied to this trading program development. (EPAMM)

**Comment:** The Guidance Document should be called "Guidelines" not "Guidance". A document that EPA managers sign off on as Guidance has a Congressional and legal connotation. (EPAJC, pg2)

**Comment:** Page 45, per Boise River -- I'm reasonably sure that the definitions of "delivery ratios" and "location ratios" are reversed. I'm pretty sure that the Idaho program uses "delivery ratio" to deal with what you call "land transport" of pollutants from NPS, while using "location ratio" to deal with effects of instream transport, deposition, and attenuation, once a pollutant has reached the river. (EPAWP, pg. 5)

**Comment:** Page 45, first bullet-- I suggest changing "improvements in the Sound" to something like "improvements in the critical area in the western end of the Sound, where DO levels are unacceptably low." (EPAWP, pg. 5)

**Comment:** On page 45, Move the sentence, "Zones close to the Sound are....." from the end of the 4th bullet to the end of the 3rd. It explains "attenuation factors", which is the subject of the 4th bullet. (EPAWP, pg5)

**Comment:** "trading" is not the only means for reaching agreement on cost-effective, equitable ways to achieve environmental goals. For instance, during the development of a TMDL, interested stakeholders can come together and negotiate about the allocation of the allowable load. (EPAWP, pg2)

**Comment:** Page 8--What's the status of the WEF study of a design for a trading program for Maryland? (EPAWP, pg2)

**Comment:** The challenge is to allow for such innovative market-based programs without compromising existing safeguards in water quality protection, and CBF is concerned that the CBP's draft guidance to states fails to meet this challenge. (CBF, pg3)

**Comment:** Consideration should be given to how water trades relate to air trades impacting the same waters. (EPAMM)

**Comment:** We on the receiving end are fed up with over control. (MFC, pg. 1)

**Comment:** We need to be open to other programs including the Clean Air Markets program which represents a dramatic shift from traditional inflexible, command-and-control regulatory methods. (WPC, p.1)

**Comment:** The goals of the program must be to: achieve environmental benefits through reductions in specific nutrients – nitrogen and phosphorus; facilitate active trading of compliance options to minimize compliance costs, maximize economic efficiency and allow strong economic growth; promote pollution prevention strategies and technologies. (WPC, p. 2)

**Comment:** To further protect against a private property claim from being made, an effort should be made t have the nutrient trading program incorporated into the Clean Water Act. (WPC, p. 3)

**Comment:** The WPC recommends two additional Fundamental Principles: (WPC, p. 4)

#9 – The Chesapeake Bay Program should administer the program. (WPC, p. 4) #10 – Trades must only occur between the same pollutants. (WPC, p. 5)

**Comment:** A number of critical safeguards must be in place in order to avoid negative impacts from pollution trading and to ensure that trading improves, instead of degrading, our waterways. (CWA, p.5)

## **Grammatical and Editorial Comments**

## X. Grammatical and Editorial Comments

No comments were received on this topic

## Attachment I

A questionable trade Bay cleanup: Nutrient trading plan good in theory, but limited in practical effect, application.

Originally published Oct 21 2000

<<...>>

IN A PERFECT system, trading nutrient-pollution credits might boost efforts to clean up the Chesapeake Bay. A plan under study by the multistate Chesapeake Bay Program would permit water polluters to buy "nutrient credits" from those who are able to reduce their pollution below legal limits. The aim is an overall reduction of nitrogen and phosphorus, which feed harmful algae, with a market reward for clean-water practices and lower costs of compliance. But a system of trading allowances has some serious limitations. The local impact of excessive discharges can vary widely: A decrease at Point A doesn't level out an increase in discharge at Point B on the same tributary. Pollutants may not be uniformly mixed in the same body of water. Uncertain quantities of pollutant runoff from developments and farms are extremely hard to equate with the measured discharge from a plant's outfall pipe. Establishing the initial inventory of credits and deciding who is eligible

to buy them (without net harm to the environment) can test even Solomonic judgment. Bay officials point to 345 large wastewater treatments plants in the watershed. About 100 have advanced systems that remove more nutrients than required. Those plants could generate credits for sale to other plants, which would find it cheaper than modernizing their facilities. In some cases, that might be an efficient, effective solution. But promoting a broader nutrient allowance trading system entails too many uncertainties. The search for innovative controls must continue. Bay states will fall short of their 1987 pledge to cut nutrient pollution by 40 percent by this year's end. Growth of population and livestock farming make that goal more difficult. But there's no way to trade that away.



