

## Appendix H

### STATE OF TENNESSEE STRATEGY FOR ANIMAL FEEDING OPERATIONS

This State of Tennessee Strategy for Animal Feeding Operations (Strategy) is developed and implemented pursuant to the authority of the Tennessee Water Quality Control Act of 1977, the Tennessee Solid Waste Disposal Act, the United States Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) program delegation, the Tennessee Right to Farm Act and the duties and powers of the Commissioner of the Tennessee Department of Environment and Conservation (TDEC) and the Commissioner of the Tennessee Department of Agriculture (TDA). The University of Tennessee Agricultural Extension Service will assist the Departments in technical guidance, education and training for the implementation of this Strategy. The purpose of this Strategy is to assure compliance with the above Acts, delegation, and powers; to encourage best management practices and to assure protection of public health, the environment and the waters of the state.

This State of Tennessee Strategy is based upon the following definitions and premises:

An Animal Feeding Operation (AFO) is a facility that (1) stables, confines, and feeds or maintains animals for a total of 45 days or more in any 12-month period and (2) does not sustain crops, vegetation forage growth, or post-harvest residues in the normal season over any portion of the facility.

A Concentrated Animal Feeding Operation (CAFO) is an animal feeding operation that may discharge to waters of the United States, impact groundwater or otherwise adversely impact the water resources of Tennessee. CAFOs are subject to the NPDES permitting authority of TDEC. The extent of such regulatory oversight is dependent upon the type and number of animals confined and may also be influenced by the type of waste management system in operation or proposed.

This Strategy addresses poultry, swine, dairy and beef producing CAFOs. Permitting policies for non-producing CAFOs (livestock markets, sale barns, etc.), as well as other types of animals will be based upon current state and federal laws and regulations.

Regardless of the size of the AFO, no discharge through a man-made ditch, flushing system, or similar man-made device or discharge into waters of the state which flow through the confinement facility is permitted by this Strategy, unless such discharge occurs only in the event of a 25-year, 24-hour or greater storm event.

All CAFOs must provide for appropriate disposal of dead animals by composting, rendering, incineration, disposal in a Class I permitted landfill or burial on-site, as

approved in a Waste Management System Plan or as approved by TDA, unless necessitated by emergency.

## Permit Requirements

### I. Class I CAFO

1. Poultry (broilers and/or layers)  
30,001 or more birds (liquid manure management systems only)
2. Swine  
2,501 or more head over 55 pounds each
3. Dairy  
701 or more head (mature animals)
4. Beef  
1,001 or more head

Class I CAFO permits are required for liquid manure management systems for the above animal feeding operations and will include the following components:

A. A Waste Management System Plan (WMSP) consistent with the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Field Office Technical Guide and Agricultural Waste Management Field Handbook or other WMSP approved by TDA. A Waste Management System Plan shall be prepared by a licensed professional engineer (PE) or a person with NRCS engineering approval authority, and will include all the components necessary to properly manage waste. Plans shall meet or exceed the requirements of the Clean Water Act and regulations promulgated pursuant thereto. WMSPs shall be approved by TDA, prior to the submittal of an application for permit to TDEC.

Contents of the Plan are to include at a minimum:

1. Soil and geological suitability report including site evaluation criteria contained in USDA/NRCS Agricultural Waste Management Field Handbook (AWMFH).
2. A map indicating the location of streams, lakes, sinkholes and other potentially sensitive areas or resources existing on the proposed site.
3. A description of the proposed system and all system components and practices. Design and performance of animal waste systems must provide for no discharge, except as may be associated with events equal to or greater than the 25-year, 24-hour storm event.
4. Engineering design plans, and construction specifications for manure storage and/or treatment. Setbacks from existing residential structures, streams, lakes and sinkholes shall be adequate to protect water quality, public health, well heads and groundwater, consistent with the guidelines found in the USDA/NRCS Field Office Technical Guide.
5. Sequence and schedule of component installation.

