

## Trading Program Guidance Comments

The following is a compilation of the comments/questions/suggestions that were submitted by workgroup members on the first version of the Draft Trading Guidance Document that was provided to the group in May 2006 and second version submitted to the group in July 2006.

The first version of the Draft Trading Guidance included a section related to Planning and Permitting Policy and Procedure for New Land Development Projects Proposing New Sewage Treatment Plant Discharges Tributary to the Chesapeake Bay, it was decided to remove this section from the guidance document, therefore comments submitted on this section were removed from this document.

The second revision of the Draft Trading Guidance incorporated many of the suggested changes provided in the comments.

Note: This second revision has been incorporated into the draft policy and is no longer a separate document.

### First Version Comments

#### I. DEFINITIONS

- **Aggregator/Broker:** This definition states that credits can be “sold to the exchange or directly to a PS or developer”. What would be the advantage of an aggregator selling to the exchange—which seems to itself be another aggregator. The most likely scenario is that the credits would be sold directly to PS or developer via the marketplace. Suggestion: Eliminate the second sentence of this definition altogether. (WRI)
- A suggestion was made to add “as applicable to sector” to the second definition of baseline. (Workgroup Mtg 5-5)
- **Certifier:** Suggest the following definition: “An individual or entity authorized to certify estimated nutrient reductions and resulting credits. Certification involves 1) validating that calculations are correct and 2) verifying that the BMP has been implemented.” The term “calculate” should be eliminated from original definition as calculations can be done by non-certified agents (such as the farmer, ag consultant, technician, etc.), or eventually by NutrientNet which would use standard estimation calculations as approved by DEP. (WRI)
- A recommendation was made to use the second definition of certifier (no changes). (Workgroup Mtg 5-5)
- **Credit:** Suggestion: Eliminate “expressed in pounds per year”—reductions are expressed in pounds per year, but credits do not have units. For example, a farmer that achieves reductions of 100 lbs of N/year may only generate 25 credits after the application of delivery factors, threshold requirements and trading ratios. (WRI)
- A recommendation was made to use the second definition of credit, deleting the words after “exceeding” and then adding “expressed in lbs/yr.” (Workgroup Mtg 5-5)

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- **Exchange:** This definition seems to indicate that the exchange is another aggregator (“collects and distributes certified credits”) and also conflates the term Exchange with the function of a registry (“records necessary information related to...transactions”) and marketplace (“handle financial transactions related to buying and selling of certified credits”). In fact, we would suggest that the DEP Exchange role is the same role as aggregator and that the marketplace and registry functions are distinct—and should be defined elsewhere. In that case, ‘Exchange’ would be eliminated from the definitions list. (WRI)
- **Nutrient Reduction:** The nutrient reductions are expressed in pounds per year. Suggestion: add ‘expressed as pounds per year’ to this definition (as opposed to credit which has no units). (WRI)
- A recommendation was made to use the first definition of registry. Discussion followed about confusion between the terms exchange and registry. J. Hines asked to hold the discussion until next meeting, where examples would be used to help clarify questions. (Workgroup Mtg 5-5)
- The term threshold was not discussed, with the understanding that other groups are working on it. (Workgroup Mtg 5-5)
- It was recommended that a new definition for third party be considered. Terms like private entrepreneur should be reviewed/considered. (Workgroup Mtg 5-5)
- A recommendation was made to consider administrative fees be added to ratios. Following discussion, it was suggested that these should be separate from ratios. (Workgroup Mtg 5-5)
- Certifier: I like the second definition for Certifier, I do not know whether the certifier should certify that the reductions are certifiable - that should be clearly defined somewhere. (Michael Kyle)
- Credit: I like the second definition, keeping pounds per year out of the definition keeps some flexibility. (Michael Kyle)
- Nutrient reduction: There are other ways to reduce nitrogen beyond BMP or technical upgrades - for example, expanding a system or operating a system in a certain fashion can result in reduction without a technical upgrade. (Michael Kyle)
- Trading threshold: This term should be defined, it is used in Section II in the document. (Michael Kyle)
- Offset: Should be defined (see comment under Section III) (Michael Kyle)

**Suggested additional definitions:** The following definitions and terms may be useful for the program guidance. These definitions come from the GHG world which has spent many years working through issues around validation, verification and certification. (WRI)

