# Overview of Manure Management Manual Guidelines

This overview provides a summary of the guidelines in the October 2011 revision of **Land Application of Manure – Manure Management Plan Guidance** a supplement to Manure Management for Environmental Protection Manual published by the Pennsylvania Department of Environmental Protection.

## These Guidelines Pertain To:

A. Every farm in Pennsylvania that generates or uses manure, regardless of the size of the farm, including farms that:
   1. Pasture livestock or poultry, or
   2. Maintain an Animal Concentration Area (barnyard, exercise lot, or feedlot), or
   3. Apply manure to their crop fields.

B. Farms that are defined as CAOs or CAFOs need to follow a different, more detailed nutrient management planning process than that outlined below.

## General Manure Management Requirements

A. Develop a written Manure Management Plan.

B. The Manure Management Manual provides a standardized process and format for developing these plans. An alternative plan format can be used if approved by DEP.

C. Farmers can develop their own plans and are not required to use a certified nutrient management planner.

D. The manure management plan written for these operations does not need to be submitted for review and approval, but these plans must be maintained and available on site.

E. Livestock and manure on the farm must be managed consistent with the manure management plan and required records maintained.

## DEP Authorized Manure Management Practices

The authorized manure management practices outlined below must be incorporated into the manure management plan if applicable to the operation. Alternative manure management practices may be used if the farmer gets specific approval from DEP.

A. Manure application rates can be developed using one of the following 3 methods:
   1. The look-up charts provided in the manual (Appendix 1: Manure Application Rate Tables), or
   2. Nutrient Balance Sheets which are more farm specific, or
   3. The PA Phosphorus Index which requires the assistance of an authorized specialist.

B. Year-round manure application setbacks for the mechanical application of manure include:
   1. 100’ setback from streams (during seasons when water flows in those channels), lakes, ponds, existing open sinkholes, and from private or public active water wells.
   2. The 100’ setback from a stream, lake or pond (surface water) can be reduced to the following if these additional measures are taken:
      a. 50’ setback if the field soil phosphorus level is less than 200 ppm P, is farmed using continuous no-till, and if residue is removed, a cover crop is planted on the field.
      b. 35’ setback if the stream, lake or pond has a 35’ permanent vegetative cover.

C. Winter spreading restrictions:
    1. Winter is defined as meeting any one of the following:
        a. The date includes or is between December 15 to February 28, or
        b. The ground is frozen more than 4 inches, or
        c. The ground is snow covered.
    2. Farmers may not apply more than the following manure rates during the winter season:
        a. 5,000 gallons per acre of liquid manure.
        b. 20 tons per acre non-poultry dry manure.
        c. 3 tons per acre poultry manure.
    3. The winter application field must have at least 25% crop reside cover or a cover crop.
    4. The winter application field may not have a slope greater than 15%.

D. Pastures must be managed using one of the following options or be designated an Animal Concentration Area and follow the requirements for ACAs:
    1. Maintain dense vegetation of an average 3" height across the pasture during the growing season.
    2. Develop a grazing plan to meet the NRCS standard.

E. Animal concentration area management:
    1. These are barnyards, feedlots, exercise lots, and other animal congregation areas within pastures that will not maintain the dense vegetation of a pasture.
    2. The following criteria must be followed to address runoff from these areas:
        a. Divert upslope water.
        b. Direct runoff into a storage or allow it to flow thru an adequate vegetative filter.
        c. Disallow animal access to a stream except for properly constructed crossings.
        d. Keep watering, feeding, etc areas as far from streams as practical.

F. Manure storage management:
    1. All liquid or semi-solid manure storage facilities built since 2000 must:
        a. Be designed by a Pa Professional Engineer to meet NRCS standards.
        b. Have an engineer certification stating the storage was built to the required standards.
    2. Certain manure storages are required to have a DEP permit:
        a. Liquid or semi-solid manure storages with a volume in excess of 2.5 million gallons.
        b. Liquid or semi-solid manure storages with a volume in excess of 1.0 million gallons if the storage is being built in a Special Protection or Agriculture Impaired watershed.
    3. Proper manure storage maintenance:
        a. Check for leaks, cracks, overflows, trees, or other issues threatening storage integrity.
        b. Must maintain the required freeboard at all times.
            i. 12" for manure storage ponds.
            ii. 6" for all other manure storage structures.

H. In-Field manure stacking of dry manure:
    1. In-field stacking is acceptable on unimproved areas if the following conditions are met:
        a. 100' setback from streams, lakes, ponds, water wells, and open sinkholes.
        b. Placed on areas with a slope of less than 8%.
        c. Cover the stacks with an impermeable cover if on the area for more than 120 days.
        d. Divert upslope water if necessary.
    2. Stacking on improved areas is allowed as long as runoff from the stack does not directly reach streams, wells, sinkholes or other water resources.