6. Operation and Maintenance Plan, including schedules for emptying structures.
  7. Closure Plan which outlines the procedure for, in the event of the CAFO ceasing operation, the final emptying and decommissioning of the manure storage and/or treatment structure.
  8. Emergency and safety measures, including notification of TDEC and TDA.
- B. Operator certification by TDA within one year of permit issuance.
- C. A Nutrient Management Plan (NMP), generally consistent with USDA/NRCS Field Office Technical Guide and approved by TDA, which will include at a minimum:
1. Aerial site photographs or maps and soil maps showing the location of animal waste application fields and the location of all nearby streams, lakes and sinkholes.
  2. Current and planned plant production sequence and rotation.
  3. Identification of non-application buffer strips around the application site(s) which are sufficient to protect water quality.
  4. Soil test results for phosphorus and potassium.
  5. Complete nutrient budget (N,P,K) for plant production system.
  6. Nutrient budget shall be based upon realistic yield goals.
  7. Nutrient budget shall include an evaluation of all nutrient sources.
  8. Calculated agronomic rate.
  9. Planned application method.
  10. Proposed timing of nutrient applications.
- D. Record Keeping Plan, approved by TDA, to include at a minimum:
1. Soil test results and recommended nutrient application rates.
  2. Quantities and sources of nutrients applied.
  3. Dates of applications.
  4. Methods of applications.
  5. Crops planted and dates of planting.
  6. Harvest dates and yields, including residue removed.
  7. Manure nutrient analysis.
  8. Operator certification.
  9. Inspection reviews and recommendations.
  10. Quantities transported off-site shall be recorded, including the name for the recipient, date and amount transported, final destination and use of the material.
- E. The operation is subject to monitoring and, at a minimum, annual inspection by TDEC and/or TDA.
- F. Existing operations as Class I CAFOs will be subject to a two-year compliance schedule, provided however, items I.A.1, I.A.4 and I.A.5 do not apply.
- G. Public notice shall be circulated within the geographical area of the proposed facility and shall provide for a public hearing on the proposed permit for the operation of the facility. Public notice shall comply with Rule 1200-4-1-.05(3)(c) through .05(3)(I).
- H. Permit is to be issued and enforced by TDEC consistent with water quality law, solid waste disposal law and regulations.

## II. Class II CAFO

### Liquid Manure Management Systems

1. Poultry (broilers and/or layers)  
9,000 up to 30,000 birds
2. Swine  
751-2,500 head over 55 pounds each
3. Dairy  
201-700 head (mature animals)
4. Beef  
301-1,000 head

### Dry Manure Management Systems

1. Poultry (broilers and/or layers)  
50,000 or more birds for existing operations  
20,000 or more birds for new operations
2. Swine  
751 or more head
3. Dairy  
201 or more head (mature animals)
4. Beef  
301 or more head

Class II CAFO permits are required for manure management systems for the above animal feeding operations and will include the following components:

A. Waste handling systems, which include liquid storage and/or treatment, shall be prepared by a PE or a person with NRCS approval authority. (Dry waste storage systems which exceed 5-day unprotected exposure of waste will be considered liquid waste storage systems which may be subject to Class I requirements). Liquid waste handling systems will include the following:

1. A soil and geological suitability report including site evaluation criteria contained in USDA/NRCS Agricultural Waste Management Field Handbook (AWMFH).
2. A map indicating the location of streams, lakes, sinkholes and other potentially sensitive areas or resources existing on the proposed site.
3. A description of the proposed system and all system components and practices. Design and performance of animal waste systems must provide for no discharge, except as may be associated with events equal to or greater than the 25-year, 24-hour storm event.
4. Setbacks from existing residential structures, streams, lakes and sinkholes shall be adequate to protect water quality, public health, well heads and groundwater, consistent with the guidelines found in the USDA/NRCS Field Office Technical Guide.

