

DRAFT

MINUTES

AGRICULTURAL ADVISORY BOARD MEETING

June 15, 2011

DEP Southcentral Regional Office

Susquehanna Room A

Harrisburg, PA

In Attendance – Members

Larry Breech, Pennsylvania Farmers Union

Kristen Saacke Blunk, the Pennsylvania State University

Kelly Heffner, Department of Environmental Protection

Duane Hobbs, Ag Chemicals Manufactures

Jay Howes, PA House - Agriculture and Rural Affairs Committee

Betsy Huber, Pennsylvania State Grange

David McElhaney, Livestock Producer

Keith Masser, Vegetable Producer

Susan Marquart, Natural Resources Conservation Service

William Neilson, Pennsylvania Farm Bureau

Michael Pechart, Department of Agriculture

Jennifer Reed-Harry, PennAg Industries

Gerald Seyler, Grain Producer

Brenda Shambaugh, Pennsylvania Association of Conservation Districts

Jeanne Sullivan, PA House - Agriculture and Rural Affairs Committee

In Attendance - Agencies, Advisors, and Guests

John Bell, Pennsylvania Farm Bureau

Rick Day, the Pennsylvania State University

Shelly Dehoff, Pennsylvania Agricultural Ombudsman

Bob Donnelly, Environmental Protection Agency

William Fink, Country View Family Farms

Doug Goodlander - State Conservation Commission

Dr. Kevin Herkelman, Wenger Feeds

Bob Neidenen, the Pennsylvania State University

Kelly O'Neil, Chesapeake Bay Foundation

Erin Smith, Department of Agriculture

Kim Snell Zarcone, Penn Futures

Kyle Zieba, Environmental Protection Agency

Marge Hughes, Don Fiesta, Tom Juengst, Kenn Pattison, Dukes Pepper, Frank Schneider,

Jim Spontak, Steve Taglang - Department of Environmental Protection

The June 15, 2011, meeting of the Agricultural Advisory Board (AAB) was called to order by Chairperson Jennifer Harry at 10:01 a.m.

Chairperson Harry announced that the following members had asked to be excused:

- John Peters, Fruit Producer
- Carl Musser, Poultry Producer
- Roy Brubaker, Sustainable Agriculture
- Richard Hissong, Dairy Producer
- Michael Firestine, Agri-business
- William Wells, Ornamental Horticulture

Chairperson Harry welcomed Kelly Heffner, Acting Deputy Secretary for Water Management

Chairperson Harry welcomed Susan Marquart who will now be the representative for United States Department of Agriculture's Natural Resources Conservation Service.

Members of the AAB introduced themselves, as did the various guests.

Minutes from the February 16, 2011 meeting were approved as written.

Concentrated Animal Feeding Operation General Permit Renewal (PAG-12) – Kenn Pattison, Bureau of Watershed Management, provided an overview of the Concentrated Animal Feeding Operation (CAFO) General Permit (GP) Renewal (PAG-12).

Mr. Pattison explained that the current PAG-12 is set to expire on September 30, 2011 and that the Department believes it should be updated. Additionally, the Department is going to be asking the

Environmental Protection Agency (EPA) for an extension of the current PAG-12, while it works on revisions.

Mr. Pattison reported that EPA has made some verbal comments on updates to the PAG-12 that includes the following:

- Permit should be consistent with federal regulations
- Permit should contain consistent definitions for waste water, erosion and sedimentation plan, wet weather events, and animal heavy use area
- Permit should have adequate public notification.

Mr. Pattison explained that other updates being looked at include revisions to provide consistency with the Pennsylvania Soil and Water Technical Guide and existing regulations (Chapter 91.36, Chapter 92a, and Chapter 102); reporting and retention of records; general editorial changes; and better clarity.

Mr. Pattison reported that the Department does not have a final draft of the updated PAG-12 at present and that staff is still working on it. It was discussed to form a workgroup of the AAB to assist the Department in finalizing the draft revised PAG-12. Chairperson Harry agreed and formed a workgroup. Mr. Pattison noted that once a revised draft PAG-12 is developed, that it will go through the normal process of being published in the PA Bulletin for public comments, etc.

Ms. Kyle Zieba stated that EPA is working informally with the Department at this moment since a revised draft has not been formally submitted for EPA review.

Chairperson Harry asked if the major revisions were going to be primarily editorial and streamlining and Mr. Pattison agreed.

Mr. William Neilson commented that EPA will be doing a review of their CAFO program in 2012 and wondered how this will affect the revised PAG-12. Mr. Pattison answered that this is one reason the Department will be looking for an extension of the current PAG-12.