- **Validation** is the process of ensuring, before a project is implemented, that it will result in the claimed nutrient reductions, that it contains adequate measures for monitoring and verification, and that it meets relevant project criteria. (WRI)
- **Verification:** Refers to establishing whether the measured nutrient reductions actually occurred, similar to an accounting audit performed by an objective, certified party. It is the systematic examination of nutrient loading and reduction information, using audit-based skills by an independent third party. Verification

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involves an analytical review of a data acquisition process, assessment and testing of internal controls, and the validation of data. Verification will be a key step towards certification. Certification is the final stage of the nutrient reduction process, when the nutrient reductions are transformed into a commodity (nutrient reduction credits). (WRI)

- **Certification** refers to the formal declaration of an independent body stating that claimed nutrient reductions have been achieved. (WRI)
- **Marketplace:** The marketplace is a place (e.g., online market) where buyers and sellers can meet, negotiate trades and finalize transactions. (WRI)

## II. PROPOSAL SUBMITTALS

- Under “Proposal Submittals,” a recommendation was made to find another term for stakeholder. (Workgroup Mtg 5-5)
- Suggested rewording: Potentially generate nutrient reductions to be certified as credits (PA Builders)

### Basic Requirements for Proposals:

- Concerning the second bullet under “Basic Requirements,” J. Bell asked if verification was the intended term. A suggestion was made to use the term ‘documentation’ instead. (Workgroup Mtg 5-5)
- Discussion was initiated for the section “Proposal Review Process.” A suggestion was made that members of existing DEP advisory committees could become part of the process. A request was made to consider the time period associated with credits, and whether approvals could be considered for time periods greater than one year. It was also mentioned that concerns about trade secrets, confidentiality, etc need to be considered. (Workgroup Mtg 5-5)
- This section of the guidance is intended to help guide ~~stakeholders~~ individuals through the process of submitting proposals for approval that would: (PA Builders)
- Proposals must ~~include verification~~ demonstrate that credit generating projects meet applicable trading thresholds; (PA Builders)
- **Bullet 2:** Suggested wording change: Proposals must include documentation (or demonstrate) that the credit generating projects meet applicable trading thresholds (WRI)
- **Bullet 5:** All proposals should be subject to the same certification process. Therefore, it is just necessary that the certifier is approved as they should be given a verification standard to which they need to adhere too. (WRI)
- **Bullet 6:** This should be part of the verification process. Therefore, this information is signed off on and then sent to DEP (WRI)
- Many of these requirements can be easily checked within NutrientNet. If DEP is going to require paperwork for all these requirements, it is going to make it a burdensome and costly program. The requirements that can easily be incorporated into NutrientNet include:
  - a) **Bullet 2**—Proposals must include verification that credits meet trading threshold. If a percentage number is used then this can easily be applied to the

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nutrient reductions estimated in NutrientNet. If trading thresholds include both the baseline compliance and threshold requirements, this still can be easily done and then the information just verified.

- b) Bullet 4—Load reductions calculations and measurements must be department approved. Using NutrientNet the approved DEP calculations can be incorporated so this will not be an issue.
  - c) Bullet 7—Proposals must include a summary sheet. This can be easily generated within NutrientNet so that all proposals contain the same information. In addition, much of the information that would be needed for this will have already been entered into or generated within NutrientNet.
  - d) Bullet 8—Proposals must include background research etc. This will create a huge amount of paperwork for DEP. Much of this information may already be part of NutrientNet (e.g., calculation algorithms) or entered into NutrientNet. (WRI)
- The Draft would require as a prerequisite for consideration of a nutrient trading proposal "verification that credit generating projects meet applicable trading thresholds." As discussed at the last meeting, care needs to be taken to distinguish between the type of "verification" needed for consideration of a nutrient a nutrient trading proposal and the aspects of "certification" necessary for determining the number of nutrient credits that will be available for trading as a result of a BMP. To that end, we would suggest that more specific detail be provided with respect to the persons who will be recognized as qualified to "verify" that a potential seller of credits has met the baseline and threshold requirements and will generate tradable credits of nutrient reduction through implementation of a BMP and what specific items will need to be "verified" in order for a proposal to be considered for approval. (PA Farm Bureau)

Specific Elements Needed for Potential Credit-Generating Projects:

- **Certified Registry:** Not sure what the purpose of the Certified Registry is...should be clarified. Would certifier receive cost share, have compliance checklist? This seems to be generator information that is captured in the "Trade Registry". (WRI)
- **Trade Registry:** Some of these data elements are unclear:
  - a. Area of Reduction—are you asking for acres? Lat/long coordinates? What about PS reductions?
  - b. Nutrient Source—what would be possible values for this field?
  - c. Monitoring—are you asking for a monitoring plan, monitoring dates? Not sure what monitoring requirements are for trades. (WRI)
  - d. The elements necessary to capture all pertinent data should be thought through thoroughly and may evolve with this process. (WRI)
- **Online Bulletin Board:** Need some clarification on what this is. Will this simply be the publicly available registry information (pulled from the Trade Registry)? Where will this be available? (WRI)

Proposal Review Process:

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- The Draft states that proposals for nutrient trading credits "may be reviewed by additional stakeholders that have related interests in the trading program." We are not clear on the intended objective of this provision, and we are concerned that the opportunity for "interested parties" to be involved in the process for evaluation of tradable credits may result in determinations that are inconsistent and arbitrary, and are motivated by economic or political self-interest. We would suggest this provision be deleted, or changed significantly to more clearly state the provision's intent and the circumstances under which "interested parties" will have opportunity to participate. (PA Farm Bureau)
- *General comment:* WRI believes that the process outlined here is extremely labor intensive and will impose very high transaction costs on buyers and sellers—limiting the fluidity of the market. Most of these functions we envision being done in NutrientNet which will provide standard calculations and electronic certification/approval processes. (WRI)
- *Proposed Non-point Source submittal process using NutrientNet:*
  - Step 1: applicant (individual farmer or aggregator) establishes an account on NutrientNet (assigned by DEP administrator).
  - Step 2: applicant uses NutrientNet to estimate project reductions and credits and electronically submits this 'proposal'.
  - Step 3: Proposal is reviewed by local DEP-authorized certifier (such as conservation district staff or other authorized entity who would hold certifier status and have permissions within NutrientNet to certify proposals). Role of certifier would be to 1) validate calculations (i.e. certify that estimated reductions are possible if project is implemented) 2) verify that BMP is implemented. Once these two conditions are met, certifier would electronically certify the credits on NutrientNet and credits would be placed in applicant's NutrientNet account and also registered in the registry.
  - Step 4: Applicant can place credits for sale on the marketplace. In the case of an aggregator, his account would hold credits from several approved projects and these credits could be listed jointly or separately. (WRI)
- *Proposed Point Source submittal process using NutrientNet:*
  - Step 1: Authorized point source user establishes an account on NutrientNet (account will be enabled by DEP). This account will hold the facility permit information for N & P limits for that facility.
  - Step 2: Point source user enters in current year flow & concentration limit data per his DMR data directly into NutrientNet (alternately this data may have to be projected if DEP regulations stipulate that compliance must occur within permit year). NutrientNet will compare this data to the regulated limits and calculate either the generated credits or the credits needed for compliance. Point source will electronically submit this data to DEP.
  - Step 3: DEP will use NutrientNet to electronically certify (or not) the point source's estimated credits based on either actual DMR data or projected DMR data. Certified credits will be placed in point source accounts on NutrientNet.
  - Step 4: Point source may post credits on the marketplace. (WRI)
- Note: we realize that until NutrientNet is fully developed there is a need for an interim review process. However, we suggest that at the very least DEP establish

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a recognized methodology for calculating reductions/credits for several BMPs before approving any projects. (WRI)

**APPENDIX DOCUMENT**

**NUTRIENT CREDIT REGISTRATION/CERTIFICATION FORM**

- Need to include section in form on whether there is a local TMDL in the watershed for nutrients. Also need a check on whether the stream segment maximum allowable credits has been exceeded. (EPA Region 3)
- DEP need to make a decision on whether BMPs that are directly funded by 319 are creditable. If not, then this question needs to be asked on this form. (EPA Region 3)
- More calculation to derive credits is needed in part 5b...like trading ratio. (EPA Region 3)
- I find 5b confusing. Is the baseline loading covered under units? This loading must be identified somewhere on the form. Same for credit generating practices for the line that says # reduced...reduced from what? If # beyond baseline reduced, the form should say so. This section should clearly identify the credits earned, which may be different than the # reduced. (EPA Region 3)
- I'm not sure how the Bay model can be used to 'verify' the credits. I thought this was an inspection exercise. If so, the person inspecting the BMP should put the date of the inspection and sign the form. (EPA Region 3)