- B. A Nutrient Management Plan (NMP) approved by TDA. The NMP is to be generally consistent with current USDA/NRCS Field Office Technical Guide and the Agricultural Waste Management Field Handbook or other NMP approved by TDA. An NMP is suggested to include but is not limited to:
1. Aerial site photographs or maps and soil maps showing the location of animal waste application fields and the location of all nearby streams, lakes and sinkholes.
  2. Current and planned plant production sequence and rotation.
  3. Identification of non-application buffer strips around the application site(s) which are sufficient to protect water quality.
  4. Soil test results for phosphorus and potassium.
  5. Complete nutrient budget (N,P,K) for plant production system.
  6. Nutrient budget shall be based upon realistic yield goals.
  7. Nutrient budget shall include an evaluation of all nutrient sources.
  8. Calculated agronomic rate.
  9. Planned application method.
  10. Proposed timing of nutrient applications.
- C. Record Keeping Plan, approved by TDA, should include:
1. Soil test results and recommended nutrient application rates.
  2. Quantities and sources of nutrients applied.
  3. Dates of applications.
  4. Methods of applications.
  5. Crops planted and dates of plantings.
  6. Harvest dates and yields including residue removed.
  7. Manure nutrient analysis.
  8. Inspection reviews and recommendations.
  9. Quantities transported off-site shall be recorded; including the name of recipient, date and amount transported and final destination and use of material.
- D. Operation is subject to inspection and monitoring by TDEC and/or TDA.
- E. Existing operations as Class II CAFOs will be subject to a two-year compliance schedule, provided however, items II.A.1 and II.A.4 do not apply.
- F. Class II CAFO General Permit to be issued and enforced by TDEC, consistent with TDEC water quality laws and regulations.

### III. Right to Farm

Other components of the Strategy are policies and procedures of TDA pursuant to the Tennessee Right to Farm Act (TCA 43-26-101 et seq.). The Right to Farm Act provides the farmer with a level of protection against nuisance type lawsuits. A farming operation that meets the conditions of the Act is presumed not to be a nuisance in a court of law, and it is necessary, therefore, for the plaintiff to convince the court otherwise.

A farming operation qualifies for "Right to Farm" status if (1) the operation existed before a change in the use of land or occupancy of land within one mile of the boundaries

of the farm, or (2) the operation is using "generally acceptable agricultural and management practices" as determined in a rulemaking by TDA.

Rules proposed by TDA establish a process for determining whether or not a farming practice may be considered "acceptable" and subject to the benefits of the Right to Farm law. To qualify as "acceptable", the farming activity must at a minimum not be in violation of laws, rules or regulations of TDA, TDEC or other federal, state or local government regulations that may apply to protection of the environment, public health or public safety. Further, the operation must not be in violation of conservation program laws or regulations of the USDA. In addition to meeting these minimum requirements, the operation must also meet certain "Guidelines for Performance" as determined by TDA. Such "Guidelines" include compliance or consistency with technical assistance recommendations, management plans or other applied science provisions in programs and services of TDA, the University of Tennessee Agricultural Extension Service and/or NRCS.

If after inspection by TDA, the farming operation is determined to be using "acceptable" management practices, TDA will issue a "Certification of Acceptability" indicating that the farm qualifies for benefits under the Right to Farm Act. Such certification will serve as evidence in a court of law that the farming operation does not constitute a nuisance. It is important to note that any inspection and subsequent certification by TDA is done at the request or invitation of the farmer, i.e., the provisions of the Right to Farm law are entirely voluntary.

As a component of this Strategy, the Right to Farm Act should constitute an important incentive or benefit for CAFOs. Such operations that otherwise meet NPDES permitting requirements are likely to satisfy Right to Farm certification criteria and, therefore, should benefit from the nuisance suit protection provisions of the Act.

This Strategy is to become effective: July 29, 1998

Issued by:

Milton H. Hamilton, Jr  
Commissioner  
TN Dept. of Environment and Conservation

Dan Wheeler  
Commissioner  
TN Dept. of Agriculture

References:

USDA/NRCS Field Office Technical Guide

USDA/NRCS National Engineering Handbook Series, Part 651, Agricultural  
Waste Management Field Handbook, 1992.