

**Process and Schedule for Submission of Documentation on Manure
Management Plans' Use of Book Values Agreed to by Pennsylvania and EPA**
February 7, 2017

BACKGROUND

On January 19, 2017, Jill Whitcomb, Pennsylvania Department of Environmental Protection, Doug Goodlander, Pennsylvania Department of Environmental Protection, and Frank Schneider, Pennsylvania State Conservation Commission met via conference call with Mark Dubin, University of Maryland Extension (in his role as the Chesapeake Bay Program Partnership's Agricultural Technical Coordinator), Matt Johnston, University of Maryland Department of Environmental Science and Technology (in his role as the Chesapeake Bay Program Partnership's Non-Point Source Data Analyst) and Rich Batiuk, U.S. EPA Chesapeake Bay Program Office (in his role at the Partnership's Basinwide BMP Verification Program Coordinator).

The objective of the meeting was to reach agreement on exactly how EPA's draft *Guidance for Submission of Documentation Needed to Address the Phase 6 Nutrient Management BMP Language Agreed to by the Chesapeake Bay Program Partnership* would be applied by Pennsylvania to meet the following language in Appendix G of the Partnership approved Phase 6 Nutrient Management BMP Expert Panel's Final Report:

Where book values are used in lieu of site-specific manure or soil analyses, the jurisdiction's program must be sufficiently conservative to ensure that implementation of the standard process is sufficiently restrictive to be protective of water quality.

Jurisdictions reporting book value based nutrient management for credit in the Chesapeake Bay Program's modeling system must provide a description and justification documenting how their program, including the methods for calculating the book values, meets this standard as part of their EPA approved BMP verification program plan.

AGREED TO DOCUMENTATION

EPA and Pennsylvania agreed to the development of the following three sets of documentation which were fully consistent with EPA's draft guidance developed at the request of the Partnership's Agriculture Workgroup and the Water Quality Goal Implementation Team.

Pennsylvania State University Manure Book Values

Pennsylvania Department of Environmental Protection and Pennsylvania State Conservation Commission will work directly with the lead authors of the Penn State University's Manure Management Plan Nutrient Balance Worksheet User Guide to secure additional documentation describing the basis for how the manure nutrient values published in Table 6 of the document were derived. The documentation will describe the numeric and statistical range of analytical manure nutrient values for nitrogen and phosphorus by population significant livestock species, and the statistical methods utilized to derive the manure nutrient values published by Penn State University. The documentation should also describe the source(s) and relative age of the analytical manure nutrient data, e.g. PSU Laboratory: 2001-2016.

Application of Default Soil-Test Phosphorus Values in Development of Manure Management Plans

Pennsylvania Department of Environmental Protection and Pennsylvania State Conservation Commission will provide more detailed documentation describing the process by which, in the absence of available Phosphorus soil nutrient analysis, a default process can be implemented by assuming a “High Soil Phosphorus” soil residual and using crop specific annual Phosphorus removal rates as part of the Manure Management planning process. This documentation, largely drawn from existing planning guidance documentation, will clarify the specific steps and sources of information utilized in the default process, as well as additional clarification on the specific Phosphorus soil residual value represented by a “High Soil Phosphorus” classification used in default calculation process.

Use of Soil-Test P Default Values and Manure Nutrient Book Values in Manure Management Plans

To provide working documentation that Pennsylvania’s holistic implementation of Manure Management Plan regulations is sufficiently conservative considering their greater reliance upon soil-test phosphorus default values and manure nutrient book values, Pennsylvania committed to surveying all 43 conservation districts within their portion of Chesapeake Bay watershed. Through a survey form developed cooperatively between the Pennsylvania Department of Environmental Protection, the Pennsylvania State Conservation Commission, and the Chesapeake Bay Program Office, the two Pennsylvania agencies will jointly contact the county conservation districts within the Commonwealth’s portion of the Chesapeake Bay watershed and ask them to provide the following:

For the Manure Management Plans written or reviewed by conservation district employees, segregated by the population significant livestock and poultry species identified in the survey form¹, how many of those manure management plans (numerically and by acreage) were developed and are being implemented by the producers utilizing one of the following methods:

- 1) Use of default soil test P and default manure values;
- 2) Use of default soil test P and site-specific manure nutrient analysis;
- 3) Use of site-specific soil test P values and default manure values;
- 4) Use of site-specific soil test P values and site-specific manure nutrient analysis

EPA and Pennsylvania both recognize responses may not be received from all 43 conservation districts—the objective here is to get a representative understanding of the basis for the manure management plans written to date across the array of population significant livestock and poultry species covered by these manure management plans.

In writing up this documentation, Pennsylvania Department of Environmental Protection and Pennsylvania State Conservation Commission will provide additional background information on relative size and types of agricultural operations to which these Manure Management Plan regulations apply. The emphasis of this entire set of agreed to documentation is to clearly communicate the conservative nature of the resultant recommended agricultural nutrient application rates through implementation of the entire program, not any single element in isolation.

¹ Only include species that have less than or equal to 70% coverage by Act 38 Nutrient Management Plans.

SCHEDULE FOR CREDITING

If Pennsylvania submits the above documentation in a timely manner, EPA has the time necessary to carry out its respective reviews, and EPA approves the document for incorporation into Pennsylvania's BMP verification program plan by March 30, 2017, Pennsylvania's submitted manure management plan acres will be incorporated into the calibration of the Partnership's Phase 6 Chesapeake Bay Watershed Model following the Partnership approved verification guidelines currently in place for Progress scenario reported acres and applicable to all jurisdictions. Pennsylvania's submitted manure management plan acres will also be credited in management watershed model scenarios used in the development of Pennsylvania's Phase III Watershed Implementation Plan, credited in future progress scenarios using the Phase 6 Watershed Model, and incorporated into Pennsylvania's historical record of BMP implementation when next updated in advance of development the 2018-2019 milestones consistent with CBP partnership approved milestone protocols and procedures.

If EPA disapproves the submitted documentation, EPA will clearly spell out in writing those specific areas of Pennsylvania's program that fall short of achieving the test of being "sufficiently conservative to ensure that implementation of the standard process is sufficiently restrictive to be protective of water quality."

EVALUATION AND AMENDMENT OF VERIFICATION DOCUMENTATION

Upon EPA review and agreement that the submitted documentation provided clear evidence of the conservative nature of the resultant recommended agricultural nutrient application rates through implementation of the entire program consistent with EPA's published guidance, EPA will ask Pennsylvania Department of Environmental Protection to amend their existing EPA approved BMP Verification Program Quality Assurance Plan to include the submitted documentation. EPA will then accept Pennsylvania's submitted manure management plan acreages starting with the Penn State University's Farmer Survey for crediting through the Partnership's suite of decision support tools, fully consistent with the Partnership approved Phase 6 Nutrient Management Practices BMP recommendations.

EPA and Pennsylvania agreed to target the mid-March 2017 timeframe for Pennsylvania's submission of documentation followed by EPA's timely review and approval.