**APPENDIX DOCUMENT**

**NUTRIENT CREDIT REGISTRATION/CERTIFICATION FORM**

- Isn't this a repeat of the earlier form? Are you just checking that we read it? (EPA Region 3)
- *General:* The context for this form needs to be explained. It appears that this form is to be used by the certifier to certify that the nutrient reductions have occurred and then this form is sent to DEP for final approval for registration. However, there are some conflicting questions that ask about registration that are confusing. (WRI)
- It is also not clear for what period of time this form is valid for. Is this an interim form? A large amount of the information on the form will come directly from NutrientNet (either as default information or as user-entered information). This means that if there is always going to be a requirement for this form, then to streamline the process a default form should be contained within NutrientNet. This form gets automatically filled in by NutrientNet, the user then checks all the information is correct, adds any additional information not already captured by NutrientNet, and then the user prints out the form and gets the relevant parties to sign it.
- Information would be captured by NutrientNet and can automatically be used to populate this form includes:
  - #1: Operation Name
  - #2: Address
  - #3: Watershed affected by operation
  - #4: Nutrient Certified

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- #5: Best Management Practices
- #6: Baseline Compliance Checklist
- #9: Preservation/conservation easements (this can be a separate question added to NutrientNet) (WRI)
- #1: Registration/Certification No.: Where does the registration/certification no. come from? Why is there a need to include certification here? It seems to make more sense that this number is not a certification number but would be generated when the credits are registered. As long as the credits have been certified then they are eligible for registration.(WRI)
- #4: Nutrient Certified: Why is the term 'nutrient certified' used? At this point the nutrient reduction has not been certified but is being certified. Suggestion: delete 'certified' and just use 'Nutrient'. (WRI)
- # 5: Best Management Practices
  - *General*: The alphabet numbering is used more than once. (WRI)
  - *a) Baseline (page 16)*: How does this relate to baseline compliance? Suggest changing 'baseline' to 'existing best management practices' to avoid any confusion. (WRI)
  - *Current Practices: Units (page 16)?* What are units? Does this refer to actual pounds/year (existing load) that comes from the field where the BMP is implemented (total lbs from a field) or are units the lbs/yr that the implemented BMP reduced or are you just wanting an answer like 'pounds/year'? (WRI)
  - Suggestion: You explicitly ask for what you want. Our thought is that you are after the existing load that is coming from your field (or farm---as this still needs to be determined) and that this load would include any reductions already resulting from existing BMP's. (WRI)
  - Therefore, change 'units' to 'Existing nutrient/sediment load (pounds/year)' (WRI)
  - *Practices planned prior to certification (page 16)* Suggested wording change to 'Additional best management practices to be implemented prior to certification'. (WRI)
  - As above, clarity around 'units' is needed. (WRI)
  - *b) credit generating practices (page 16)* Has the e.g. in parenthesis been established? We were under the impression that was not the case and that credits could be generated as long as they meet the baseline compliance and threshold requirements...and the threshold requirements were tied to a percentage reduction not the bay model BMPs, etc. There are issues with not counting Bay Program BMPs as the CB model assumes that all these acres have gone in, but are not able to specify exactly where the BMP have been or should be implemented. The concept of tying the ability to generate reductions to a percentage is a much fairer and easier route to go. The CB model could be used to identify what the threshold percentage number should be, and then this could be used as the threshold level for generating credits. (WRI)
  - *i. Current (page 16)*: Are you saying that you may already have BMPs in place that can be used to generate credits? If so, then you are assuming the

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CB model BMPs can't be used to generate credits (which is not how we thought the discussions were heading), and anything not included as a BMP in the CB model is eligible regardless of whether it meets a threshold or not. (WRI)