## APPENDIX A COMMENTATOR LIST AND CODE TABLE

NAME	ORGANIZATION	ORG CODE	
Comments Received by Virginia			
Various via CBF form letter*	us via CBF form letter* Chesapeake Bay Foundation		
Peter L. deFur, Ph.D.	VCU, Environmental Studies Program	VCU1	
Kimberly A.Prisco	VCU, Environmental Studies Program	VCU2	
Robert Fetters	VCU, Environmental Studies Program	VCU3	
Cathy H. Walsh	VCU, Environmental Studies Program	VCU4	
Stacy Reed	VCU, Environmental Studies Program	VCU5	
Jennifer L. Ledbetter	VCU, Environmental Studies Program	VCU6	
Karen Doran	VCU, Environmental Studies Program	VCU7	
David Walker	VCU, Environmental Studies Program	VCU8	
John J. Rowley	VCU, Environmental Studies Program	VCU9	
Scott Reed	VCU, Environmental Studies Program	VCU10	
Ian Whitlock	VCU, Environmental Studies Program	VCU11	
James Speckhart	VCU, Environmental Studies Program	VCU12	
Greg Edmonds	VCU, Environmental Studies Program	VCU13	
Marolyn Parson, Ph.D.	National Assoc. of Home Builders	NAHB	
Aileen C. Smith	DOD Ches Bay Program Coordination	DOD	
William W. Orrock	Hanover-Caroline SWCD	HCSWCD	
Robert E. Jordan	Private Citizen	PCRE	
William Hunley	VA Assoc. of Munic. Wastewater Agencies	VAMWA	
Dale C. Hammes, P.E.	Loudoun County Sanitation Authority	LCSA	
Robert Wichser	Richmond Dept. of Public Utilities	RDPU	
Bridgewater Workshop	September 26, 2000	VA – 9/26/00	
Manassas Workshop	September 28, 2000	VA - 9/28/00	
Richmond Workshop	October 3, 2000	VA – 910/3/00	

## \* Commenters using CBF Form Letter:

Anderson, David	Dudde, Amanda M.	Lamar, Andrew	Rhame, Jean
Anderson, Troy	Durrani, Nahia	Lambert, Eric	Ricci, Glenn
Antony, Paul	Dwyer, Jacqueline	Levy, Mayer	Rivera, Gloria
Barrett, Christina	Everett, Shawn	Lowery, Lorie	Roberts, John
Berres, Matt	Foster, Amber	Lyle, David	Roper, Ruama
Blank, Corinne	Frontz, Jeffri H.	Mathis, Elisabeth	Sanders, Delaine
Bobitz, Ward	Galavotti, Holly	Meyer, Christopher	Sheldon, Kimberlie E.
Bond, Melanie	Gallup, Elizabeth	Nelson, Christina	Smoot, Ashley
Brede, Katherine	Graybill, Roy & Elizabeth	Olson, Jane	Spence, Betty
Brown, Luke	Guruswamy, Dharm	O'Neill, John	Story, Milissa
Brucato, Courtney	Hanada, A.P.	Pabis, Kate	Sude, Daniel
Calvert, Patrick	Hochstadt, Ted	Palmer, Jim	Taylor, Gary
Carter, Ann	Huffman, Michael	Pelina, Anthony	Tazewell, John
Chambers, Joy	Hunter-Clapp, Betty	Perkins, Douglas M.	Thomas, Paige
Crumpacker, Amy	Ishee, Mary Catherine	Pinkney, St. George	Walker, Shawn
Culler, Alan	Jackson, Jan	Pospichal, Tom	Wicks, Margo
Derzon, James	Kelly, Kathy	Rees, Cherie	York, Ruth E.
Dixon, Sidney	Kennedy, Bradley	Reilly, Sheila	•
,	Kratzert, David	Replogle, Michael	
	•		



