



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Bureau of Watershed Restoration
and Nonpoint Source Management



Land Application of Manure, a supplement to Manure Management for Environmental Protection (361-0300-002) Substantive Revision

Agriculture Advisory Board Meeting

June 22, 2023

Josh Shapiro, Governor

Richard Negrin, Acting Secretary

Manure Management Manual (MMM) Revision Agenda

- Background
- Progress to date
 - Timeline
 - Stakeholder Engagement
- Summary of Revisions
- Future: Supporting Tools and Resources

Background

AUTHORITY

Section 5(b)(1) and Section 402 of the Pennsylvania Clean Streams Law, 35 P.S. Sections 691.5(b)(1) and 691.402; Section 1920 A of the Administrative Code of 1929, 71 P.S. Section 510 20, and 25 Pa. Code Section 91.36(b).

Background

25 Pa. Code Section 91.36(b)

(1) The land application of animal manures and agricultural process wastewater requires a permit or approval from the Department unless the operator can demonstrate that the land application meets one of the following:

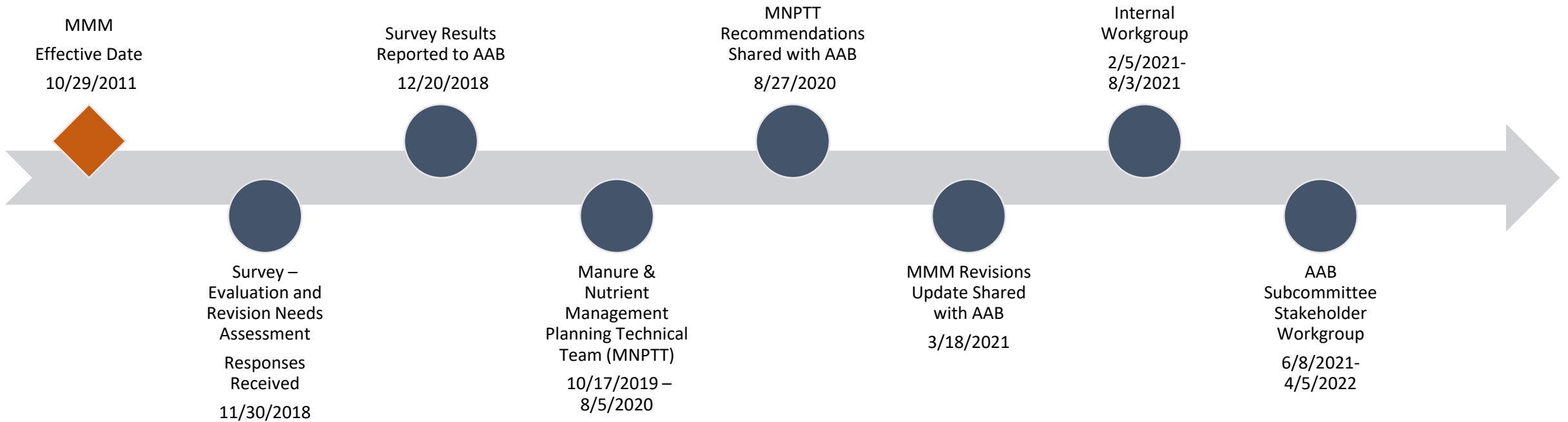
(i) The land application follows current standards for development and implementation of a plan to manage nutrients for water quality protection, including soil and manure testing and calculation of proper levels and methods of nitrogen and phosphorus application. The Manure Management Manual contains current standards for development and implementation of a plan to manage nutrients for water quality protection which can be used to comply with the requirements in paragraph (1).

Background

PURPOSE

- The PURPOSE of these revisions is to **address the diverse planning needs of the regulated community** and maintain or improve the feasibility of planning, verification, and implementation of Manure Management Plans developed in accordance with the standards set forth in the Manure Management Manual.

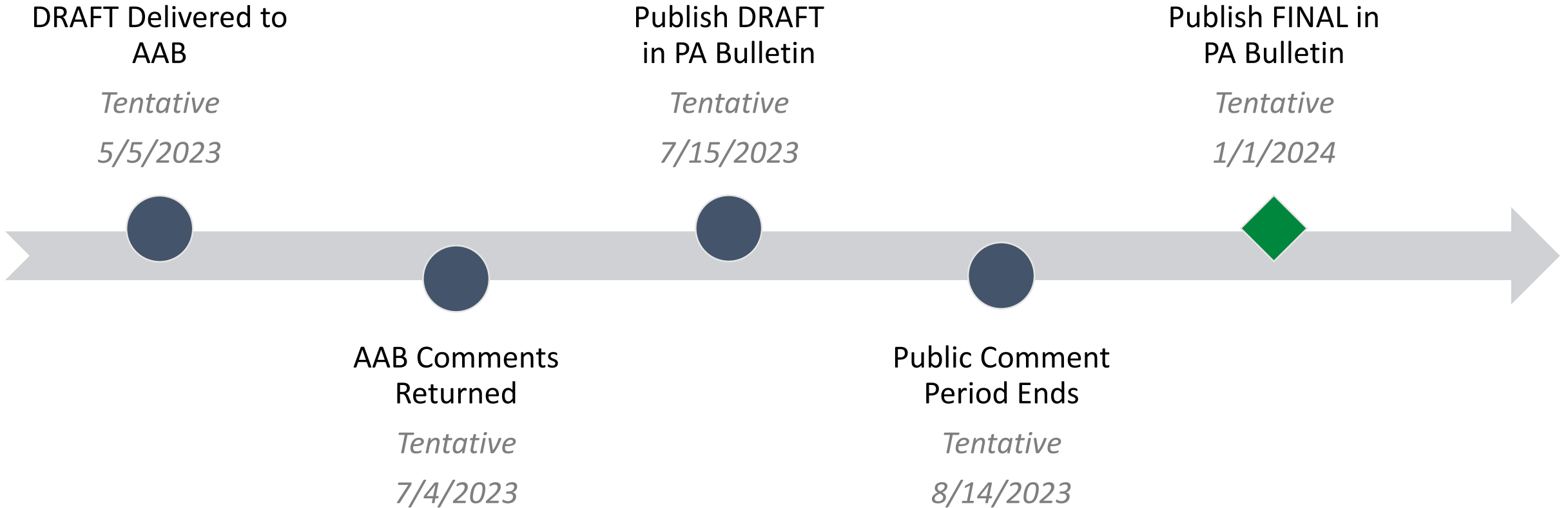
Timeline (To Date)



