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.

- 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

- 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