## APPENDIX A COMMENTATOR LIST AND CODE TABLE

## **Comments received by Maryland**

Code	Commentor Name/Organization	Date
PM	PM denotes comments received during the public meetings	9/26, 9/27, 9/29
EL	EL denotes written comments received from Earl Ludy	9/29/00
MFC	MFC denotes written comments received from Max & Flo Chambers	10/3/00
SG	SG denotes written comments received from Sharon Ganzier	10/27/00

NAME	ORGANIZATION	ORG CODE	
Comments Received by Pennsylvania			
R. John Dawes	W. PA. Watershed Protection Program	WPWPP	
F. Deardaft	Private Citizen	PCFD	
Nancy A. Evans	PPL Generation, LLC	PPL	
J Andrew Hadley, P.E.	Proctor and Gamble	P&G	
Ed Hopkins	Sierra Club	SC	
Nate King	Private Citizen	PCNK	
Robin Mann	PA Chapter, Sierra Club	PCSC	
Courtney Myers	Private Citizen	PCCM	
Marolyn Parson, Ph.D.	National Assoc. of Home Builders	NAHB	
Larry J. Schweiger	Western Pennsylvania Conservancy	WPC	
Michelle Stayman	Private Citizen	PCMS	
James M. Stuhltrager	Mid-At. Env. Law Cent.,and Am.Lit.Soc.	MAELC and ALS	
William B. Thomas	Electric Power Generation Association	EPGA	
Robert Wendelgass	Clean Water Action	CWA	
Wilkes-Barre Workshop	September 26, 2000	PA – 9/26/00	
Williamsport Workshop	September 28, 2000	PA - 9/28/00	
Harrisburg Workshop	October 5, 2000	PA - 10/5/00	

Comments Received by Washington D.C.

DC Workshop	10 October, 2000	DC - 10/10/00
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## APPENDIX A COMMENTATOR LIST AND CODE TABLE

## Comments Received by EPA at the Chesapeake Bay Program Office

<b>Comment Code</b>	Commenter/Organization	Date
MFC	Max Chambers, Private Citizen	9/29/00
CBF	Jolene Chincilli, et al., CBF	10/27/00
EPAMM	EPA Region3 Management Meetings/EPA	10/16, 10/24,10/30/00
EPAWP	William Painter, EPA	9/21/00
EPAJC	John Capacasa/EPA	8/29/00
MAM	Ron Neugebauer/MAMWA	11/8/00



This Appendix covers the following topics:

**B.1: Public Meetings** 

B.2: Public Comments and Major Issues

B.3: Changes Made in Response to Public Comments

B.4: STAC's Comments and Major Issues

Public review of the Trading Guidelines consisted of 16 public meetings around the Bay watershed, solicitation and receipt of written public comments, and also a review organized by the Bay Program's Scientific and Technical Advisory Committee. The Negotiation Team made changes in response to these comments where it considered changes appropriate. Changes not made in response to comments were generally because the Team believed that such comments related to details more appropriate for consideration by the individual jurisdictions in the development of their own programs, or because the comments were evenly balanced on both sides of a particular issue such that the Team's negotiated consensus reflects the best compromise on that issue.

### **B.1 Public Meetings**

Sixteen Public meetings were held during September and October, 2000. The dates and locations are listed below. Generally attendance ranged from 3 - 30 attendees at each of the public meetings. Participants included stakeholders from a variety of disciplines, ranging from public citizens, environmental advocates, industry and local governments. Discussions focused on educating the participants on the concept of trading more than the specifics of an individual trading program. Proceedings for each meeting have been compiled by each of the jurisdictions hosting the meetings. These proceedings can be found on the Chesapeake Bay Program's web site at <a href="https://www.Chesapeakebay.net">www.Chesapeakebay.net</a>.

