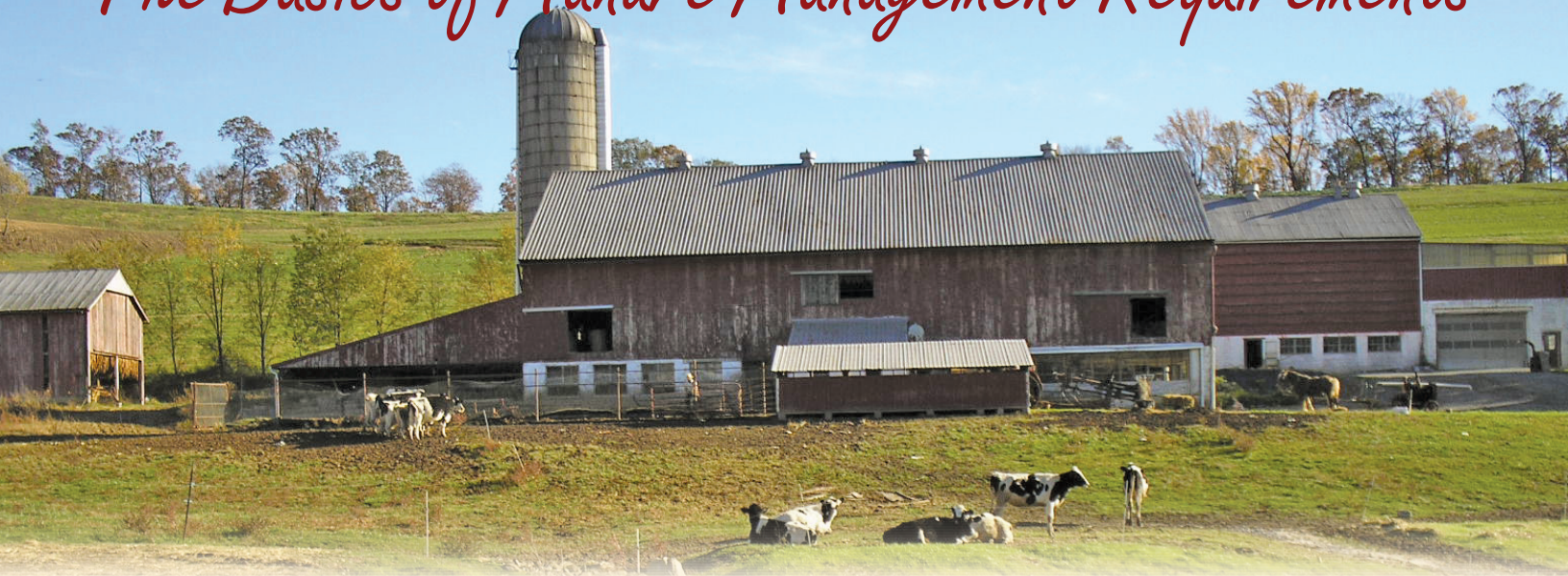


The Basics of Manure Management Requirements



All farming operations that land apply manure or agricultural process wastewater, whether they generate the manure or import it from another operation, **must** have a written Manure Management Plan. All farming operations that include an Animal Concentration Area (ACA) or pasture **must** have a written Manure Management Plan.

For farms **not** defined as Concentrated Animal Feeding Operations (CAFOs) or Concentrated Animal Operations (CAOs), Manure Management Plans can be prepared by the farmer, although the farmer may benefit from getting assistance by those trained and experienced in developing plans. Manure Management Plans do not have to be submitted for approval but must be kept on the farm and made available upon request.

It should be noted that farms defined as CAFOs or as CAOs are required to develop more detailed written plans, called Nutrient Management Plans. These plans must be developed by a Certified Nutrient Management Specialist and submitted to the local county conservation district for review and approval.

Pennsylvania Chapter 91 regulations address pollution control and prevention at agricultural operations. Section 91.36 of the regulations refers to the Manure Management Manual (MMM) as containing standards for development of a Manure Management Plan. The MMM is available to assist farmers to develop a written Manure Management Plan. A farmer can use a plan different than the MMM, but they then must get DEP review and approval. The following is an overview of the sections of a Manure Management Plan. Complete details are outlined in the *Manure Management for Environmental Protection*.

