COMPONENTS OF AN ANIMAL WASTE MANAGEMENT PLAN

I. General Information:
   A. Completed Certification Form
   B. Site Schematic

II. Site Evaluation and Site Investigation
   A. Existing Operations:
      1. Evaluate proximity of the waste storage facility to a 100-year floodplain
      2. Evaluate dam safety
      3. Evaluate proximity of wetlands to waste application area
   B. New or Expanding Operations:
      1. NRCS Site Evaluation Form NC-CPA-17 (attached) or equivalent
      2. Hazard Classification (NC-ENG-34) (attached)
      3. Site Map
         a) Location and elevation of borings and/or test pits in relation to established grid layout
         b) Borrow area located (if one is required)
         c) Soils map included
         d) Statement concerning observation of cultural resources (if applicable)
      4. Wetlands Determination

III. Design Survey (for New and Expanding facilities)
   A. Location and elevation of all buildings, pads, ponds, ditches, roads, utilities, fence lines, discharge pipes, wells, and any other structures that are in or near the design area.
   B. Location of property lines, perennial streams, wetland areas, and any other borders that lie close to and affect the design area.
   C. Topography of facility location.
   D. Areas where surface runoff is to be controlled, both polluted and non-polluted.
   E. Dimensions and elevations of existing facilities.
   F. Hazard classification data as needed.

IV. Facility Design
   A. Lagoon/Storage Facility Design
      1. Existing Operations:
         a) Show design needs (i.e., storage)
         b) Show measurements and calculated volumes
      2. New Construction:
         a) Show design needs (i.e., storage)
         b) Show construction inspection notes from NRCS standards to include liner inspection
         c) Consideration for emergency spillway
   B. Runoff control measures
      1. Waterways
      2. Diversions

Additional items due to changes in NRCS Standards and regulations are indicated in bold.

Appendix 2.4
Components of an Animal Waste Management Plan

3. Riparian buffers – see NRCS Filter Strip Standard 395
4. Filter Strips
5. Roof guttering
6. Others
C. Land Application System
1. Irrigation systems
   a) Parameters for existing equipment
   b) Designs for new systems
2. Tank spreaders
3. Box spreaders
4. Others
D. Operation and Maintenance Plan – include information about inspecting:
1. Pool Area – look for:
   a) Undesirable vegetative growth
   b) Floating or lodged debris
2. Embankment
   a) Settlement, cracking, or “jug” holes
   b) Side slope stability – slumps or bulges
   c) Wet or damp areas on the back slope
   d) Erosion due to lack of vegetation or wave action
   e) Rodent damage
3. Pipes
   a) Condition of pipes – look for:
      1) Separation of joints
      2) Cracks or breaks
      3) Accumulation of salts or minerals
   b) Extend out into the lagoon beyond the toe of the bank slope
   c) Be supported by piers, posts, or a cradle to prevent sagging
4. Vegetation – brush and trees on the embankment must be controlled by mowing, spraying, chopping, etc.
5. Pumps – check for proper operation of:
   a) Recycling pumps
   b) Irrigation pumps
6. Outside surface water diversions – inspect your diversion system for the following:
   a) Adequate vegetation
   b) Diversion capacity
   c) Ridge height
V. Waste Utilization Plan
A. Maps of fields to be used for waste application
B. Amount of manure produced/used annually
C. Waste application method
D. Dominant soil series by field for fields that will be used for waste application
E. Crops to be grown by field
F. Realistic yield expectations (R.Y.E.) of the crops to be grown where data is available
Components of an Animal Waste Management Plan

G. Nitrogen application rate by field based on R.Y.E. or recommendations from a land grant university if R.Y.E. data is not available. Also, a N balance which equals N applied minus R.Y.E. N rate (lbs/acre)

H. Waste application windows based on when the receiving crops are actively growing. Waste applications should be timed such that waste storage is not exceeded any time during the year.

I. NRCS irrigation parameters

J. Required specifications from NRCS Waste Utilization Plan Standard 633

K. Calibration information

L. Waste sampling for nutrient analysis within 60 days of land application

M. Annual soil sampling
   1. Lime requirement
   2. Measurement of Copper accumulation
   3. Measurement of Zinc accumulation

VI. Record Keeping

   A. Required – in order to satisfy the Division of Water Quality’s farm inspection procedures, the following items need to be available at the individual farm:
      1. Waste application records
      2. Map of farm fields including irrigation fields and acreage
      3. Certified Waste Management Plan (if applicable)
      4. Waste sample analysis or calculation of waste constituents

   B. Recommended – it may be beneficial for you to maintain the additional following records for verification of Best Management Practices (BMPs):
      1. Daily farm rain records
      2. Weekly lagoon level (freeboard) records
      3. Soils analysis
      4. Animal population
      5. Crop yields

VII. Emergency Action Plan should include provisions for:

   A. Description on how to stop the release of the waste
   B. Description on how to assess the extent of the spill and note any obvious damages.
   C. Phone numbers for contact at the appropriate agencies

VIII. Odor Control

   A. Checklist of potential odor sources
   B. Site-specific management practices to minimize odor sources

IX. Insect Control

   A. Checklist of potential insect sources
   B. Site-specific management practices to minimize insect problems

X. Provisions for Disposing of Mortalities