Chairperson Harry asked if the Department will still maintain control of issuing CAFO permits or if the Department will look at handing this over to EPA. Mr. Pattison answered that the Department will still handle issuing CAFO permits, since we are delegated by EPA to issue National Pollution Discharge Elimination System (NPDES) permits, and we cannot hand pick which areas we want to do and which we want EPA to do. It's an all or none situation.

Pennsylvania Chesapeake Bay Agricultural Water Quality Initiative (AgWQI) – Frank Schneider, Bureau of Watershed Management, provided an update on the proposed Pennsylvania

Chesapeake Bay Water Quality Initiative (AgWQI). Mr. Schneider reviewed the history of the AgWQI that was part of the Pennsylvania Phase I Chesapeake Bay Watershed Implementation Plan (WIP). In the WIP, a workgroup of the AAB, with other invited guests such as the Chesapeake Bay Foundation (CBF) and EPA, is identified to assist the Department in development and implementation of the AgWQI. Currently the AAB workgroup is meeting quarterly.

Mr. Schneider provided an update on the last AgWQI workgroup meeting that was held on April 11, 2011. During that meeting there was discussion on the following items:

- State Conservation Commission (SCC) Ag Compliance Workgroup that is drafting an Agricultural Compliance Goals and Responsibilities paper. Included will be partner roles and responsibilities. The SCC is looking for a final strategy in July 2011
- Education / Outreach / Training
 - Need to train Penn State Cooperative Extension personnel on current agricultural regulations. Kristen Saacke Blunk will be looking into webinar based training.
 - Outreach to other groups / organizations, such as the PA Bankers Association, Farm Insurance groups, Farm Credit groups, Dairy Herd Improvement Association (DHIA), Dairy Cooperatives, Grain Mills, Equipment Dealers, Veterinarians, Center for Dairy Excellence, others that visit farms, etc.
 - Chesapeake Bay Program technicians will be required to perform 100 site visits in the Fiscal year 2011-12 contract and must develop a plan to outreach to all agricultural operations in their counties within 5 years. The outreach plan is due the 1st quarter of the 2011-12 fiscal year.
- PACD circuit rider position that was created to assist conservation districts and others complete PennVest funding applications for Non-Point Source Best Management Practices
- Model Ag Compliance Policy that is being developed by the Department and will be used by county conservation districts. The model policy will be modeled after the proposed Act-38 policy. The model policy still needs internal Department / agency review and additional AgWQI workgroup review.
- State Bio-Security Law and following the procedures of notification.

Mr. Schneider reported that the next meeting of the AgWQI workgroup will be July 26, 2011.

PaOneStop Demonstration - Rick Day, the Pennsylvania State University, gave a demonstration of the PaOneStop Program that he has been developing. The PaOneStop Program is being

developed to assist farming operations with on-line tools to meet Chapter 102 and Manure Management Manual Mapping compliance.

Mr. Day explained that PaOneStop consists of two modules: *Nutrient Management Planning Mapping Module* and the *Conservation Planning Module*. Development of both modules is on-going and will be released to the public incrementally. Currently the *Nutrient Management Planning Mapping Module* has been released. Mr. Day reported that currently one must use the Firefox internet browser but once the modules are final, the program will allow the use of other internet browsers.

Mr. Day reported that the PaOneStop is being developed by the Pennsylvania State University Cooperative Extension in collaboration with and support from the SCC, Pa Department of Agriculture (PDA), Pa Department of Environmental Protection (DEP), United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), CBF, and the National Consortium for Rural Geospatial Innovations in America.

Mr. Day explained that the PaOneStop program will have many benefits that include:

- Actively engage farmers in conservation and nutrient management planning.
- Efficient production of conservation plans and manure management plan maps.
- Meet Chapter 102 compliance standards.
- Evaluate various management scenarios.
- Reduce soil loss.
- Improve water quality.
- Provide valuable database of agricultural management and conservation practices statewide.

Mr. Day provided a demonstration of the PaOneStop program as it is currently released with the *Nutrient Management Planning Mapping Module*. Currently, persons who use the program would need to do the following or have access to perform the following functions:

- Create a User Login.
- Locate Farm.
- Drawn and Label Fields.
- Edit Fields.
- Extract Soils for Fields.
- Draw Farm Features.
- Determine Unsuitable Acreages.

- Create Map.
- Generate Map.
- Generate Custom Maps.
- Edit / Delete Farms.

Mr. Day provided a demonstration of the PaOneStop program as it relates to the *Conservation Planning Module*, which has not been released as of the date of the meeting. This module will assist farmers in developing Ag Erosion and Sedimentation Control Plans (Ag E&S) in order to meet compliance with Chapter 102. In addition to the above listed features, users will additionally be able to do the following:

- Extract Soil, Terrain, and Climate Conditions.
- Determine Soil Loss for each Field.
- Compare Soil Loss to NRCS Tolerable Soil Loss Value (T).
- Modify Crop Management and / or Implement Conservation Practices Necessary to Achieve Soil Loss T for each Field.
- Store Farm Information for Future Modifications.
- Print Reports and Maps Summarizing the Conservation Plan.
- Submit Conservation Plans to Regulatory Agencies for Review.

