

Pennsylvania Inter-Agency Nutrient Management Conference

TECHNICAL MANUAL VERSION 11 UPDATE

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v.11.2019



Penn State **Extension**

History – Tech Manual

- Tech Manual Version 10.0 was released in October 2017
- In August 2018, SCC held a Tech Manual open comment period
 - Users submitted comments and suggestions for revisions to the Tech Manual
- 109 comments / suggestions were submitted to SCC
- SCC reviewed the comments / suggestions
 - Deemed that 57 comments / suggestions had merit

General Updates

- Version # updated throughout
- Web links updated throughout

CAFO NMP Reviews

- NMP Submission: Required Appendices and Supplemental Information
 - This section was revised to include guidance on CAFO NMP reviews
- The updated guidance provides:
 - That if DEP doesn't provide comments to the CD within the 30 day public notice period, the CD is too assume that DEP has no comments, unless advised otherwise.
 - Once the PA Bulletin notice is submitted to DEP for publication, DEP will inform the district of the anticipated PA Bulletin publish date, which in turn the CD will notify the plan writer.

Identification of CAOs

- Section I: Identification of CAOs
 - Added guidance on what must be submitted by the commercial NMS to delegated CDs /SCC to prove that an operation is not a CAO.
 - Added guidance on what must be submitted by the commercial NMS to delegated CDs /SCC to prove an existing CAO is no longer a CAO and wishes to withdrawal from the program.
 - Updated animal weights in the sample CAO calculation.

NMP Summary

- Nutrient Management Plan Summary
 - Added guidance to refer to Appendix 2 for detailed discussion on Operation Acres / Animal Equivalent Units / Animal Equivalent Units per Acre.
 - Added a discussion on the whole farm note that should be used in regards to the requirements for fall manure applications that require at least 25% cover.
 - Updated guidance that the Manure Storage Winter Capacity Planning Level for CAFOs is to be used for Liquid, Semi-Solid, and Solid manure storages.

NMP Agreement and Responsibilities

- Appendix 1: Nutrient Management Plan Agreement and Responsibilities
- Updated guidance on Ag E&S plan verification
 - “If an operation is not required to have an ag E&S plan, as they have no farm fields (export all manure) and they have no ACA’s, the planner should check the No Ag E&S plan required box.”

Operation Information

- Appendix 2: Operation Information
 - Added mortality compost to the operation description, if applicable
 - Added Facilities to the Names & Addresses of Owners of Rented or Leased Land
 - Updated guidance on emergency manure stacking areas, if needed, which should correspond with the operation map

Small Quantity Manure Groups

- Appendix 3: Small Quantity Manure Groups
 - This section was revised to include guidance for uncollected manure in addition to collected manure
- The specific documentation requirements for this manure in the NMP are:
 - “The Operation Description section of Appendix 2: Operation Information must include a description of how the manure in the small quantity manure group will be handled and utilized. The description must include where the collected manure will be applied, and, if applicable, the specific pasture that will receive the uncollected manure.”

Small Quantity Manure Groups

- Documentation (continued)
 - “If the collected or uncollected manure from the small quantity manure group will be applied to a crop field or pasture, a note for the crop management unit(s) receiving the manure must be included in the NMP Summary Notes.”
 - “The animal types, number and weights must be entered into Appendix 3 but manure production data does not need to be entered. The animal information is necessary to complete the CAO determination for the operation.”

Small Quantity Manure Groups

- Appendix 4: Field Identification
 - Guidance was added on how to handle uncollected manure
- The guidance states:
 - “Pastures that are grazed by animals in a small quantity animal group must be included in Appendix 4 and meet all the requirements of a CMU, including soil test results, fertilizer applications and manure applications from other manure groups. The amount and rate of uncollected manure from a small quantity manure group does not need to be included in Appendix 4. Refer to the Small Quantity Manure Groups guidance in Appendix 3 – Manure Group Information.”

Outdoor Poultry Access Areas

- A “Poultry Outdoor Access Areas” section was added to Appendix 3 which states:
 - “Poultry operations that provide access for the birds to outdoor areas can choose to manage the area as a pasture and include it as a field in Appendix 4 or identify and evaluate the area as an animal concentration area in Appendix 6. In both options, all Act 38 planning requirements must be met.”
- The same paragraph was added to the Appendix 4: Field Identification

Report Dates

- The following sentence was added to the Appendix 3: Manure Analysis Regulatory Requirements section:
 - “Refer to Section V: Plan Review and Implementation for guidance on manure analysis report dates for plan submission.”
- A similar sentence was added to the Appendix 4: Soil Testing section which states:
 - “Refer to Section V: Plan Review and Implementation for guidance on soil test report dates for plan submission.”