- *ii Planned (page 16):* This suggests that farmers can register planned BMPs. We did not think this was the case. Similarly, did not think farmers could certify planned BMPs as when you certify something it needs to have been implemented. However, you can validate information pertaining to a planned BMP (see definition we added to the definitions section). (WRI)
- Also, the fact that there is a 'value' question there which suggests a set price. We were under the impression that most folks were now comfortable with a varying price. We have also made extensive comments on why we think that DEP setting a price could be 'dangerous' for DEP. (WRI)
- *e) Method of calculation (page 17)* Why is there more than 1 method of calculation? This is will get DEP in the situation where they are comparing apples with oranges as there is no consistency in terms of how the calculations were done. This is the whole reason why NutrientNet is attractive as it standardizes how reductions are calculated and adds consistency to any credit/reduction calculations. Once DEP has an approved methodology all people will use the same calculation method. By allowing many different methods will place an incredible burden on DEP who will have to review each proposed set of calculations and determine whether they will be allowed. (WRI)
- Suggestion: Don't have this and stipulate that all must go through NutrientNet. (WRI)
- The exception could be where a new BMP is being proposed. In this case, DEP would have to assess it and give it sign off. However, once the new BMP efficiencies were approved, they would then be included into NutrientNet so that all others proposing this BMP use the same set of calculations/efficiencies/values to estimates their reductions/credits. Therefore, e) could then be changed to ask whether a new BMP (ie. not the on the DEP already approved list) is being proposed and then ask farmers how its efficiency was determined and whether DEP has approved it. (WRI)
- *f) Period of credit generation (page 17)* It may make sense to try to get all farmers on the same schedule for credit life (e.g., calendar year or July 1 to June 30<sup>th</sup> or whatever). It will make the tracking of non-point source credits much easier. The same could be said for point sources. It may make more sense that the new permits when they are written reflect the same compliance period for all point sources. This will make it much easier for operating a trading program, and this is how I believe Virginia is approaching this. (WRI)

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- *g) Method of verification (page 17)* How can the CB model be used to verify credits. The CB model is a watershed scale model, while credits are generated at the field or farm scale. (WRI)
- #6: The Baseline Compliance Checklist: This could also be completed within NutrientNet. The Baseline Compliance Checklist can be a set of questions that the user is asked to answer before they even start calculating nutrient reductions. By doing it that way the farmer doesn't go to all the trouble of calculating their nutrient reductions only to find out they are not in compliance. If they are not in compliance then farmer can choose not to continue with even considering his BMP for the trading program or puts in place those baseline practices to meet compliance before offering nutrient reductions into the trading program. (WRI)
- #8: Cost-share prepayments Suggestion is either get rid of 'Amount \$' and replace with 'percent cost-share' or add an additional question that asks the 'percent cost-share'. The percent cost-share is easier to work with if the amount of reductions eligible for sale are pro-rated by their cost share payments (e.g., can only sell the portion of the credits paid for by the farmer and not those paid for through cost-share). (WRI)
- #9: Preservation/conservation easements Suggested wording change: 'Describe any preservation/conservation easements on lands where nutrient-reducing BMPs are to be implemented'. This broadens the question so that DEP knows what easements are in place regardless of whether they are above the threshold that allows trading. (WRI)
- #10: Date of credit registration Why are you registering credits before they are certified? The credits should be registered AFTER they have been certified. (WRI)

**APPENDIX DOCUMENT**  
**NUTRIENT TRADING LANDOWNER AGREEMENT**

- 6. In the event there is a prepayment to the Landowner from the Chesapeake Bay Program (there are other prepayment conservation programs, do they need listed? e.g. CREP, the Department shall deduct that amount from the total amount of payments to Landowner for units sold. The prepayment specified under this agreement is \$\_\_\_\_\_ . (PA Builders)
- 8. Cost/ Share prepayments for credit-generating BMPs. Some existing ag conservation programs (e.g. CREP) have land rental payments also. Does that need factored in here? (PA Builders)
- Once again need to put this form in context. When and how is this form to be used? At the moment, we have no idea what your thoughts are about this. To us it also looks like an 'interim' form and if this is the case, this also needs to be stipulated. Also, it looks like a form for those who sell/give their nutrient reductions/credits to DEP, not those that post their offers to sell directly to the marketplace or those that sell to another aggregator. (WRI)
- #2: this point seems to say that this form is only for those farmers who are part of the 'Strawman Project Implementation' grants program who are required to give DEP their nutrient reductions. (WRI)

