



## Trading and Offsets Workgroup

Conference Call

Wednesday, April 20, 2016

10:00 AM to 12:00 PM

Conference Line- 866.299.3188 code- 267.5715

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### Welcome, Introduction and Announcements -- David Foster, Chair

### Manure Treatment Technology Panel Report – Jeremy Hanson, VT

Jeremy provided an overview of the recently released Manure Treatment Technology BMP expert panel report and discuss potential trading implications of the recommendations.

#### Discussion:

- Bevin Buchheister (CBC): As I understood, there is some nitrogen that gets reduced as  $N_2$  which doesn't fall back to the ground.  $NO_x$  travels further and  $NH_3$  falls locally.
  - Olivia Devereux (DEC): If some portion of the nitrogen falls back to the ground, we are waiting to hear from the atmospheric deposition model on the percent that falls back to manure receiving land uses, but otherwise the other 90% would be removed from the load.
  - Hanson: The airshed model would account for those differences in speciation, so those air deposition modelers would deal with those changes and recommendations.
- Buchheister: Is this the final recommendations for credit, or does it go through the airshed modelers first? I am afraid we are incentivizing dirty burning manure technologies.
  - Devereux: That is an issue because what is volatilized is not considered part of deposition load except what falls back to the ground locally. We are hoping that comes into the July beta calibration of the model. That is an issue with any BMP, like lagoons, and that is not something this panel was asked to look at.
- Ridge Hall (CLA): I don't think the panel should approve of a BMP unless it is clear that it does not just convert a water pollution problem to an air pollution problem that incentivizes dirty burning energy.
  - Hanson: I think one of the clarifications to the report is that we are not saying it is good to take the nitrogen from the manure and put it into the air. In the model that is just how it is accounted for. We are not making an endorsement of qualitative value.
    - Buchheister: I think by giving it a credit, you are giving it an endorsement and value. Not all of our states have restrictive emissions requirements.
  - Bob Rose (EPA): There is a similar question with the land application of the treated manure. All of these questions really require the modelers to take the BMP and know the fate of the air applied as well as the land applied product. Is there a plan, working with all the committees to deal with those intricate issues?
    - Devereux: Atmospheric deposition is determined by the monitoring stations, so it is measured. We know what is coming out similarly at the water quality monitoring stations. When we look at the effect of BMPs that impact the air, we don't add an additional reduction to that.
- Rose: I respect the scope of the current panel, but there seems to be more work that needs to be done.
  - Devereux: The Modeling Workgroup does look at the links between all of the various models that are used to ensure that they are coordinated and that loads are not double counted or missed.

- Jason Keppler (MDA): I am still struggling with how this directly related to water quality benefits. There are a number of factors to consider beyond transforming manure to different forms. As Jeremy mentioned, this panel was not looking at the offset of potential commercial fertilizer use by removal out of the waste stream. How do we quantify water quality benefits with these practices in a way that relates to nutrient trading, not only in Maryland, but across the watershed?
  - Hanson: That is a good question. The panel worked to make the recommendations to the CBP modeling tools, but the state trading programs have other aspects and requirements that are factored in.
- Keppler: I am not sure how to take this recommendation and report and factor it in to the nutrient trading program.
- Keppler: We are also offsetting manure taken out of the nutrient stream for crop application and supplementing it with fertilizer so land application stays the same.
  - Devereux: Good point. This is a reduction for where the manure is treated. The nutrient need is backfilled with other manure. Whatever is removed is treated at the facility, and if it goes elsewhere in the watershed it is added to what is distributed. This technology represents the in-between point, not what happened after it is removed or what happens after it is applied. The panel just looked at what happens at the facility. The model does take care of what happens before and after.
    - Keppler: I understand that, but ultimately what we have is just half of the picture then.
    - Devereux: For trading, you do need the whole picture, but this panel didn't look at that.
- Hanson: Maybe a place to start that discussion is by asking how you handle other BMPs with a similar replacement nutrient issue, like manure transfer?
- Keppler: I am concerned about the misperception that these technologies have the ability to measure what comes in and what goes out. There is a much greater issue at play here that we need to address.
- Buchheister: Does this report go to the Modeling Workgroup for their approval?
  - Hanson: The Protocol doesn't have a step built in for their approval, but we will certainly be working with them to clarify these air quality concerns that have been raised. We can certainly try to build a MWG briefing into the schedule, but they don't have to specifically approve it.
- Buchheister: Would a technology that changes nitrogen into N<sub>2</sub> gas get the same credit as one that produces NO<sub>x</sub> or something that falls locally?
  - Hanson: There isn't a lot of data available to quantify what nitrogen speciation changes are caused by the technologies. It would likely fall into the future research needs of the panel.
- Buchheister: Maybe we will need to kick this up to the Management Board if it is a policy issue.
  - Hanson: I will leave that decision up to the WQGIT and the Workgroups.