Operation Information - Section 1 – Manure Management Plans include contact information and general information about the farm.

Mechanical Manure Application - Section 2 – Manure Management Plans identify manure and fertilizer application rates for each crop group, manure application setbacks from environmentally sensitive areas, and requirements for winter application.

- 1) Manure Application Rates and Timing – Use one of these three options for determining rates:
 - The Manure Application Rate Tables included in the MMM; or
 - Nitrogen or Phosphorus Balance Worksheets; or
 - The P-Index developed by a certified individual.
- 2) Environmentally Sensitive Areas – identification of streams, sinkholes, public drinking water sources, and private drinking water sources:
 - 100 foot setback from these environmentally sensitive areas.
 - The setback from a stream can be reduced if using designated conservation practices.
- 3) Winter Application - Winter application of manure is discouraged. DEP encourages farmers to use other management like solid manure stacking and liquid manure storage. You may winter spread, but there are additional conditions and restrictions, including:
 - Setback of 100 ft. from top of stream banks, lakes and ponds.
 - **No application** on fields with slopes greater than 15%.
 - All fields must have minimum 25% crop residue at application time or an established and growing crop/cover crop.
 - Maximum application rates of 5000 gal/ac or 20 tons/ac non-poultry manure and 3 tons/ac poultry.

NOTE: In the MMM, “Winter” is identified as:

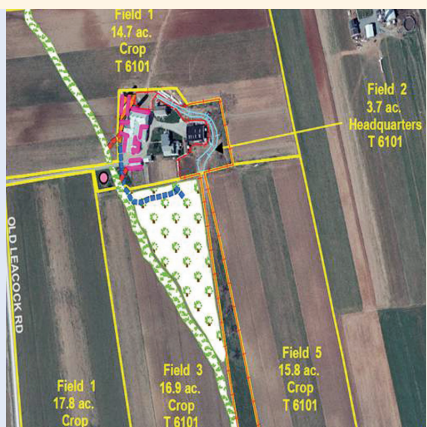
- December 15 through February 28 or
- Anytime the ground is frozen at least 4 inches, or
- Anytime the ground is snow covered.



*Winter spreading is allowed,
but various conditions and restrictions apply.*

Farm Maps - Section 3 –

The Manure Management Plan must include a map. The map will identify field boundaries and acreage, environmentally sensitive areas, manure storage structures, manure stockpiling and stacking areas, pastures, ACAs and roads.



Record Keeping - Section 4 –

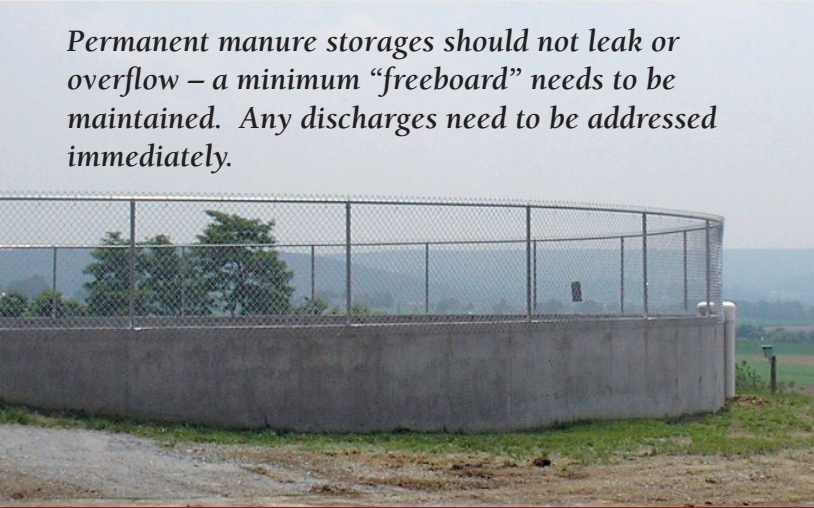
Farmers are required to keep records of manure application, crop yield, manure export, and manure storage observations (if applicable). The farmer may use his current methods of recordkeeping **or** the MMM provides blank reporting forms that can be used.

