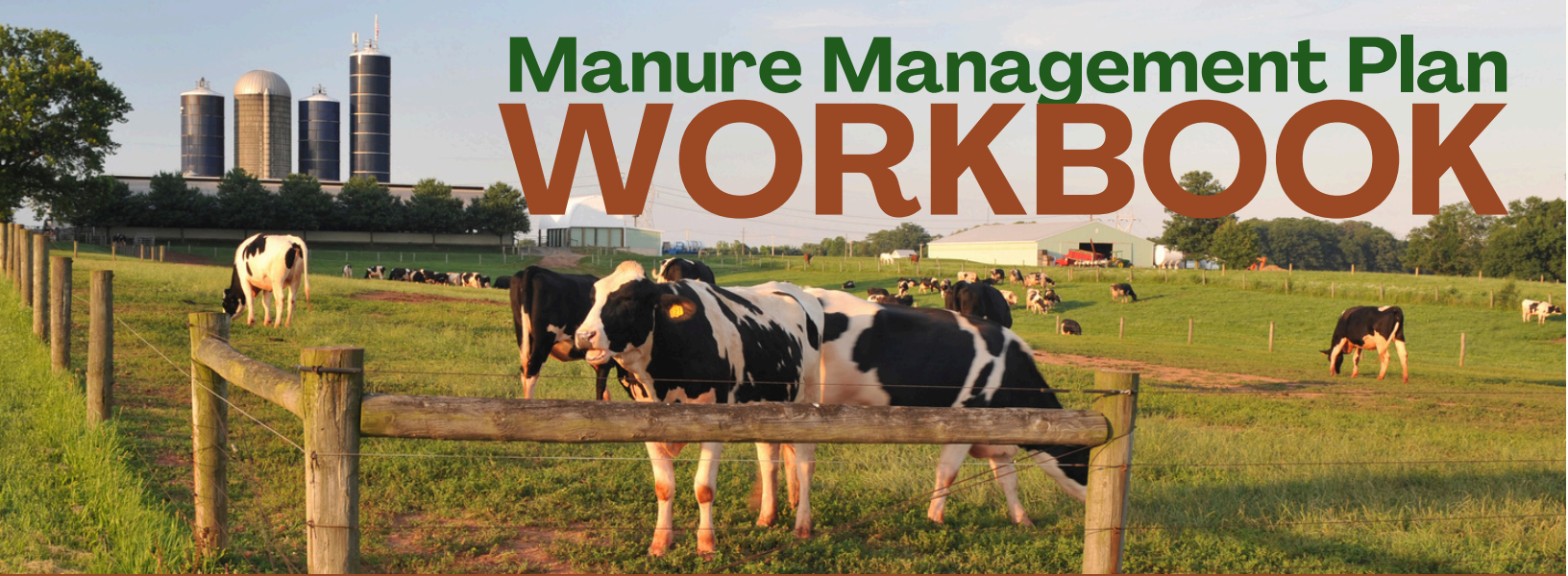


Manure Management Plan WORKBOOK



All agricultural operations in Pennsylvania, regardless of size, that land apply manure or agricultural process wastewater are required to have a permit or approval from DEP, unless the land application follows current planning standards to manage nutrients and protect water quality. This planning requirement also applies to all agricultural operations that manage an Animal Concentration Area (ACA) or pasture.

Pennsylvania Chapter 91 regulations address pollution control and prevention at agricultural operations. Section 91.36 identifies the Manure Management Manual (MMM) as the standard for developing a Manure Management Plan. DEP's Land Application Of Manure: A Supplement to Manure Management for Environmental Protection (361-0300-002) is the supplement of the MMM that provides the acceptable planning templates for a Manure Management Plan.

For agricultural operations not defined as a Concentrated Animal Feeding Operation (CAFO) or Concentrated Animal Operation (CAO), the Manure Management Plan Workbook is one acceptable template.



SECTIONS OF THE MANURE MANAGEMENT PLAN WORKBOOK

1

Section 1 - General Information: This section of the plan contains information that includes date of development, contact information, basic operation information, and the number and types of animals managed.