#### **Maryland Trading Update** – Marya Levelev, MDE and Susan Payne, MDA

Marya Levelev (MDE) briefly discussed the MDE court ruling and the status of the Maryland trading and offset program.

#### **Discussion:**

- Levelev: Maryland Court of Appeals decision on March 11<sup>th</sup> stated that the MDE decision to issue stormwater permits was supported and was not arbitrary and capricious and was legally correct. The Court issued a 100 page decision opinion dismissing complaints that stormwater permits were not sufficiently stringent. The court looked at the history of stormwater programs, the TMDL, Clean Water Act, and current requirement of the permits and decided supported the issuance of these permits.

- Buchheister: For me, the most important part of the ruling was whether Maryland could use the 20% requirement to reduce the counties' impervious surface area, since others wanted to see numeric reduction goals. The Court said yes, MDE could use the 20% impervious surface reduction because it served as a surrogate for numeric reductions.
- Levelv: The Court recognized that all aspects of the permit allow for progress towards meeting the TMDL.
- Buchheister: I believe MDE was waiting on this decision before beginning to issue Phase II permits. So I assume these will be issued in the year?
  - Levelv: I don't have the date right now, but MDE is looking at it.
- Susan Payne (MDA) discussed the status of the draft Ag certification and verification regulations.
- Payne: Due to some procedural complications, it was easier to adopt regulations as initially published and at the same time proposed changes that will be posted to register and receive additional comments. They should be on the register shortly.
  - Buchheister: Could you please elaborate on the changes?
    - Payne: Most changes dealt with definitions. For example, in the original definition of the credit was a pound of nitrogen, phosphorus or total suspended sediment delivered annually to the Bay, which would exclude us from dealing with edge of stream credits we talked about in the advisory committee. We also changed the category 1 definition to add language clarifying that the BMPs referred to are the BMPs approved by CBP partnership.
- Payne: The Water Quality Trading Advisory Committee has a meeting Thursday April 21<sup>st</sup> from 2-5pm. We have so far made one complete run through the entire proposed comprehensive guidelines manual. We will actually start getting into the meat of specific revisions and proposed language to replace what is there on Thursday. We also have another meeting on May 19<sup>th</sup> at CBF from 1-4pm. That is when we hope to wrap up work on this particular draft of the manual.

#### **Virginia Trading Update** – Matt Richardson, VA DEQ

Matt provided an update on Virginia's Regulatory Advisory panel process, focusing on their draft nonpoint source certification regulations.

#### **Discussion:**

- Richardson: The process began with VA DCR in 2012, and when we consolidated stormwater to VA DEQ in 2013, our Nutrient Trading Act required procedures for the process for certifying credits, which we are establishing. We expect final regulations to go to The Virginia Stormwater Control Board for final approval at end of the month. We have a few issues we are still trying to work out. One is the definition of a management area because DEQ is concerned about leakage. The second is public notification. Virginia statute requires public notification but DEQ plans to use informal public comment when necessary. Virginia general assembly requires a bill to within 35 days define when land use change is complete, which would make it very difficult to have a public comment period. Wetland terms are a challenge, but we will form a subgroup to work through those issues. Another issue is a requirement for site visits. Current staffing levels wouldn't allow visits to every site. We are not looking to make that a requirement for DEQ regulations. Perpetual credits is a sticking point. DEQ is concerned that if perpetual credits are approved for structural BMPs, they would be left holding the bag if someone walked away, so we are working through financial assurance. Defining innovative practices is another issue. How we will determine credits generated, public comments, will we convene a technical advisory committee for every practice presented to us, and how do we have good public comment.
- Buchheister: Could you clarify the issue with perpetual credits?
  - Richardson: We are trying to write a credit we can live with for a good amount of time. We are concerned that if someone proposes a structural BMP for perpetual credit, then sells the credit, DEQ would have to perform maintenance and would have to replace the BMP

somehow.