Manure Storage and Stockpiling/Stacking Area – Section 5 – The Manure Management Plan must identify any manure storage and stockpiling/stacking areas on the farm. Manure and agricultural process wastewater must be properly stored. Liquid or semi-solid manure storage facilities built since the year 2000 must be designed by a licensed PA Professional Engineer.

Manure stacking in farmstead areas must use an improved stacking pad or covered area. Manure in these improved stacking pads does not necessarily need to be covered.

In-field stacking on unimproved areas is allowed for stackable manure. Manure stacking in crop fields includes 100 ft. setbacks from environmentally sensitive areas and stockpiles must be on lands of less than 8% slope.

Permanent manure storages should not leak or overflow – a minimum “freeboard” needs to be maintained. Any discharges need to be addressed immediately.



Pastures should maintain average vegetation height of at least 3" during the growing season.



Pasture Management - Section 6 – The Manure Management Plan should identify pastures. Farmers have options for managing pastures, including:

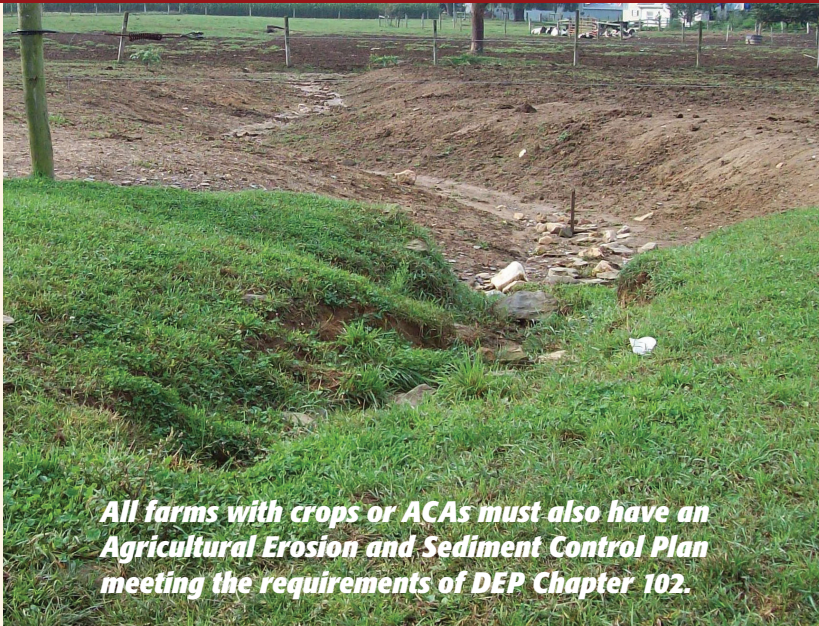
- Maintain “dense vegetation throughout the growing season”, which *minimize bare spots and maintain average vegetation height of at least 3 inches.*
- **Or** develop a Prescribed Grazing Plan, as outlined in NRCS PA Technical Guide Practice Standard 528 – Prescribed Grazing Plan.

Manure Management for Environmental Protection
**is available online, at regional DEP offices or at
local county conservation district offices.**



Animal Concentration Areas - Section 7 – The Manure Management Plans should include barnyards, feedlots, loafing areas, exercise lots or other similar animal confinement areas that will not maintain the dense vegetation of a pasture. ACAs are not pastures. When managing ACAs, the farmer should:

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



All farms with crops or ACAs must also have an Agricultural Erosion and Sediment Control Plan meeting the requirements of DEP Chapter 102.

A Manure Management Plan should include . . .

- ✓ Acres of the operation: Owned and Rented
- ✓ Animals on the operation: Animal type, Animal # (normal production day), Days on farm per year
- ✓ Manure application rates and timing
- ✓ Crop rotation used on the operation
- ✓ Identify Environmentally Sensitive Areas
 - ✓ Winter application: If manure is applied during the winter
- ✓ Manure storage facilities: If manure is stored in a manure storage facility, identify type of tank, structure, pond or lagoon.
- ✓ Solid manure stockpiling or stacking: If manure is stockpiled or stacked in outdoor areas
- ✓ Identify pasture areas and list acres: Owned and Rented
- ✓ Identify Animal Concentration Areas (ACAs): Owned and Rented