Commercial Vegetable Recommendation

- Removal values for N and K_2O were added to the Appendix 4: Commercial Vegetable Crop Removal Values section
- The removal value guidance for commercial vegetables now states:
 - “The following standard removal values should be used for all commercial vegetable crops: 100 lb N, 50 lb P_2O_5 , and 215 lb K_2O per acre.”

Uncollected Manure Rates

- Guidance was added to the Appendix 4: Planned Manure Rate section
 - To provide specific guidance on how to calculate the planned manure application rate for uncollected manure
- The guidance states:
 - “Planned manure application rates for pastures are determined by dividing the amount of uncollected manure on the pasture by the acres in the pasture. If the Grazing Calculator is used to determine the uncollected manure application rate, a printout of the Grazing Calculator should be included in Appendix 10.”

Significant Management Change

- The phrase “manure storage structure installation” was removed the introductory language of the Appendix 5: Significant Farm Management Change section
 - Specifically because it is not on the list of the four specific criteria that define a significant management for the P Index

Drainage Class Tables

- The P Index transport factor for “Runoff Potential” is determined by accessing the Pennsylvania Drainage Class Tables
 - Available on the Nutrient Management Program website
 - <https://extension.psu.edu/programs/nutrient-management/planning-resources/other-planning-resources/pennsylvania-county-drainage-class-tables>
- The original tables that have been used since the release of the PA P Index have been replaced by the most recent tables developed by NRCS

Importer/Broker Agreements and NBSs

- Appendix 8: Importer/Broker Agreements and NBSs
 - Added “The signed agreements do not need to be re-signed or updated with each NMP Update or Amendment, unless a substantial change has occurred with the template provided or the parties or provisions contained in the signed document. Substantial changes could include changes in manure amounts, changes in types of manure, change in application season, and change in acres available.”
 - Added guidance on when importers may or may not need a Chapter 91 MMP
 - Added guidance on the Review of Exporting Information

Importer/Broker Agreements and NBSs

- Appendix 8: Importer/Broker Agreements and NBSs
 - Added guidance that the current manure analysis or the running average analysis can be used
 - Removed references to P Banking, as P Banking for NBS is no longer an option.
 - Removed the requirement for manure exported out of state to have the other state confirm the farm meets that States requirements

Supporting Information and Documentation

- Appendix 10: Supporting Information and Documentation
 - Removed the requirement for manure used out of state on owned or rented land to have the other state confirm the farm meets that States requirements

Record Keeping and Informational Requirements

- Section IV: Record Keeping and Informational Requirements
- Added language for BMP designs and certification for new liquid and semi-solid manure storage facilities.
 - “At least 2 weeks prior to installation of the facility or the repair, the registered engineer shall submit a verification (including a quality assurance inspection plan for construction) to the Commission or delegated conservation district documenting that the design, meeting the requirements including applicable setbacks, has been completed. Following completion of the installation or repair, the responsible engineer and construction contractor shall certify to the Commission or delegated conservation district that construction of the manure storage facility was completed according to the design, construction and location standards.”

Plan Review and Implementation

- Section V: Plan Review and Implementation
 - Added guidance that if the NMP is deemed administratively incomplete, the entire NMP should be returned
 - Updated Ag E&S Guidance to match with DEP guidance

Plan Amendments and Transfers

- Section VI: Plan Amendments and Transfers
 - Updated guidance on a change in crop management that results in a reduction of greater than 20% in nitrogen necessary for realistic expected crop yields or in the amount of nitrogen that the crops will use in the given crop year
 - “This 20% reduction is a “whole farm reduction” of the nitrogen necessary, not a single CMU (field) reduction. ”

Agronomy Guide Tables

- Supplement 1: Agronomy Guide Tables has been updated to reflect changes in the 2019-2020 Penn State Agronomy Guide
 - Table 1.2-13 includes new daily manure production and manure analysis book values for layers, broilers and turkeys

Sample NMP & NBSs

- The following supplements have been updated to reflect the changes in the Act 38 planning tools
 - Supplement 2 - Sample Nutrient Management Plan
 - Supplement 3 - Sample Nutrient Balance Sheet
 - Supplement 4 - Sample Nutrient Balance Sheet

Moving Forward

- Revisions are approved
- Tech Manual Version 11 will become effective in October 2019
 - For all NMP written for Crop Year 2020 and beyond
- Manual has been posted to the program website for reference and download
 - <https://extension.psu.edu/programs/nutrient-management/planning-resources>

QUESTIONS