#### NUTRIENT TRADING PUBLIC MEETING DETAILS

State	Meeting Location	Meeting Building	Meeting
			Dates/Times
VA	Bridgewater	Bridgewater Retirement	Sept. 26
		Center	10 - 12pm
	Manassas	Manassas Battlefield Holiday	Sept. 28
		Inn	2-4pm, 7-9pm
	Richmond	VA Power Office in	October 3
		Innsbrook, VA	2-4pm,7-9pm
PA	Williamsport	DEP North Central Office	9/28
			2-4pm,7-9pm
	Harrisburg	DEP Rachel Carson Bldg	10/5
			2-4pm,7-9pm



	Wilkes-Barre	DEP NE Office	9/26
			2-4pm,7-9pm
MD	Laurel	WSSC Headquarters	9/26
			2-4pm,7-9pm
	Hagerstown	Hagerstown Community	9/27
		College	7-9pm
	Eastern Shore	Salisbury State	9/29
			7-9pm
DC	DC	Martin Luther King Library	10/10
			6:30 - 8:30pm

### **B.2** Public Comments and Major Issues

One hundred and eighteen comment letters were received by the jurisdictions and the Chesapeake Bay Program collectively on the Draft Nutrient Trading Guidelines Document. A summary of all of the comments, entitled "Nutrient Trading in the Chesapeake Bay Watershed Public Comments Summary" can be obtained via the Chesapeake Bay website. This summary is an assimilation of the individual comment summaries prepared by each jurisdiction for the comments they received. Hard copies of the individual jurisdiction comment summaries are also available at the Chesapeake Bay Program, as well as hard copies of the actual comment letters.

The major issues presented by the comments are delineated below.

#### a) Guideline #1- trading to meet or maintain the reduction goals

Many believe that trading should not occur until after achievement of the 40% goal. On the other hand, many believe that this would unnecessarily restrict the market. Many believe that trading only between "like sources" will eliminate the most likely partnering of buyers and sellers.

#### b) Fundamental Principle 3:

Trading should have a defined cap within which to trade. Many felt that this should be accomplished via TMDLs. Many stated that trading should not occur until TMDLs are established.

#### c) Fundamental Principle 4

Many believe that trading should result in a net reduction, and not just remain as is.

#### d) Fundamental Principle 5: what does strive to do its part to meet the 40% goal



Many are confused about what this means

#### e) Fundamental Principle 6

Many believe that trading within the major tributaries is too large an area for trades to ensure water quality. On the other hand, many felt that this would unduly restrict the market. Also, many were concerned that it is important to restrict the possibility of producing pollution hot spots.

#### f) Guideline 24: Permitting Trades

Many felt that trading should occur within the NPDES permit system. Especially where local water quality is at issue. This is because general permits are not sufficiently transparent and do not include sufficient opportunities for public participation. Many felt that enforcement and accountability cannot be guaranteed if not in the NPDES permit system.

#### g) The section on ratios needs to be corrected, and/or clarified.

#### h) Monitoring

Water quality in streams or rivers with trades must be closely monitored. The guidance must require the establishment of a water quality monitoring program which requires monitoring by the traders and the state. Many stated that the guidelines do not go into enough detail on this.

#### i) Trade Mechanism

Many comments were submitted regarding the trade mechanisms that would be in place for trading. Many wanted more information and felt the Guidance document is lacking here. The concept of individual trades versus a dynamic trading system was mentioned and several recommended providing guidance on this. A dynamic trading system, where available trades are generated and posted in a clearinghouse type fashion, available for sale on the open market was often mentioned as a preferable approach to limiting trades to individual relationships which would bog down a trading program.

## **B.3** Changes Made in Response to Public Comments

The Nutrient Trading Negotiation met after the public comment period closed on October 27, 2000 to discuss the comments and to reach consensus on any changes resulting from the comments. The following changes were made to the document.

#### a) Additional language to be put into the guidelines:

For trading to occur within a major Bay tributary, the nutrient trading program must incorporate: (a) specific nutrient loading allocations established to provide water quality conditions necessary to protect living resources in the tributary and the Bay; (b) a baseline and a cap for nutrient loads for the tributary; and (c) allowances for point and nonpoint sources.



#### b) Trading to Achieve or Maintain the Chesapeake Bay Nutrient Cap(Guideline #1)

Trading should be allowed among "like" source types in order to achieve the 40% nutrient reduction goal. This means that point sources could trade with point sources, and nonpoint sources could trade with nonpoint sources, but point sources could not trade with nonpoint sources.