- Hall: Can you tell us some about the relationship between existing regulations and the ones under development?
  - Richardson: Point sources are trading amongst themselves. Nonpoint trades are usually land conversions and are defined by BMP structure and the clearinghouse. We are starting to certify nonpoint source BMPs for trading with point sources.
  - Russ Baxter (VA Secretary of Natural Resources Office): The Code of Virginia defines what is possible under trading. We don't actually have current regulations. Point sources trade credits amongst themselves to meet permit requirements. Stormwater trades are common, but are small trades amongst each other. Trades make up a relatively small percentage of the discharges.
- Hall: Are stormwater users generating credits or buying and using credits?
  - Baxter: Generating through land conversion to forest and selling to stormwater users to meet post construction loading requirements.
    - Buchheister: Isn't that an offset?
      - Baxter: It offsets the additional loads, but it is a reduction because they have to come down to a level defined in the stormwater permit. It is not an even game, it requires a reduction of phosphorus loads post-construction of a site, so they are buying it for that purpose, not just to stay even.
- Buchheister: Have there been any trades between the MS4 permit holders and agriculture or other credit generators?
  - Baxter: Not yet. MS4s are just starting their Chesapeake Bay Action Plans and we haven't finalized issuance of all Phase I permits. We think that will be a market in the future.
- Levelov: Do you expect MS4s that can trade to trade with point sources and agriculture?
  - Baxter: The bill passed in 2012 does allow MS4s to do that. They have to report a plan to DEQ that shows how they would use credits as part of overall compliance plan for permit. It is authorized in the code but hasn't happened yet.
- Levelov: Would they have to become a member of the association to trade with point sources?
  - Baxter: No, it is just that there are a few advantages to be part of the association, but it is not required.
- Levelov: So they would be able to purchase unused allocations to meet reduction requirements?
  - Baxter: Yes, we thought a lot about it when we developed Phase I WIPs. We were trying to give some options for MS4s to meet permit requirements because they are the next sewage treatment plants in terms of overall costs and capital. There is not only an overall cap but they have local caps within their permits.
  - Chris Pomeroy (VAMWA): The one thing I would add is that if you have an MS4 buyer and a wastewater treatment plant supplier of credit, a permit modification is not necessary. Credits can trade annually without amending watershed general permit or wastewater permit.
- Levelov: So in a way it is similar to compliance credit?
  - Baxter: Correct.
- Buchheister: How is the concept of additionality satisfied when you are trading from wastewater treatment plants to an MS4 purchaser to cover their permits?
  - Baxter: That has been an issue we are trying to deal with it. We take 5% off the top of any certified credit, so if you are approved for 100, you can only sell 95. That bakes in at least a 5% improvement for the benefit of water quality.
- Levelov: Do you have uncertainty ratios?
  - Baxter: As part of the watershed general permit, we do. If a point source will use nonpoint source credits it is a 2:1 ratio.
- Levelov: If a stormwater user wanted to purchase agriculture credit, is there a ratio?
  - Pomeroy: It isn't really defined yet in the process.

- Levellev: If MS4s are trading in agriculture, I think EPA has indicated that no ratio is required.
  - Rose: That is correct. In our memos we discuss a 2:1 ratio for trades between point source and nonpoint source, and we have been verbally communicating that we feel 1:1 is ok for an MS4 since it is more of a nonpoint to nonpoint source trade.
  - Kelly Gable (EPA): In the TM we expressed the concept that the trading ratio is meant to express like source to like source trades. We didn't want to be prescriptive but we wanted to address where things were similar in terms of monitoring.
    - Rose: Correct.

#### **Upcoming Trading Conversations Forum** – *Bob Rose, EPA*

- Bob provided an overview of the upcoming trading forum to be held in Missouri in May.
- Rose: The forum will be two and a half days and focused on lessons learned and successful examples of trading programs. They will hold a series of these forums on different issues. Registration is open. They are being funded by a USDA grant, but EPA is not collaborating on this forum.
  - George Van Houtven (RTI): Looks like it is more of an open conversation format?
    - Rose: I am not sure of the format. The speakers are not identified yet.

#### **Jurisdiction Roundtable updates** -- *Group*

- Payne: Maryland will be issuing a press release shortly about the revisions made to registry portion of the Chesapeake Bay Trading Platform. Maryland had a grant under CBIG to update the registry and marketplace portion, and we have done that in cooperation with Virginia and Pennsylvania and there is a lot more info that will be posted on the site and for administrators to use to review and post data. It will be a place for folks with projects to open an account and verifiers to have accounts and have it all together in one location.

#### **Adjourned**

#### **List of Call Participants**

<b>Member</b>	<b>Affiliation</b>
David Foster (Chair)	Phoenix Initiatives
David Wood (Staff)	CRC
Bevin Buchheister	CBC
Ridge Hall	CLA
Olivia Devereux	DEC
Bob Rose	EPA
Kelly Gable	EPA
Susan Payne	MDA
Jason Keppler	MDA
Marya Levellev	MDE
Brian Schlauderaff	PA DEP
George Van Houtven	RTI
Matt Richardson	VA DEQ
Russ Baxter	VA Secretary of Natural Resources Office
Chris Pomeroy	VAMWA
Sarah Walker	WRI
Jeremy Hanson	VT
Mindy Selman	USDA

Jeremy Rowlen  
Karl Berger  
Jeff Corbin

Bion  
MWCOG  
Restoration Systems