Stakeholder Engagement

FORUM	DATES ENGAGED	STAKEHOLDER GROUPS REPRESENTED	
Survey	10/29/2018 - 11/30/2018	County Conservation Districts Certified Commercial NM Specialists Hauler/Brokers	Federal Agencies Agricultural Operators Penn State University
MNPTT	10/17/2019 - 8/5/2020	Chesapeake Bay Foundation PA Farm Bureau Penn State University	PennAg. Industries Association SCC
Internal Wkgroup	2/5/2021 - 8-3/2021	Clearfield CCD Lancaster CCD NRCS Penn State Extension	Farm Bureau DEP Regional Staff SCC
AAB Subcommittee – Stakeholder Wkgroup	6/8/2021 - 4/5/2022	PennAg Industries PA Farm Bureau Sen. Elder Vogel’s Office Perry CCD	Chesapeake Bay Foundation Penn State University PDA

Proposed Timeline (Moving Forward)



Summary or Revisions

Planning options for Non-CAOs, Non-CAFOs meeting the requirements under 91.36(b)

- In the draft technical guidance document
 - Manure Management Plan Short Form
 - Manure Management Plan Workbook
- Act 38 NMP

The operator must obtain independent approval for any other planning format

Summary or Revisions

Manure Management Plan Short Form Guidelines

- Maximum combined weight of livestock and poultry
- Maximum animal density
- Maximum amount of imported manure
- Manure is evenly spread across all acres

Summary or Revisions

Manure Management Plan Short Form Guidelines (cont.)

- Minimum 100' setbacks from environmentally sensitive areas
- No winter spreading
- No liquid or semi-solid manure generated or stored on site
- Solid manure storage to prevent pollutional discharge
- Exported manure is applied according to a NMP or MMP or transported to a permitted waste disposal site.

Summary or Revisions

Manure Management Plan Short Form Guidelines (cont.)

- Pastures maintain at least 3” of vegetation height and 75% perennial grass cover when animals are on pasture.
- No Animal Concentration Areas (ACAs) on site

Summary or Revisions

Manure Management Plan Workbook – New Worksheets

- Animals Worksheet – AEU Calculation
- Agricultural Process Wastewater Worksheet

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Operation Information
 - To reflect new and revised worksheets later in the MMP Workbook
 - Manure Spreader Calibration – New check item verifying that the manure spreader will be calibrated according the recommendations in Agronomy Facts 68 prior to manure application.

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Environmentally Sensitive Areas Worksheet
 - Included springs for clarification
- Winter Spreading Worksheet
 - No changes to winter spreading requirements
 - Minor revisions to heading language

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Manure Management Plan Summary
 - New check box identifying that soils tests taken in the last 3 years indicated phosphorous levels are less than 200 ppm.
 - Clarification language indicating that no single manure application can exceed 9,000 gallons per acre unless it is applied in accordance with §83.294(e).

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Operation Map (Formerly Farm Map)
 - New blank page inserted to facilitate hand drawing and/or remind the planner to include a map.
- Manure Storage and Stacking Worksheet (Formerly Manure Storage Facilities Worksheet)
 - Facilitates planning for stacking and stockpiling of manure.
 - Facilitates consideration and documentation of the PE certification for the design and construction of liquid and semi-solid manure storage facilities as required under §91.36(a)(2).

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Pasture Management Worksheet
 - Clarification of vegetation requirements needed to maintain pasture.
 - Added installation quantities and dates to obtain the necessary information to report pasture BMPs in MMPs toward Chesapeake Bay WIP implementation.

Summary or Revisions

Manure Management Plan Workbook – Revised Worksheets

- Animal Concentration Area Worksheet
 - Added installation quantities and dates to obtain the necessary information to report pasture BMPs in MMPs toward Chesapeake Bay WIP implementation.

Summary or Revisions

Revised Appendix

- Appendix 1: Manure Application Rate Tables
 - Simplified rate tables to include only application rates for Phosphorus removal of common crops and manure types in the Commonwealth of PA.

Summary or Revisions

New Appendices

- Appendix 2: Agronomy Facts 54
 - To assist with completion of Animals Worksheet
- Appendix 3: Agronomy Facts 69
 - To assist with manure calibration

Future: Supporting Tools and Resources

- Education & Outreach
 - PE certification of the design and construction of liquid and semi-solid manure storage facilities
 - Manure spreader calibration
 - New worksheets
 - New standard planning formats
- Tools
 - PAOneStop MMP Module
 - Engineer Report of Existing Manure Storage Facilities

Summary

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Contact Information

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