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- #3: This looks to be a significant amount of paperwork. Our concern is that DEP is setting up an overly burdensome process that will be time/staff intensive and very expensive to operate. DEP should think through how they could streamline this process in some way to reduce the burden and cost of the trading program. (WRI)
- #4: This clause says that DEP will sell the certified units. Haven't the nutrient reductions been converted to credits at this point. If not they should have been. (WRI)
- #5: This clause asks that the \$ amount is added. What happens if the credits have not yet been sold. Also, same issue as #4 above with certified unit. Suggestion: change the \$ amount to 'market price on day credits are sold'. (WRI)
- #6: What prepayments is the Chesapeake Bay Program making to farmers? We did not think there were any. Also, same issue as #4 above with unit. (WRI)
- #7: As with #4 above, 'units' should be 'credits' (WRI)
- #10: What are the monitoring, reporting and recordkeeping requirements? We are not aware that DEP has any, are they planning on developing some? (WRI)
- The questions in this form can be part of NutrientNet, so that the information can be electronically transferred to any given database streamlining information transfer. It will also allow DEP to approve or say they checked the compliance requirements and that the proposal meets all the requirements electronically, which could then allow the rest of the information in the proposal to be posted for registration or onto the market. (WRI)
- The drafted provision of the Nutrient Trading Landowner Agreement (numbered item 6) would require that monies received from the Chesapeake Bay Program for a credit-generating BMP be deducted from the proceeds the landowner would otherwise receive for credits sold from the BMP. We continue to strongly object to any deduction from sale proceeds that farmers and landowners should receive through implementation of BMPs because the farmer or landowner received financial help in implementing the BMP. We believe the inclusion of this requirement will significantly discourage meaningful participation of farmers and landowners in nutrient trading. We would recommend this requirement be deleted. (PA Farm Bureau)

**APPENDIX DOCUMENT**  
**BUYER-BANK AGREEMENT**

- The second 'whereas' has the Bay agreement set as meeting a 40% reduction in N and P. that is the old agreement. Need to insert in here the Bay cap allocations for Pa. (EPA Region 3)
- Item 4. Aren't we allowing direct exchange of credits between buyer and seller? If so, should 5 be omitted? (EPA Region 3)
- **WHEREAS**, the purchase of nutrient reduction credits is authorized in accordance with the provisions of applicable water management permitting and sewage facilities planning regulations of the Department. Don't believe this is a

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true statement. Point source wkgrp. Members are not positive this is an accurate statement. Dana knows the details. (PA Builders)

- 3. The Buyer hereby agrees to purchase from the Department \_\_\_\_\_ certified units of (name of nutrient) at \$\_\_\_\_\_ per unit or such price as may be agreed to under a one-year extension set forth in the renewal clauses in Exhibit A attached to and made a part of this Agreement. Thought a 5 year contract was to be allowed also? Credits were to be annually verified but a 5 yr. contract was to be available. (PA Builders)
- 5. The Buyer understands that the price paid for certified units is subject to market conditions and may vary. Suggest adding...after the initial contract period expires. Price can't change in the middle of a contract. (PA Builders)
- 12. Suggested language ...Buyer may only purchase credits to fulfill needed offsets. Credits cannot be purchased on speculation – or – “extra” credits cannot be purchased over the defined need. (PA Builders)

### **Second Version Comments**

I have had the opportunity to view some new knowledge presented by the USGS which reveals that, in their belief, in excess of 50 to 80% of nitrogen reaching the Chesapeake Bay is transported via groundwater, which travels from the streams to the river and ultimately ends up in the Bay. If that scenario is true, then correcting nutrient infiltration to the groundwater and legacy sediment will almost allow us to meet our obligations to the Chesapeake Bay. Much of what is being recommended in the tributary strategy focuses mainly on nutrients getting into the streams from surface water and virtually none of the strategy addresses the nutrients that arrive in the groundwater. Therefore, we need to concentrate not only on reducing the nutrients from the surface water but also the nutrients in the groundwater and their migration to the Bay. Most of what we have been talking about in the tributary strategies protects the surface water but at the same time can increase groundwater infiltration. Consequently, we need to consider practices that use all of the nutrients applied to the soil's surface, such as precision agriculture would, concentrating more on these practices rather than just simply practices to slow down the movement of the nutrient-rich water into the streams. I believe we should encourage those precision agriculture practices and other practices such as transporting the nutrients out of the tributary strategy area thus removing the nutrients from the watershed. We might consider giving two credits for one pound of nitrogen to those practices instead of the one-to-one or two pounds of nitrogen to one credit to those practices that are more difficult to quantify and simply slow down the nutrient movement to the streams. (George Wolff)

