



# Delaware Nutrient Management



## Meeting Minutes of the Technology Subcommittee Meeting Held – July 7, 2017

The Delaware Nutrient Management Commission

### **In attendance:**

*Sub-Committee Members Present: Chairman Kenny Blessing, Laura Hill, Jessica Inhof, Bill Vanderwende, Robert Palmer, Mark Adkins (appointed fill-in)*

*Ex-officios Present: Secretary Michael Scuse, Chris Brosch*

*Commission Members Present: Wayne Hudson, Ken Horeis*

*Sub-Committee Members Absent: Richard Sterling, Scott Webb, Lisa McCormick*

*Commission Members Absent: Jim Elliott, Larry Jester, Bud O'Neill, Brenna Goggin*

*Others Present: Bob Coleman, Julia Moore, Brooke Walls, Clint Gill, Aaron Givens, Debbie Absher, Bryan Jones, Robert Baldwin, Sally Kepfer, Ann Baldwin, Danielle Bauer, Victor Clark, Scott Hudson, Kerin Hume, Kasey Taylor*

***This meeting was properly notified and posted as required by law.***

### **Call to Order/Welcome:**

Chairman Blessing called the meeting to order at 9:30 a.m., and welcomed everyone in attendance. Mark Adkins was appointed by Chairman Blessing to sit in for Richard Sterling, who was unable to attend.

### **Approval of Minutes:**

Unanimous approval of minutes dated February 25, 2016. Chairman Blessing signed for previous Chairman David Baker, whom has since retired.

### **Discussion and Action Items:**

#### ***Compliance overview for DDA inspections***

- Nutrient Management Administrator Chris Brosch welcomed the visitors from the Conservation District (Districts) and Natural Resources Conservation Services (NRCS): Debbie Absher, Bryan Jones, Sally Kepfer, Ann Baldwin, Kasey Taylor, Kerin Hume.
- The purpose for their attendance was to document for this committee & the commission some of the conversations that have been occurring between the DDA & EPA related to compliance of the Nutrient Management Plans (NMP) and our inspections of these plans. These go further than those typically revolving around our CAFO permitting and includes any operation with an NMP, as well as those who perhaps should have one and don't.
- Two weeks after Chris Brosch became the NM Administrator, he had to submit this first Compliance Report to the EPA. There was a scramble to gather enough data to complete it. The second year there were growing pains not only trying to figure out how to modernize the inspection process but also capture the results.

- Administrator Brosch and Brooke Walls prepared a slideshow to document the history in more detail and initiate further discussion, with comments anticipated from the Districts and NRCS regarding what kinds of inspections they are doing and protocols they use, knowing that none of that action on their part is regulatory like that of the NM.
- The hope is to gather all the facts we can in front of this Committee and the NM Commission. Administrator Brosch envisions this as one conversation in a series of conversations, trying to move forward in terms of having a more reliable estimate of compliance in this state where we have had struggles in the past quantifying it.
- Slideshow presentation (see attached document):
  - The opening slide represents the number of acres farmers self-reported every year to the program based on their legally required and employee protected Annual Implementation Reports. In the most recent years since we've adopted our new database, there has been a spike in those acres that are covered.
  - Goals were reviewed; highlighting that outreach from our office to many farmer's mailboxes would result in more complete returns.
  - The Inspection Form used prior to our current one was cluttered, hard to follow, with poor flow and just not an easy process overall.
  - Our new Inspection Form can be filled out electronically while the NM scientist is on the farm call performing the inspection, with the data being entered to our Salesforce.com database at the same time. It follows a logical progression through the NMP, streamlining the process but not reducing it, and it allow us to easily run reports to utilize the data obtained.
  - Also introduces a few water quality elements and capture some BMPs, as well, to utilize the overall compliance assessment for model credit.
  - Proposed Inspection Action review spelled out the foundational thought that minor infractions, such as the need to "tidy up" or an incidental non-compliance that can be rectified during the visit, should require a 2-week follow up, then if everything is now/still compliant, the farm should be approved as Compliant and not need inspection for another 5 years. New Inspection Actions have been proposed in the slideshow.
  - It was noted that the timing of the NM inspections are not coordinated with those of the District, so the typical farmer is probably going to confuse us with the district and may feel picked on.
  - There is no Standard Operating Procedure (SOP) for inspections by NM at this time. We need one, however, and would like to see major non-compliance as part of it. There are many questions in regard to this:
    - Do they get audited in 1 year when we have seen improvement?
    - Do small infractions need to be marked as non-compliant on the form if they do not affect water quality? It's good for the farmers to know we are paying attention, but is it worthwhile?
  - We also would like an audit more tailored to Water Quality. And that should be driving the compliance numbers we pass on each year. Would like comments from the group about how to determine the SOP to obtain the reported compliance and provide a consistent approach. The Districts probably see things on a regular basis and we want to have a consistent approach when we visit.
  - Referring back to an earlier slide listing Goals, there seem to be 2 tiers of compliance in effect now: Procedural and Water Quality.
    - Some of the Procedural components that we don't want our new SOP to revolve around:
      - Obtaining the signature on the cover sheet. If he District has it and NM doesn't, is that farm really non-compliant?
      - Maps – in regard to inclusion of irrigation. That changes so quickly and may not have bearing on water quality.
      - Receipts – it's more important that manure logs are accurate.
      - While continuing education is a major part of what makes our program robust, it is not what is driving our visits. Annual Reports are, because that is our best estimate of what has been going on year to year. We have been working hard in the last 8 months to reach the farmers who have not submitted Annual Reports in the last 2 years.
    - There needs to be a differentiation between the Procedural and Water Quality results.
    - Water Quality components in the SOP should include:

- Looking at whether the equipment in use is reliable and calibrated, considering if the recommended rates are appropriate, did they switch irrigation around, and are their yields steadily increasing due to improved genetics.
- Suggested that a workshop should be developed to determine all that is important here and this is what we want to see on our inspection form and standard procedure.
- There may also be an added element for the planners, as well as operators and farmers. The results would need to have similar outcomes, but not penalize farmers for bad plans.

### ***Partner's inspection protocols***

- Secretary Scuse reminded the Commission that the goal here is to find numbers that we are comfortable with and that satisfy the EPA.
- Discussion ensued regarding templates and plans:
  - Commissioner Inhof: Maryland created their own templates, and though the information is the same in both states, Delaware's is more streamlined.
  - Commissioner Hill: the plans written by the Districts is too much paper
  - Sally Kepfer: but Delaware's is one of the shortest in the country, at 15 pages. She still agreed we need to redo our CNMP, maybe sitting with a few producers and consultants to see where we can cut it down. She also noted that Technical Services Providers don't have the GIS capability that she does for maps and not all streams or farmed ditches are marked on maps required by the Phosphorous Site Index.
  - Commissioner Blessing: uses his own forms.
  - Commissioner Inhof: what the farmer keeps record of and comparing it to what she has written are two different aspects of it. She can't control that the manure is in the dripline of the shed but she can control in the plan what additional fertilizer he should purchase. There are a lot of components that go together to make the completed puzzle.
  - Secretary Scuse: do districts go back and monitor or verify the plans they have written are being followed?
    - Kerin Hume: this not regularly done.
    - Bryan Jones: the NRP does some follow-up at the poultry headquarters plant, but it's only compliance inspections of structures to make sure they are in line for what they were put in to do – such as for composting – and if they are doing it correctly.
    - Debbie Absher: they do not do a record review.
    - Commissioner Blessing: do the flock supervisors do a preliminary housekeeping inspection on the premises?
    - Commissioner Hill: no, they do not.
    - Commissioner Adkins: you hit what is hot.
    - Sally Kepfer: in Sussex County they are always hounded to get plans done, but there's no buy-in to see if it's done correctly. Maybe it's up to the industry to give more time per farm - they are the ones out there day to day - and her office can do their spot checks and reports, but that's only 5% on new things, once a year.
    - Commissioner Hill: is there a time span with a manure structure cost-share, and if so, once that time is up, are they no longer inspected?
    - Administrator Brosch: NM does have regulatory control still, and we want to keep reporting that shed. It's one of the big pollution reduction points in the models.
  - Commissioner Blessing: all the information being required is already recorded somewhere, through either crop yield reports; integrated agencies like the Poultry Industry where the company representatives go around and grower logs are kept; or new poultry operations with storm water assessments and ponds and all the drainage issues associated with it. Agencies are just not coordinating and sharing what they know.
    - Discussion ensued, questioning if the landowner has to explicitly give agreement to let the FSA and Insurance Agencies share data.
      - Secretary Scuse: it would make sense to give the landowner the ability to give their crop reports at the FSA, since you have to anyway, then then have them automatically share that data with the Insurance Agencies. Or if you go to the Insurance Agency to do your property report, they would have to be prepared to capture the additional information that the FSA needs so you can be covered there too. This sharing would certainly help to validate farm yields when audited.

