Manure Management Manual Revisions

Ag Advisory Board

June 16, 2010

Timeline

- December AAB Presentation, Subcommittee was formed
- February and April updates were given to AAB
- January thru May: Workgroup Meetings & Document Reviews
- May 24 Third meeting of the subcommittee to review their comments on the latest redraft of the field application section
- June 16 AAB Presentation

Changes to MMM

- Penn State Agronomy Guide References
- Plan Format
- Phosphorus
- Manure Testing
- Manure Management on Environmentally Sensitive Areas
- Winter application restrictions
- Field stacking criteria
- Pasture management
- Manure storage assessment
- Animal Concentration Areas, ACA

Manure Management Plan, New Format

- General information
- Manure application rates
- Manure storage and stockpiling
- Managing Manure in Pastures
- Animal Concentration Areas/AHUA

General Information

- Farm Name and address
- Plan preparer's name
- General information about farm that may direct planner to other sections of MMM
  - Animal numbers, crop rotation, pasture and ACA acres, etc.

Manure Application and Timing for Mechanical Application

- Option 1: Manure Application Charts, Section 2,“Book Values” may be used from Manure
- Option 2: Nutrient Balance Worksheets, Nitrogen or Phosphorus applied rates, crop groups, average yields, book values for manure
- Option 3: Certified Nutrient Management Planner may develop a Phosphorus-Index plan, which is a more flexable plan

- Use of nitrogen or phosphorus rates based on soil test P levels (200 ppm)

Soil and Manure Tests

- The current MMM encourages Soil and manure testing
- The changes require soil tests if farmer wants to spread within 150’ of stream or wants to apply to nitrogen based rates
- Manure testing is not required, book values may be used.

Manure Management in Environmentally Sensitive Areas

- Setbacks from water bodies
  - 100’ or 35’ buffer if using p-index (planning option 3)
  - 150’ if not using the p-index
- Setbacks from open sinkholes:
  - 100’ or 35’ buffer
- Setbacks from Private and Public Water Supplies
  - 100’
- No application in areas of concentrated flow
- The current MMM references old Ch 83, proposed to be revised to the above

Winter Application

- Year round setbacks plus additional winter setbacks are clearly stated
- Field conditions suitable for winter spreading are given
  - 40% cover, < 15% slope, prioritize fields with crop
- Limited max application rate for the season
  - 5,000 gallons liquid, 20 tons solid
- The current MMM discourages winter application and gives reasons, the new changes are more specific

Managing in Field Stacking Areas

- Unimproved, in-field stacking areas
- Stream setback of 150 feet
- Do not use areas with 8% or greater
- Manure must be dry enough to pile 5 ft. high
- Stockpiles must be covered if exposed to weather 120 days or more
- Divert clean water if more than 100’ from top of slope
- Only pile on the same spot once every 4 years

Manure Storage in Structures for Liquid ands Semisolids

- Must meet NRCS Technical Standards
- Storages constructed after 1/29//2000 must be certified by registered engineer to meet MMM or obtain a permit
- There shall be no overtopping or leakage Maintain 6” to 2’ freeboard, based on type of storage and category of farm
- The storage shall be checked for cracking or any problems that may lead to leakage
- There must not be any slope failures, deterioration of liners or known local water pollution from the facility

Managing Solid manure storage areas

- Improved areas, used continually for solid manure storage
- Must follow NRCS technical standards
- Divert clean water
- Contain and/or treat polluted water
- Stream setback of 150 feet

Pastures

- Pastures must be maintained with dense vegetation with minimal bare spots
  - 3” grass height or 80% cover
- Operations that graze within 150’ of a stream are to assess the stocking rate of the pasture using either:
  - Animal stocking rate charts
  - Pasture nutrient balance calculation worksheets
- The 150’ limit is reduced to 50’ if the area is a non-grazed permanent vegetative buffer.
- Operations that keep grazing outside of the 150’ or 50’ area stated above do not need to provide any pasture stocking rate assessment in their MM plan

Animal Concentration Areas (ACA)

- ACAs are barnyards, feedlots, exercise lots, loafing areas, riding rings or areas.
  - Bare areas such as walkways or watering areas that do not have direct runoff to a water body are not considered ACAs
- Divert clean water around the area
- Water that becomes polluted/commingled with manure/sediment must be treated with a filter strip or contained in storage
- Animals cannot have unlimited access to streams near the ACA
- The size of the ACA or denuded area must be minimized in size

Where do we go from here?

- Draft Document Presented for comment to AAB – June 16, 2010
- Informal Review and Comments
  - Meet w/ AAB, NMAB, PACD, etc.
  - Conservation District review / “test drive”
- Formal DEP Guidance Document Process
  - PA Bulletin Publication
  - 30 – 90 Day Comment Period
  - *Comment & Response* Document