Within several years after the implementation of a trading program the states may reexamine the success or failure of trades to date in achieving the goal and thereafter, determine if cross source trading to achieve is appropriate.

Once the 40% nutrient reduction goal is met, trades should be allowed within and across source types, to maintain nutrient reduction goals or further reduce nutrient levels.

**Add to text:** Allow states to make the determination (40% goal discussion)

#### c) Fundamental Principle #4

Change the fundamental principle from "Each trade must achieve no change in nutrient loadings or a net reduction in nutrient loadings" to:

"Each trade must result in a net reduction in nutrient loadings or contribute to maintenance of a tributary nutrient cap. Net reduction in loadings or maintenance of a cap shall be calculated based upon the estimated tributary loadings at a point in time determined by the state."

#### d) Fundamental Principle #5

Change this fundamental principle from "Every source should strive to do its part in reaching the 40% reduction goal prior to considering the nutrient trading option." to: "Sources should implement nutrient reduction actions to achieve the 40% reduction goal, as well as the goals adopted for the tributaries south of the Potomac River prior to pursuing a nutrient trading option."

#### e) Placement of Fundamental Principle 6:

Move Fundamental Principle #6 on geographic scope to Fundamental Principle #2 so that the reader will see the direct connection between no impacts on local water quality to the geographic scope of a trading effort.

#### f) The Ratio Appendix:

The Appendix on ratios was corrected to correctly describe the use of ratios by other programs in the country

#### g) Guidelines for Enforcement and Compliance

24. Add "Any NPDES permitee with a nutrient effluent permit limit desiring to trade should have the trade linked to its permit."

Add in the text a statement about discretion as to whether an NPDES permittee wishing to SELL credits must have its NPDES permit linked to a trading agreement.



#### h) Guideline 22:

Annual account balancing periods should be used for nonpoint sources based upon seasonal monitoring.

#### i) Guideline 24:

Add a statement in the text about how trading between federal facilities is an exception to guideline 24 regarding use of public funds to trade.

- j) Change the title to "Nutrient Trading Fundamental Principles and Guidelines"
- k) Add appendix about public meetings, comments and responses.
- l) Insert A, for page 14 under section 3.2: Geographic Scope: Trading may occur between states as long as the trade is within the major tributary boundaries such as between Maryland and Virginia in the Potomac River basin. However, according to Fundamental Principle 6 below, trading would not be allowed between different basins in different states such as between the Susquehanna and the Potomac River Basins.
- m) Insert B, for page 28 under section 7.0: Ensuring Accountability: (remove second paragraph under "Assessing Performance" and replace with the following) Monthly monitoring for point sources is suggested to enable adequate tracking of nutrient reduction through trading and to provide sufficient time to take corrective action in the event that trading contracts are not being honored or anticipated results are not being achieved. It is further recommended that monitoring for nonpoint sources be performed on a seasonal, rather than annual, basis, to better account for storm events and periods of wet weather.
- n) Insert D on page 14 under section 3.3 Fundamental Principles, just after the second to last sentence of the first paragraph: Note that the first fundamental principle essentially states that local water quality will not be impacted by trades. This is an overarching theme that any trading program must incorporate when considering trade location and nutrient credit exchanges. Implementation of this principle will ensure that pollution "hot spots" will not result from trades.

## **B.4 Comments Received by STAC**

The Chesapeake Bay Program's Scientific and Technical Advisory Committee (STAC) also provided comments on these trading guidelines. Not only was the Chair of STAC intricately involved in planning and organizing the Negotiation Team and their meetings, and providing technical expertise to the Team, but STAC also reviewed this document in addition to selecting 3 additional experts on trading in the U.S. to review this document and provide comment. The six people that performed this review are the following:

Kurt Stephenson, Virginia Tech Pat Norris, MSU



Leon Danielson, NC State University Claire Schary EPA with the Idaho Trading Program Dave Batchelor, Michigan Dept. of Environmental Quality Mark Tedesco, EPA with the Long Island Sound Program

Below is a summary of their comments. Hard copies of these comments may be obtained from the Chesapeake Bay Program.

