

Delaware Nutrient Management
Program

DELAWARE STATE
TECHNICAL STANDARD

ANIMAL WASTE
MANAGEMENT PLAN

(Reported by each)

DEFINITION

Managing the amount, source, storage and handling of manure, litter and process wastewater in a farm's production area. This practice is sometimes referred to as a "No Land Nutrient Management Plan".

PURPOSE

To minimize agricultural pollution of surface and ground water by encouraging proper operation and maintenance of farms that only raise livestock.

**CONDITIONS WHERE
PRACTICE APPLIES**

This practice applies to all farms where livestock are raised but crops are not grown. Such operations export the manure produced. For farms that where crops are raised see the State Technical Standard for "Nutrient Management".

CONSIDERATIONS

Animal Waste Management Plans rely upon proper manure testing and analysis. Also it is important to consider water quality standards and designated use limitations that exist locally or statewide in managing nutrients.

1. Outside nutrient stockpiling setback distances in the production area from environmentally sensitive areas, such as streams, water bodies, sinkholes wells, gullies, ditches, surface inlets, or rapidly permeable soil areas.
2. Time limits for any outdoor stockpiling of manure in the production area.
3. Modifying the manure composition by changing the animal's diet or using chemical amendments.
4. Alternative uses to land application of manure including the redistribution of this material to nutrient deficit areas and the production of pelletized fertilizers and compost.

CRITERIA

Criteria Applicable to All Purposes

Plans for Animal Waste Management shall comply with all applicable federal, state, and local laws and regulations.

Persons who write animal waste management plans shall be certified through the Delaware Department of Agriculture – Nutrient Management Certification Program. This may include any reciprocity agreements with other states.

Plans for animal waste management that are elements of a more comprehensive conservation plan shall recognize other requirements of the conservation plan and be compatible with its other requirements.

Manure samples shall be collected and prepared according to standard industry practice.

Additional Criteria Applicable to Manure Testing

The Nutrient values of manure shall be determined prior to export. Samples should

betaken in accordance as close to the export date as feasible.

Analyses shall be performed through an accredited testing laboratory.

In those cases where a representative manure sample and analysis cannot be readily obtained, an NRCS or other acceptable “book value” may be used for planning purposes. In the first year, an actual sample shall be obtained and analyzed, and the plan revised to reflect the test results. Book values recognized by NRCS may be found in the Agricultural Waste Management Field Handbook, Chapter 4- Agricultural Waste Characteristics.

To calculate the amount of manure available for crop utilization from different animal types and production systems, use the information Excel worksheets provided by the University of Delaware located at: <http://www.rec.udel.edu/nutrient/page4>.

Additional Criteria to Minimize Agricultural Pollution of Resources

Plans developed to minimize agricultural pollution of water resources shall include practices and/or management activities that can reduce the risk of nutrient discharge from the production area.

PLANS & SPECIFICATIONS

Specifications shall be in keeping with this standard, the Delaware Nutrient Management Law and the Delaware CAFO Regulations. They shall describe the requirements for applying the practice to achieve its intended purpose, and to prevent water quality impairment.

All Animal Waste Management plans for facilities covered by a Concentrated Animal Feeding Operation (CAFO) Permit must contain the nine elements listed in the State Technical Standard “Nine Elements of a

Nutrient Management Plan or Animal Waste Management Plan”.

The following components shall be included in the animal waste management plan where applicable:

1. Type, number, and average size of animals,
2. Quantities of manure generated annually, total amount of manure used on the farm each year, including any imported manure, and amount and destination of all manure exported,
3. Conservation practices and management activities needed to reduce the potential for nutrient movement from the site,
4. Other practices or management activities, as determined by specific regulation, program requirements, or producer goals.

An Animal Waste Management plan shall include a statement that the plan was developed based on the requirements of the current standard and any applicable federal, state, or local regulations or policies, and that changes in any of these requirements may necessitate a revision of the plan.

OPERATION AND MAINTAINENCE

The farmer is responsible for proper operation and maintenance when implementing this practice. Operation and maintenance addresses the following:

1. Periodic plan review to determine if adjustments or modifications to the plan are needed. Plans must be reviewed and revised at least every 5 years. More frequent revisions may be warranted and if there are significant changes in the numbers of animals raised or the physical layout of the production area.

2. Protection of manure storage facilities from weather and accidental leakage or spillage.

Record Keeping

Maintaining records to document plan implementation is the responsibility of the farmer. Animal Waste Management plans shall include the following records:

1. A record of the most recent manure test, and
2. Information about conservation practices and management activities that can reduce the potential for nutrient discharge from the production area.
3. Type and amount of manure exported from the farm. They should also indicate the name and address of the operation receiving the manure and the date it left the farm.

Records should be maintained for a minimum of six years; or for a period longer than six years if required by other federal, state, local ordinances, or contract

SUPPORTING DATA AND DOCUMENTATION

Animal Waste Management Plans shall include the following items:

1. Aerial photograph and soil map of the site,
2. Results of applicable water and manure analyses,
3. Quantification of the amount and total nutrient content of all nutrient sources,
4. Location of designated sensitive areas or resources and the associated, nutrient management restriction,
5. Guidance for implementation, operation, maintenance, record keeping,
6. Dates of review and the person performing the review. Also any

recommendations that resulted from the review.

7. Signed certification statement by the farmer agreeing to follow the terms of the plan.

REFERENCES

1. Delaware Department of Agriculture. Title 3 of Delaware Code, Chapter 22 Nutrient Management
2. Delaware Department of Agriculture. Delaware Nutrient Management Notes.
3. University of Delaware, 1996. Nutrient Management Handbook.. USDA, Natural Resources Conservation Service, April, 1992. Agricultural Waste Management Field Handbook.