Managing Animal Waste in Environmentally Sound Ways

The Problem/Issue:
Every owner and on-site manager of concentrated animal feeding operations in Alabama is required by Alabama Department of Environmental Management's AFO/CAFO rules to have both initial and annual training in various aspects of animal manure and waste product management. All CAFO personnel responsible for the operation and maintenance of the system must be trained, and this training documented at each annual re-registration of the CAFO.

Each AFO and CAFO in Alabama, regardless of size or number of animals, is required to operate the farm production site in an environmentally safe and responsible manner. Each operation must maintain manure and dead animal management records sufficient to document accepted levels of environmental stewardship under Alabama's ADEM AFO/CAFO rules. Each farm is subject to on-site inspection by ADEM to ensure proper operation under the rules. This ADEM inspection may be either a routine annual or complaint-driven visit. An unsatisfactory ADEM inspection may subject the operator to fines and other actions that could become burdensome to further operation.

What’s Been Done:
Eleven Extension agents attended in-service training that provided educational material and training for county Extension agents who will provide CAFO continuing education training on the county level. Specialists on the Extension Waste Management Task Force prepared training material to include Power Point presentations and overhead projections with appropriate Extension publications and Timely Information Sheets. Topics included buffers and setbacks for animal manure land application; understanding the phosphorus index, emergency response plans, waste management facility self-inspection, records for manure handling and dead animal/bird management, how to operate and maintain a dead animal/bird composter, and operating a liquid manure management system.

Armed with this information and supported by state Extension specialists, agents with Animal Feeding Operation responsibilities responded to more than 25 requests from operators of AFOs or CAFOs who received unfavorable inspections from ADEM and needed educational information to correct noted deficiencies within
the ADEM-imposed response deadline.

Nine agents attended a second in-service training. Information on details of an ADEM inspection was presented, along with guidance for setting up and leading a mock ADEM inspection for AFO/CAFO operators.

Six agents presented five multicounty mock ADEM on-site farm inspection training tours to provide education that helped prepare the operation for periodic operation reviews and inspections. Agents taught 75 farm operators and poultry company personnel were taught by these agents to understand and properly document the best management practices in their nutrient management, comprehensive nutrient management, or waste management system plan. These periodic operational snapshots identified record-keeping and operational deficiencies that may harm the environment and initiate ADEM AFO/CAFO compliance enforcement action and prevent Annual CAFO recertification.

The Alabama Animal Waste Management Web site was redesigned to include new Extension publications and the latest regulatory information from EPA and ADEM. A member-only web-based discussion list was initiated and is used by all agents who signed up for the 2003 animal waste management programs. This list is used to get the latest animal waste/manure/nutrient management and biosecurity information to agents with AFO and CAFO responsibilities.

**Why We Care:**

Results from informal surveys by participating county Extension agents of the more than 400 AFO and CAFO operators trained at the 20 Extension conducted continuing education programs were overwhelmingly positive. When two to three employees of each of these 400 AFO/CAFOs are considered, over 1,000 animal feeding operation employees received ADEM-required continuing education as a result of Extension efforts. More than 3,100 total clientele contacts were reported.

In addition to the direct benefit to AFO/CAFO operators, this training will lead to better utilization of animal manures and especially to better utilization of poultry litter—a byproduct of our large poultry industry that has the potential to be a significant contributor to environmental problems. This will ultimately benefit the general public through improved water quality and environmental quality.

The need to continue training Alabama's animal feeding operations and concentrated animal feeding operations will only increase in the future. Our intentions are to expand agent training support to allow Extension field agents to continue to meet this increasingly important educational need for the economic viability of Alabama farmers and the protection of Alabama's environment.