#### a) Each reviewer made complimentary comments to begin the review.

It is a comprehensive document that is well written and should be easy for users to understand. The level of consensus that has been achieved is remarkable. It is a valuable resource to potential users. Great effort to get stakeholder involvement. Stakeholder involvement increases chances of program success. State flexibility allows states to select the approach that fits them best. Highly prescriptive trading programs have not proven to be very successful - these fundamental principles and guidelines strike a good balance in this regard.

#### b) Simple extension of Command and Control

Given the 34 guidelines, the system is a direct extension of the existing command and control system. Voluntary exchange can not exist. Simple extensions of command and control systems will not bring about the allowance markets that are the truly innovative solutions for water quality management.

#### c) Centralized regulatory agency versus decentralized allowance markets

This document does not provide information, guidelines or discussion devoted to the characteristics needed for an allowance market to function. No distinction exists between centralized regulatory agency versus decentralized allowance markets. The trading framework embodied in the document provides a workable approach only for a highly managed program.

#### d) Allowance market development is missing

None of the eight fundamental principles deals with requirements for allowance market development. Property right conditions necessary for investment in aggressive pollution control activities is not provided for in this document.

e) Establishment of Exchange Commodity: The document leaves a lot to be desired on establishing the exchange commodity. A fundamental fact that is glossed over in the text is that the largest hurdles to overcome in establishing a market-like alternative is, in fact, establishing the exchange commodity - a limited number of enforceable discharge allowances. It is not clear from reading the document why a nitrogen source would want to purchase credits under the voluntary framework. At least one party to a trade must have a source specific, enforceable allocation. The treatment of trading credits versus adjusting allocations needs clarification. In many credit-trading programs, allocations remain the same but compliance is determined based on the discharge adjusted by the sale or purchase of credits. The definition of an allowance sounds like a TMDL-like definition of a waste load allocation for a point source but it is unclear throughout the document whether the individual non-point sources will receive a TMDL-like load allocation.



#### f) Requirement severely restrict trading

The guidelines establish a number of requirements that severely restrict trading and the benefits trading offers. These factors will substantially decrease the number of trades and the economic and water quality benefits that could be achieved. Greater benefit at lower costs can be achieved through trading programs that establish a CAP and let the market decide where the most costeffective reductions can be found. The requirement that the buyer is liable for seller's actions will diminish the willingness to trade. From an economic standpoint, it is not clear why point/nonpoint trades are forbidden until after the 40% reduction is achieved. Because point sources have made reductions, their marginal cost are lower than less controlled non-point sources - large economic gains could be achieved with point/non-point trades. This document begs the question as to what incentive exists for a source to participate. The guidelines do not allow a source to trade to meet the limited specified by the allowance. If trading cannot be used to meet initial allowances, then how can it be used to meet the initial tributary load allocation or CAP? If the public has the opportunity to comment prior to each trade this would be an onerous and costly requirement that would most likely kill a trading program. The guidance requires states to certify credits but does not indicate how this will be done. It is not clear whether fundamental principles 4 and 5 allow sources to achieve a net 40 percent reduction through trading. These 2 principles will affect how targets and baselines are set and determine the performance of the program. The guidance removes the least cost options of reducing storm-water loading. The guidance creates "maximum extent practical" control technology requirements. The requirement for trading "like sources only" may create a barrier to municipal source participation. Restrictions on cross tributary trading severely restrict benefits from trading. A potentially big economic and environmental opportunity is being missed by not allowing trading between point and non-point sources at the outset. Explain the term prioritizing trade partners. Any prioritizing should be left to the private sector. The state should not be an enforcer of private contracts. The compliance design creates a tremendous administrative burden to the state by calling for a certification program for screening prospective buyers and sellers and then for certifying credits prior to trade approval.

#### g) Restrictions on use of cost-share funds

Restrictions on use of cost-share funds should be decided by the rules of the programs that provide those funds, not the trading programs. The document does not indicate how trading will be coordinated with nutrient management plans. Additional direction is needed on how to handle non-point sources, cost share monies and nutrient management plans.

#### h) Compliance for non-point sources

It is unclear how compliance from non-point sources will be determined.

#### i) Working documents

The guide must be perceived as a "working document" and be revised after experience on actual cases.