### **General Observations and Comments**

1. We've noticed that, when using DEP's website to access information related to the Chesapeake Bay Tributary Strategy, there is no link to the Nutrient Trading section of the website. This should be addressed. (Pennsylvania Municipal Authorities Association)

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2. Our understanding is that the July 17th draft document is supplemental to the October 1, 2005 Interim Final Nutrient and Sediment Reduction Credit Trading Policy and Guidelines, but that both documents may ultimately be combined in some fashion. (Pennsylvania Municipal Authorities Association)

If that is the plan, we suggest taking a fresh look at both documents with the intent of creating a simple, easy-to-read handbook on nutrient trading (for use by DEP and CCD staff, point source wastewater dischargers and those engaged in non-point source activities). (Pennsylvania Municipal Authorities Association)

The organization of such a handbook could be as follows:

- Basic Trading Principles
  - A tool for achieving compliance with nutrient reduction requirements within the Bay watershed in a cost-effective manner
  - Not a substitute for addressing site-specific water quality impairment, but potentially useful in implementing TMDLs within a sub-watershed  
(Pennsylvania Municipal Authorities Association)
- Procedures for Creating Nutrient Reduction Credits
  - General principles (including use of various ratios, duration of credits, performance guarantee, etc.)
  - Creation by point source dischargers
  - Creation by non-point source activities
  - Certification and verification responsibilities and procedures  
(Pennsylvania Municipal Authorities Association)
- Procedures for Buying and Selling Credits
  - General info about the Exchange (what it is and where to find it)
  - Management of the Exchange (who runs it, DEP's role)
  - Using the Exchange (how does it work)
  - Exchanging credits outside the Exchange
  - Registration of credits bought and sold  
(Pennsylvania Municipal Authorities Association)
- How Credits Are Reflected in Point Source NPDES Permits  
(Pennsylvania Municipal Authorities Association)

Based on our previous comments on the 11/05 interim final procedure document, and discussions that have occurred at various Trading Workgroup meetings over the past 8 months, we would like to stress the importance of addressing the following as DEP moves forward to finalize its trading program:

- The program should clearly address the roles and responsibilities of DEP's central and regional offices, the County Conservation Districts and any other entities that DEP may use to facilitate the trading process. (Pennsylvania Municipal Authorities Association)
- It is still unclear as to what type of entity, and who, will actually run the Exchange. Will the Nutrient Net platform be used? (Pennsylvania Municipal Authorities Association)

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- Uncertainties remain regarding the process for determining credit generation from agricultural activities. Further refinement is needed regarding duration and length of credits and procedures for guaranteeing performance of credit-generating activities. (Pennsylvania Municipal Authorities Association)
- Limited information is available as to what amounts of credits are currently available from either point or non-point sources (municipal dischargers and developers need to know this in order to plan ahead). (Pennsylvania Municipal Authorities Association)
- It remains unclear as to how conversion of land use (i.e. from active farming to some non-farming use) factors into the generation of reduction credits. (Pennsylvania Municipal Authorities Association)
- Questions remain as to the potential for generating nutrient reduction credits associated with legacy sediments (this could be particularly important to those involved in various commercial and residential land development activities). (Pennsylvania Municipal Authorities Association)
- The overall policy should take into account the statutory restrictions on purchasing by local government from non-governmental entities. Purchases greater than \$10,000 must be done via a competitive bidding process. This would apply to purchase of credits from private parties. (Pennsylvania Municipal Authorities Association)
- DEP should continue looking into opportunities (outside the conventional trading framework) for municipal point sources and non-point source entities to share resources and expertise to enhance the opportunity for nutrient reduction, while reducing costs, conserving energy and improving operational efficiencies. For instance, a municipal point source could provide a variety of services to local area farmers to facilitate their implementation of high-value BMPs, thereby enabling them to generate credits for use by the point source. (Pennsylvania Municipal Authorities Association)

