



POULTRY WASTE MANAGEMENT

Environmental Issues Facing the Louisiana Poultry Industry

Matthew Stephens
Area Waste Management Specialist and County Agent
LSU AgCenter

Most of us involved in agriculture are aware of environmental concerns related to production agriculture. Regulatory proposals involving animal agriculture, such as poultry production, have caused concerns throughout the poultry-producing area of Louisiana.

The LSU AgCenter believes that voluntary litter and mortality management practices by the producer are the best approach to addressing the water quality issues associated with poultry production. The LSU AgCenter promotes the voluntary adoption of BMPs (Best Management Practices). By voluntarily implementing these BMPs, the poultry producer will be using the latest technology available to address the environmental concerns associated with poultry production.

The following is a list of definitions about environmental issues concerning animal agriculture.

TMDL (Total Maximum Daily Load)-The total amount of any type of pollutant that a river, lake or stream can withstand and still meet water quality standards.

BMPs (Best Management Practices)-Agricultural production practices that are designed to minimize the impact that production agriculture has on the environment.

CNMP (Comprehensive Nutrient Management Plan)-A written plan that details the management and land application of poultry litter to maximize its nutrient value while reducing the potential for surface water impairment.

Point Source Pollution-A pollution source that can be easily identified, such as a pipe. For example, a discharge pipe from a factory.

Nonpoint-source Pollution-A pollution source that cannot be easily identified. An example of this is pesticides and nutrients that are carried to streams and rivers by runoff after a heavy rain.

AFO (Animal Feeding Operation)-Any operation that confines animals for a period of time for the purpose of feeding. This includes feedlots, swine, dairy and poultry producers.

CAFO (Confined Animal Feeding Operation)-Any animal feeding operation that meets certain criteria set by the EPA. **A CAFO is a specific type of AFO that has the potential to contaminate nearby waterways. An AFO is a CAFO under federal regulations if:**

- X **it confines more than 100,000 broilers or layers , or**
- X **it confines between 30,000 and 100,000 broilers or layers and discharges pollutants into *waters of the United States* (either directly into on-site water, or indirectly by channeling wastes through a ditch, flushing system, or other device), or**
- X **EPA has designated it as a CAFO upon determining that the operation, regardless of its size, is a significant source of pollution. This determination, which considers a number of factors (such as slope, vegetation and the proximity of the operation to the waters), is based on an on-site inspection by the agency that issues the permits.**

NPDES (National Pollutant Discharge Elimination System)-A permitting system developed by the EPA to reduce point-source pollution into the waters of the United States. This is the permitting system that industry is required to follow before discharging into the waters of the United States.

The TMDL issue resurfaced with a lawsuit filed by several environmental groups alleging that the EPA had failed to uphold all the requirements of the 1972 Clean Water Act. A federal court ruled in favor of the environmental groups and ordered the EPA to take steps to establish TMDLs for the nation's rivers, lakes and streams that are not meeting water quality standards. States were then mandated to identify all water bodies that did not meet water quality standards and identify pollutants that were contributing to the water bodies' impairment. Following the pollutant identification process, TMDLs will be developed for that water body.

Another result of the lawsuit was to consider nonpoint pollution, such as agricultural runoff, as a major source of pollution contributing to the impairment of the nation's water bodies. Such a consideration resulted in EPA's proposals to regulate animal feeding operations, such as poultry production, with NPDES permits similar to those required by industrial operations. These proposals state that animal operations are to be designated as an AFO or CAFO, depending on the number of animals fed and animal waste management practices employed by the producer. Recent proposals by the EPA were finalized and submitted into the Federal Register on December 15, 2000.

Many producers can address the requirements of these proposed regulations by voluntarily implementing BMPs. Best Management Practices (BMPs) are sound agricultural practices endorsed by the LSU AgCenter, Natural Resources Conservation Service (NRCS), Louisiana Department of Agriculture and Forestry (LDAF) and Louisiana Farm Bureau Federation (LFBF). These BMPs will help producers be as profitable as possible while reducing the impacts that production agriculture has on the environment. BMP manuals can be acquired at your local county agent's office.

Due to proposed federal regulations, poultry producers may soon be required to develop CNMPs for their individual operations. Each plan will be site specific and developed particularly for that one operation. Factors such as topography, slope, water table and soil type will affect each individual plan. Although these factors are out of the grower's control, there are management practices in the CNMP that are within the grower's control. Application timing and rates (based on soil test results), litter storage, buffer strips and crops grown are important factors in the CNMPs. Growers will receive assistance in developing CNMPs from the LSU AgCenter, NRCS, LDAF and other certified individuals.

There are requirements that each grower needs to complete before CNMPs can be written for an operation. The following is a list of items you will need to have completed before your CNMP can be developed.

1. Collect soil samples from hay fields and pastures (bring test results).
2. Obtain aerial maps of farm and designate fields on the maps.
3. Create a file on each field and/or pasture on the farm.
4. Develop buffer strips adjacent to streams, bayous, ditches, etc.
5. Obtain soil profiles of hay fields and pastures.
6. Develop a plan of when, how and where litter is applied to hay fields and pastures.

Many changes are taking place in the poultry industry. Many questions are left unanswered. The LSU AgCenter believes these environmental issues will be around for many years to come and a team approach among agencies and agricultural producers will be required to address these environmental concerns. Voluntary adoption of BMPs by agricultural producers will be critical in meeting this challenge. For more information about environmental issues facing the poultry industry in Louisiana contact Matt Stephens at 318-368-9935.