- It was called out that you need to provide this information for some of our ARC & PRC programs also.
  - But another concern was that this would add more complexity, as there are so many options with insurance.
- Secretary Scuse: how did Maryland and Virginia come up with their numbers (72% and 69%)?
  - Administrator Brosch: Virginia did not have the 100% pass rate. Of all the inspections in that fiscal year, they documented the percentage of acres that had successful inspections that required no follow-up.
  - Commissioner Inhof: Maryland's audit form is more of a balance sheet for percentages. They pick three fields, preferably of large acreage, since it is all based on acreage, and different types. They will pick maybe a corn field and go through and balance it to the end – what the soil sample said should be allowed, what she actually recommended to be allowed, then what the growers record keeping shows he actually applied. Or they might try to pick a field that has an FIV (Fertility Index Value) above 150, or try to pick manure fields as opposed to just a fertilizer field, for a variety of sources to get their counts.
- Secretary Scuse: what percentage in those states are audited?
  - Administrator Brosch: didn't know at the moment, but surmised Maryland to be hovering around 8%. Nobody is at 20%.
    - Maryland and Delaware have a legal requirement for all farms to have a plan at certain thresholds.
    - In Virginia, only the CAFO's are required to have a plan – everyone else is voluntary. So their coverage of nutrient management is less than 70%. Then another 70% of that are the compliant folks.
- What percentage of our land base would be under CAFO?
  - Administrator Brosch didn't know for sure but said so few farmers have indicated they also had acreage.
  - Brooke Walls took action to pull a report from Salesforce of those who report Poultry and Land.
    - Reference Brooke's subsequent response:
      - NMP acres with animals= 84,807 acres
      - NMP acres without animals= 224,426 acres
      - The NMP acres with animals is any animals not CAFO only - unable to make that determination with our current reporting function. Working to make this improvement in the future.
  - Commissioner Blessing: with stricter regulations on CAFO's, would be the place from which to pull our 20%?
  - Administrator Brosch: the 20% was put in when NM was based on acres. We have 1500 farms and probably 800 growing chickens. That doesn't actually get anyone what they want, but it's the benchmark. And this is down from the 50% that the EPA originally wanted, per Secretary Scuse. But we agreed to work hard on it so they are working with us.
- Secretary Scuse: how many acres are covered by the Planners?
  - Administrator Brosch: we have @2000 acres on the books with NMP's involved in Cost Share and @15000 acres reported from the Districts. So 5-10% as a low estimate.
- Secretary Scuse: there is a concern that the workforce needed for Delaware to reach the 20% would be cost-prohibitive and a waste of money.
  - Administrator Brosch: the NM inspections average an hour or less to conduct, 2 hours if it is a big and complicated farm.
  - Debbie Absher: the staff is already stretched so thin.
    - Secretary Scuse: if the district looks at their [report] NMP and they are in compliance, all they would need to do is report it to NM for their reporting numbers.
    - It was agreed they might be able to pull information on how many CNMP's and acreages. But there are always fluctuations & that would need to be factored in.
- Bryan Jones: likes the idea of breaking the procedures into chunks – target 20% of the CAFO's, with the districts working on 20% of what they perform. Since it's a cost-sharing activity NM probably would warrant them verifying that it was done and that would just leave a balance of what was done by private contractors. NM could work with them in some way to follow up.
  - Concern: that the private sector of the EPA may not want to accept numbers from this source, but NM could get Soil Conservation numbers to be accepted.



- Administrator Brosch: would it be possible for the partners to get a report of names in one report and numbers in another? They would be separate for anonymity, but we could then know to target only 5% of these farms and 10% of the others.
      - Debbie Absher: unsure if this would be possible. But aren't the plans subject to FOIA requests?
      - Commissioners Palmer and Hudson: have concern about balance between 5% and 10%, as well as a reminder that the data needs to be random to keep confidential.
- One last Big Picture question from Administrator Brosch: what does this committee think might be useful for Water Quality? Because our goal is that the quality of the compliance is what we want to improve at the same time as getting better numbers. And we want the farmers to know the importance of this, as well as their phosphorous site index, if they have one.
  - Maryland goes after 2 or 3 different fields, depending on how big the farm.
  - The NM team follows what Bob Coleman dubbed "Farm Gate": the nutrients coming in need to match what we expect to be the yield coming out.
  - Commissioners: outreach to educate about the value of reporting and recordkeeping. It is a necessary task and will show what you have been doing, in the event of any EPA questioning.
  - Administrator Brosch: there is an ASC procedure that delineates if we have field specific records that go back over 5 years and we see the goals in the NMP have been adjusted based on the records, their credit for N in the model doubles. We definitely don't want to lose that.
    - So when we go to the BMP section and look for additional practices other than just the standard plan, that's something we can capture, if it exists. This comes from the intensive record management we want to promote.

**Next Meeting:** Will be scheduled when needed, probably no later than September.

**Adjournment:** Chairman Blessing adjourned the meeting at 10:55 a.m.

Approved,

F. K. Blessing, Technology Sub-Committee Chairman  
 Delaware Nutrient Management Commission  
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