**NUTRIENT CREDIT REGISTRATION/CERTIFICATION FORM**

- 1) Watershed affected by operation **Is there a list and/or map of these subwatersheds?**  
(PA Builders Association)
- 2) Watershed affected by operation
  - a) Local \_\_\_\_\_ **Again, what standard set of subwatersheds are to be used? HUC codes? (PA Builders Association)**

**NUTRIENT TRADING AGREEMENT BETWEEN THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE \_\_\_\_\_ COUNTY CONSERVATION DISTRICT AND LANDOWNER**

**Draft: 6-6-06**

6. In the event there is a prepayment for the certified units to the Landowner from a state or federal program, administered by the Department, such as the Chesapeake Bay

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Program, Growing Greener and The Conservation Reserve Enhancement Program (CREP), the Department shall deduct the prepayment amount from the total amount of payments to Landowner for units sold. The prepayment subject to this Agreement is \$\_\_\_\_\_.

How far back will DEP got to deduct previous payments? (PA Builders Association)

***Nutrient Trading Agreement*** (Following Comments were supplied by Tim Weston)

The draft Nutrient Trading Agreement (draft 6-6-06) makes it appear that the Department is the sole purchaser and seller of all credits. If I'm reading this correctly, this Nutrient Trading Agreement is structured such that the Landowner (*e.g.*, farmer) is agreeing to sell a certain number of "certified units" per year to PaDEP, and enters into a covenant not to sell any nutrient reduction credits to any other party. Basically, this looks like PaDEP is entering into a monopoly for buying and selling credits (that is, that PaDEP is the sole market maker).

In terms of mechanics, I have serious doubts whether the structure of this arrangement would be attractive to a Landowner, or entice them to undertake efforts that would generate credits. The Nutrient Trading Agreement commits the Landowner to create credits, but then provides that the Landowner will only be paid by PaDEP when PaDEP sells the credits to a third party. In effect, PaDEP is acting like a consignment broker.

From the perspective of making the credits real and reliable, this Nutrient Trading Agreement seems to be silent concerning remedies for non-compliance with the Landowner's commitments. The Landowner gets paid for credits when sold. As I understand this, it would mean a landowner could be paid upfront for five years of credits, and in turn the party that purchases such credits from PaDEP will be relying on those credits. However, if the Landowner ceases to carry out the BMPs that create the credits, the Agreement is utterly silent about the available remedies. There is no clause calling for either payment of damages or for specific performance.

¶ 12 of the Agreement appears to be internally inconsistent. It starts by indicating that the price paid for nutrient credits is subject to market conditions and may vary, but then states that the price for credits shall not change during the term of the Agreement. Which is it? If the Landowner agrees to make available 1000 TN credits in each of five years (2006-2011), and PaDEP sells the 500 to Jones and 500 to Smith in 2006 at different prices; and 1000 to Hanks in 2007 at a different price; et cetera, how will the price to be paid to the Landowner be determined? Will it be by the market price paid in the first year of sales, or some negotiated price between the PaDEP and the Landowner agreed to upfront?

***Buyer-Exchange Agreement***

The Buyer-Exchange Agreement similarly seems to assume that those needing credits will be buying those credits from PaDEP.

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¶ 4 states that the purchaser is not allowed to sell any nutrient reduction credits to an entity other than PaDEP unless PaDEP approves. The purpose and logic behind this restriction is not apparent. If a purchaser (*e.g.*, a municipal STP) buys more credits than they ultimately need in any given year, why shouldn't they be allowed to sell the excess credits to another party who needs them?

¶ 5 reflects the same issue as raised above regarding ¶ 12 of the Nutrient Trading Agreement. It is unclear whether the credits are being sold on a year-by-year market price basis, or for a set price for the entire agreement. Frankly, however, it is doubtful that a prospective buyer would enter into a contract to buy a certain number of credits at an unspecified price to be determined in the future. That would be akin to "writing a blank check."

Finally, this Buyer-Exchange Agreement is unclear as to what happens if the credits that PaDEP is agreeing to provide do not materialize. If PaDEP, for example, agrees to sell and provide 1000 units of TN credits usable in 2009 which were generated by Landowner Schmidt's BMPs, and the BMPs are not implemented, what happens? This agreement runs between the Buyer and PaDEP, and the Buyer has no contractual relationship with the Landowner under which the Buyer can enforce the requirements that make those credits real.