



The University of Georgia

Cooperative Extension Service

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BROILER TIP . . .

AGRICULTURAL ENVIRONMENTAL MANAGEMENT SYSTEMS

In this age of expanding environmental scrutiny, management strategies that have a holistic approach are becoming an important method of addressing environmental accountability and stewardship. As EPA considers regulations targeted at large animal production operations, management strategies that effectively address on-farm environmental issues may serve as an alternative to heavy-handed regulations.

WHAT IS AN EMS?

An Environmental Management System (EMS) is a program to assist producers in developing a strategy for integrating environmental considerations into daily production decisions. Development of an EMS provides a framework designed to help farmers evaluate their farm and its impacts on the environment and to develop stewardship strategies to avoid problems, make continual improvements, meet regulatory requirements and protect the environment. Through self-assessments and 3rd party independent audits the progress of the EMS can be monitored, documenting accomplishments and areas in need of improvement, and demonstrating active stewardship of environmental resources.

An EMS provides a plan to prevent or resolve environmental problems on the farm. With a focus on pollution prevention strategies, it is the goal of an EMS to replace management practices that are triggered by crisis with those practices that are proactive in addressing pollution prevention. An EMS provides operations of all sizes and types with a structured approach for managing environmental responsibilities and improving overall environmental performance. It is a program that utilizes science-based Best Management Practices (BMPs) to accomplish the environmental improvement objectives of each individual operation.

HOW DOES AN EMS WORK?

The EMS first establishes an on-farm environmental policy by identifying significant environmental impacts that are or could result from farm operations. Once a policy has been established, a plan is then formulated to address the impacts through implementation of critical management practices to ensure the farm meets its environmental policy commitments, by establishing measurable objectives and targets. Objectives selected based on importance of legal risk, potential cost, or environmental damage. In order to meet the established objectives, an EMS is organized around four critical action areas: plan, implement, check and correct, review and improve. These elements provide for a continual process to address short and long-term environmental concerns on the farm. Each producer can decide on the scope, pace, and priority of changes to be made within the plan while assuring that the farm is striving to achieve the established objectives.

Plan

PUTTING KNOWLEDGE TO WORK

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The plan determines the *who, what, when, how, and why* of an EMS. Setting achievable goals to reduce environmental impacts on the farm are key to the plan. Practices and procedures are identified that are necessary to reduce environmental impacts with measurable objectives and time lines for achievement. Farm activities that can impact the environment are identified and then prioritized by severity of environmental harm or legal and financial consequences. An on-farm assessment can identify priority environmental concerns. Typically conducted by a third party auditor, an assessment can assist in identifying the strengths and weaknesses of an operation and help determine priority needs and actions.

Examples of EMS priority issues may include: establishing an effective pest control program, improving the existing dead bird disposal system, implementing an odor management program, or developing and implementing a certified comprehensive nutrient management plan (CNMP).

Implementation

This step provides the needed resources to initiate the plan. BMPs that are implemented to meet the objectives are the keys of an effective EMS. Once the overall environmental policy and objectives are in place, the producer can then systematically implement needed critical management programs and related BMPs to make the plan work. It is important to designate who is responsible for compliance and implementation of appropriate BMPs for each critical management. Maintaining this accountability is vital for an EMS to remain effective.

Check and Correct

Monitoring and evaluating the progress of the EMS plan is essential to ensure that the procedures are being properly implemented and that the operation is meeting or making progress toward meeting the objectives. Records provide documentation and evidence of progress. Good record keeping also serves as a legal base from which a farmer can validate participation and compliance. By establishing a continual process of checking and evaluating through self-assessments and 3rd party independent audits, an EMS can document accomplishments and areas in need of improvement, and demonstrate active stewardship of environmental resources.

Review and Improve

This step provides for evaluation of progress. Each year the EMS needs to be evaluated to determine if the objectives are being met. A review that addresses possible changes to the environmental policy, EMS objectives, or other components in light of changing circumstances can help keep the EMS plan current with policy objectives.

BENEFITS OF AN EMS

An EMS is a continual process of planning, implementing, checking, and improving. Through the use of an EMS, producers validate their good stewardship and build upon their successes to become even better farm managers. Under the framework of an EMS program, the farmer has the flexibility to individualize his environmental improvement plan. This is in contrast to mandated state and federal regulations that tend to be tailored from a “one-size-fits-all” approach. An effective EMS communicates to interested parties that management efforts are being made to meet environmental improvement efforts with emphasis placed on pollution prevention rather than crisis management.


Of the many potential benefits of implementing an on-farm EMS, perhaps more than anything else, an EMS can provide environmental credibility to the volunteer efforts of farmers as they work toward water, air, and whole-farm environmental improvement. Communicating successes of the program with neighbors or other stakeholders is an important way to demonstrate the efforts that have been made toward helping with environmental improvement.

The College of Agricultural and Environmental Sciences at the University of Georgia is interested in developing a poultry-specific EMS and needs a limited number of farmers to participate in a pilot project. If you are interested in participating, please contact Dr. Casey Ritz with the Department of Poultry Science or Dr. Mark Risse in the Department of Biological and Agricultural Engineering.

References

EPA Project XL: <http://www.epa.gov/projectxl/>

Partnerships for Livestock Environmental Management Systems: <http://www.uwex.edu/AgEMS/>



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