Mr. Day reported that the PaOneStop program can be used presently, as it is being developed. Currently there are 347 users that generated 1,275 farm maps and 3,945 features.

Swine Phytase Feeding - Dr. Kevin Herkelman, Wenger Feeds, presented information on swine phytase feeding.

Dr. Herkelman explained that phosphorus is a critical nutrient required by swine, that a significant portion of the phosphorus in grains and seeds (animal feed) is bound by phytate, and that phytate bound phosphorus is largely unavailable to swine.

Dr. Herkelman explained that dietary phytase has many benefits that include:

- Releasing the bound phosphorus from grains.
- Increasing the available phosphorus to swine.
- Diet cost reductions.
- Reduced phosphorus excretion.
- Less land required to handle phosphorus.

Dr. Herkelman added that there are low phytate grains available that reduce phosphorus excretion but those grains are in limited supply commercially and that dietary phytase is still beneficial.

Dr. Herkelman reviewed the function of phosphorus in swine in terms of skeletal formation, cell structure, lean muscle deposition, carbohydrate metabolism, and fat metabolism. He additionally went over the sources of phosphorus in different feed sources and that not all phosphorus in feed ingredients is available to animals for productive purposes, due to phytate.

Dr. Herkelman reported that phytate is a complex molecule that binds phosphorus and other nutrients for storage in seeds and grains. Additionally 60 to 70% of the phosphorus in plant based ingredients, for animal feed, occurs as phytate phosphorus, which is largely unavailable to swine.

Dr. Herkelman explained that phytase is an enzyme that releases phosphorus. In swine, phytase is absent in the intestine, thus an exogenous enzyme form of phytase must be added to the diet in either a bacterial or fungal form, so phosphorous may be “available” to the animal to meet requirements.

In regards to the economics of using phytase, Dr. Herkelman reported that early exogenous phytase use (early 1990’s) increased diet costs and there were questions on the effectiveness and reduced phosphorus excretion. As phosphorus prices have increased due to increased demand for inorganic phosphorus for animals and plants, the addition of phytase is economical.

Mr. Keith Masser asked how phytase is produced and extracted. Dr. Herkelman answered that it is either a bacterial or fungal growth / culture product. Mr. Masser additionally wondered if the phytase gene could be “put” into a corn plant. Dr. Herkelman answered that current research is now investigating those possibilities.

Mr. Neilson inquired if the feeding of phytase has had any effect on the soil analysis of Phosphorus on CAFO farms. Dr. Herkelman could not answer as he is a nutritionist and has not looked into those effects.

Chairperson Harry followed up that PA was aware of phytase feeding in the poultry industry and that those numbers are reflected in the Chesapeake Bay Phase I WIP. Swine phytase feeding was not reported in the WIP, as it was not known that this was a “common” practice and a Standard Operating Procedure (SOP) for large integrated swine operations, until Chairperson Harry did some investigation. It is estimated that approximately 80% of swine operations and 95% of the swine CAFO operations, in PA, use phytase. Chairperson Harry mentioned that the next step will be to have EPA review the data for inclusion in the Chesapeake Bay Model.

Lunch Break (12:15 p.m. to 1 p.m.)

Manure Management Manual (Appendix 1) Field Application Supplement Revision Update

– DEP’s Steve Taglang and Jim Spontak, and Doug Goodlander of the SCC gave an update on the Manure Management Manual (Appendix 1) Field Application Supplement Revision. Mr.

Taglang reviewed the process that was taken to revise the Field Application Supplement of the Manure Management Manual (MMM). Mr. Taglang stated that an earlier version of the MMM was published in October 1986 and last revised in November 2001. He added that the Department started the revision of the Field Application Supplement in 2009 and first reported progress to the AAB in December 2009 and at five subsequent meetings. Mr. Taglang noted that an AAB workgroup assisted the Department in the revisions, starting in January 2010. Mr. Taglang explained that the MMM was published as draft in the PA Bulletin for public comment in August 2010 and that the Department received comments from 164 commentators. Mr. Taglang stated that the Department will be looking to have the final version, which the AAB is reviewing today, approved through the Department’s official review policy, and published in the summer of 2011. Mr. John Bell asked if summer of 2011 could be defined, as “summer” is too general. Mr. Taglang answered that after today’s meeting the document will need to go through the Department’s internal review process and then be published in the PA Bulletin, which ideally would be mid-July to the beginning of August.