2

Section 2 - Mechanical Manure Application: This section contains the Environmentally Sensitive Areas Worksheet, the Winter Application Worksheet, and the Manure Management Plan Summary.

1. Environmentally Sensitive Areas Worksheet: This worksheet identifies the location of environmentally sensitive areas on the operation and the applicable manure application setbacks for each area. A 100 foot manure application setback is required from Environmentally Sensitive Areas unless criteria are met to reduce the setback as described in the instructions of the Manure Management Plan Workbook.
2. Winter Application Worksheet: This worksheet identifies fields which are to receive manure during the "winter" period. The MMM defines "winter " as:
 - December 15th through February 28th or,
 - Anytime the ground is frozen at least 4 inches or,
 - Anytime the ground is snow covered.
3. Manure Management Plan Summary: This worksheet includes information related to manure application. The information includes crop groups, manure type applied, planned application rate, incorporation timing, and how the planned application rate was determined. The manure application rate may be determined using one of the following options:
 - Establish application rates using Nitrogen or Phosphorus Balance Sheets (NBS).
 - Have a trained individual implement the PA Phosphorus Index (P-Index).
 - Using Phosphorus removal values from the Manure Application Rate Tables in Appendix 1.

Manure Management Plan WORKBOOK



3

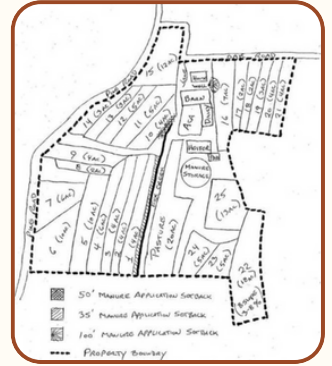
Section 3 - Operation Map: The plan must include a map that identifies:

- Field boundaries
- Acreage
- Environmentally sensitive areas
- Manure storage structures
- Manure stacking areas
- Animal Concentration Areas
- Roads

MAPPING OPTIONS

An agricultural operation can choose to use a hand drawn map, aerial imagery, or the PAOneStop Mapping Application at:

<https://extension.psu.edu/programs/paonestop>



4

Section 4 - Manure and Agricultural Process Wastewater Storage and Stacking Areas: The plan must identify any manure storage or stacking areas and describe how agricultural process wastewater will be handled.

1. Manure Storage and Stacking Worksheet: Manure stacking in farmstead areas must use an improved stacking pad or covered area. In-field stacking on unimproved areas is allowed for stackable manure. Manure stacking in crop fields includes a required 100-foot setback from environmentally sensitive areas and must be on land of less than 8% slope. In-field stacking of manure should be covered by a water repellent cover if being stacked for more than 120 days. Liquid or semi-solid manure storages built since the year 2000 must be designed by a licensed PA Professional Engineer.
2. Agricultural Process Wastewater Worksheet: Must be completed if agricultural process wastewater is generated on the operation to identify the sources (e.g. egg wash, milkhouse wastewater, and other agricultural sources) and how they are handled. If process wastewater is not being properly captured and stored on the operation, then the operator should contact a resource for assistance (e.g. County Conservation District, NRCS, or a private consultant).

5

Section 5 - Pasture Management: The plan should identify pastures. Agricultural operations have options for managing pasture, including:

- Develop a Prescribed Grazing Plan, as outlined in NRCS PA Technical Guide Practice Standard 528- Prescribed Grazing Plan.
- Maintaining at least 3 inches of vegetation that consists of at least 70% perennial vegetative cover when animals are present on the pasture.

6

Section 6 - Animal Concentration Areas: The plan should include barnyards, feedlots, loafing areas, exercise lots and other similar animal confinement areas that will meet pasture management requirements. ACAs are not pasture. When managing ACAs, the farmer should:

- Divert clean water away from the ACA.
- Collect or treat dirty water flowing from the ACA.
- Limit animal access to streams.
- Minimize the size of the ACA.
- Move feeding and water away from streams.
- Routinely remove manure.

7

Section 7 - Record Keeping:

Agricultural operations are required to keep records of:

- Manure application
- Crop yield
- Manure exported
- Manure storage observations.