Mr. Taglang reported that additions or changes to the manual from the public comment period included the following:

- Glossary.
- Penn State Agronomy Guide References.
- Plan Format.
- Manure Management on Environmentally Sensitive Areas.
- Winter Application.
- Pasture Management.
- Animal Concentration Areas (ACAs).

Mr. Taglang explained the seven sections of the MMM that include:

- Operation Information.
- Mechanical Manure Application.
- Farm Maps.
- Record Keeping.

- Manure Storage and Stockpiling / Stacking Area.
- Pasture Management.
- Animal Concentration Areas.

Ms. Kim Snell Zarcone inquired about the change from 40% cover to 25% cover in the winter application portion of Section 2 (Mechanical Manure Application) and what the science was behind the decision. Mr. Dukes Pepper answered that the 40% cover was recommended by a farmer member of the workgroup and that there was no science behind it. Ms. Kelly O'Neil added that 40% cover was chosen since farmers could write a plan on their own, without the assistance of a certified planner, and there would be some higher level of certainty of environmental protection using 40% compared to 25%.

Mr. Larry Breech inquired whom may inspect a farm for compliance and how long does that operation have to provide a plan (“...does the operator have to drop everything he is doing and get the plan?”). Mr. Taglang answered that the Department or conservation district, if delegated, could inspect operations. Mr. Pepper added that the Department would work with the operator and would not expect the operator to produce the plan in a moment's notice, if the operator was busy with some other function of the operation.

Mr. Goodlander proceeded to walk the AAB members through the process of writing a Manure Management Manual Plan and record keeping, using a hypothetical farm. Mr. Spontak reviewed the definition of a stream and why the Department tried to use a simple approach. Additionally, Mr. Spontak went over the winter application restrictions, particularly the restrictions on applications on slopes 15% or greater. Mr. Spontak stated that most surrounding states do not allow winter spreading on slopes of 8% or greater. He explained that the Department allows winter application because some farms need to perform this activity, and the Department went with 15% slope because of considerations for the Northern Tier. Mr. Spontak additionally defined the requirements for manure stacking and pasture management.

Mr. William Neilson commented that there are 63,000 farms in Pennsylvania and that by rough estimates probably 40,000 do not have plans currently. He wondered if those that do not have plans would accept this document as it may be a burden on them. Mr. Taglang commented that the Department and its partners will have a renewed focus on education and outreach and that the Department is evaluating different delivery methods.

Mr. Neilson commented that the Northern Tier has more slope and winter is longer, thus this manual will restrict too many operations from applying manure when they need to, and those operations will have the additional burden of building additional manure storage. Ms. O'Neil

stated that many surrounding states do not allow any winter application and that their maximum slope is much smaller than the proposed slope of 15%. Additionally, Ms. O'Neil stated that many CAFOs and Concentrated Animal Operations (CAOs) in Pennsylvania feel that they have done their part in regards to nutrient management and that all other operations should step up and do more.

Mr. Neilson stated that the Pennsylvania Farm Bureau's position is that Pennsylvania farmers are environmental stewards and utilize valid manure management practices, although those practices may not be written down on paper. Mr. Nielson additionally commented that the draft manual should clearly state that operations do not need to use the exact record keeping forms demonstrated in the manual, if they already use a record keeping process that collects similar information as is outlined in the sample record keeping forms. Mr. Pepper answered that the draft manual states that position presently but that the Department will look into the possibility of making it clearer.

Mr. Jay Howes mentioned that the draft manual may not give enough description in the introduction of what is required and what must be done. He advised that possibly the Preface should set the tone of the document and include the legal justification in plain English and that this information be brought forward to the very beginning of the manual. Ms. Zieba agreed.

Deputy Secretary Kelly Heffner thanked all persons that assisted the Department with this effort. Additionally, Deputy Secretary Heffner stated that when the original manure was published, the Department thought it was a good thing and that we should not allow "nit picking" to bring this effort down but rather let's be proud of what we have accomplished and take the next step.

Pennsylvania Department of Agriculture (PDA) Deputy Secretary Michael Pechart thanked all workgroup members and others that assisted in writing the revisions. He believes that this document is a key part to bring all agricultural operations on a level playing field and moves Pennsylvania to a leading position, compared to others, in regards to nutrient management. Additionally, PDA Secretary George Greig supports the draft manual and believes it provides assurance to farmers that Pennsylvania state agencies will stand behind them if they follow the prescribed practices.

Chairperson Harry asked if any members of the AAB or public had any comments. Chairperson Harry reported that David McElhaney mentioned that Bion Environmental Technologies will be hosting a tour of their livestock waste treatment technology at Kreider Farms, in Lancaster

County, on July 21, 2011, starting at 10 a.m. More information, when received, will be forwarded from Frank Schneider.

There were no comments from the public.

There being no additional discussions, the meeting was adjourned at 3:05 p.m.