

# Safe Feed, Safe Pork and Poultry - FSMA and Feed

**As a livestock producer, you may be unfamiliar with the processes involved in complete feed manufacturing. To start this conversation, let's first understand the FSMA and what it means for your feed mill to be in compliance with the FDA.**



Mash feed, photo by E. Hines

Under the Food Safety Modernization Act (FSMA), manufacturing of livestock feedstuffs is held to strict standards. Communication is key to understanding feed manufacturing processes and the steps taken to ensure safe feed is available for your livestock. This communication becomes more important during times of global crisis, such as the current spread of the African Swine Fever (ASF) virus in Asia and peer-reviewed reports of feed being a potential vector.

In early 2011, the 111 th U.S. Congress passed the **Food Safety and Modernization Act (FSMA)**, moving from an era of “response to crisis”, to “preventing crisis”. Under this model of prevention, businesses that process and handle feedstuffs are required to undergo extensive training, inspections, and certifications to ensure the safety of feed sold for animal consumption.

As a livestock producer, you may be unfamiliar with the processes involved in complete feed manufacturing. These processes, established by certified mills and ingredient manufacturers, dictate steps for proper sourcing and handling of ingredients that ensure all ingredients used in feedstuffs are

free of foreign materials and not likely to transmit disease. Certification is a critical step for mills and ingredient manufacturers to legally sell feedstuffs to livestock. The ruling also applies to feed haulers. These entities play a key part in ensuring the health and safety of your livestock.

High quality, safe feedstuffs are particularly important for poultry and swine. As monogastric animals, poultry and swine have no 'pre-digestive' phase within their enteric system. This lack of a 'pre-digestive phase' leads swine and poultry to be more susceptible to foodborne pathogens, transmissible disease, and foreign objects. Cattle and sheep (ruminants) are somewhat better equipped to handle feeds of some varying qualities due to the ability of rumen bacteria to process and ferment (pre-digestion) feedstuffs prior to entering the 'true' stomach and intestines. For swine and poultry producers, knowing the safety and quality of your feedstuffs is critical to maintaining the health of your herd or flock, and maintaining safety for individuals consuming these products.

As pork and poultry producers, you can better understand the components of your feed and their origins through a conversation with the quality assurance department at your feed mill. But what questions do you ask? The best way to start this conversation is to first understand the **FSMA** and what it means for your feed mill to be in compliance with the FDA. Compliance requires a hazard analysis, and possibly a written and approved Food Safety Plan.

## What does a Food Safety Plan include?

A food safety plan is an up-to-date document that defines all food safety hazards and modes of prevention for each specific manufacturing facility. To be compliant, a food safety plan must include:

- A written hazard analysis of all operations at that facility
- Written, science-based preventive control management for hazards identified in the analysis Oversight by a **Preventive Controls Qualified Individual (PCQI)** who has been trained to qualify them for examining and approving written food safety plans.
- Written monitoring and corrective action procedures if a change occurs from standard processes
- Written supplier approval and verification program



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- Written records documenting the implementation of the food safety plan and all training
- If applicable to processes used, a written recall plan

The food safety plan utilizes procedures that guide manufacturers through their processes in making feedstuffs, highlighting where extra attention is required to prevent or minimize contamination of animal feed. A facility with a food safety system in place should be following **CGMPs** and **Preventive Controls** to address any hazards that have been identified.

CGMPs refers to **Current Good Manufacturing Practices**. CGMPs are outside of the food safety plan and used to develop minimum standards that assure proper design, monitoring, and control of manufacturing processes and facilities as well as personnel practices and human food by-products that may be fed to animals. When put into practice, CGMPs prevent the instances of contamination and errors as well as improve quality standards. All facilities are required to follow CGMPs.

The **Hazard Analysis and Risk-based Preventive Controls** are encompassed in the food safety plan. A hazard analysis includes an assessment of all potential hazards that could be associated with each ingredient through manufacturing, processing, packing, and holding of the animal feed. The food safety plan addresses control measures, called preventive controls, related to the processes, sanitation, and the supply chain for hazards that are not controlled through CGMPs.

Again, these science-based preventive control procedures must be overseen by a **PCQI**. As a livestock producer, it is important to understand that these measures are in place to ensure the U.S. continues to produce the world's safest food supply.

Now that you have a better understanding of FSMA compliance, here are a few questions that you may want to ask the quality assurance department at your feed mill:

- Does this feed mill have a written food safety plan?
- Is this feed mill compliant with the FDA's food safety modernization act?
- Is human food waste (garbage or leftovers) used as a feed ingredient at this feed mill?
- With the spread of ASF in Asia and recent reports of feed being a vector for ASF, are there risks associated with utilizing ingredients from these regions?
- Do you conduct audits with non-U.S. based ingredient sources?
- What are your biosecurity practices for deliveries?
- Do you have a rodent management plan?

Ultimately, it is important that livestock producers and feed manufacturers to work as a team. Initiating conversations with quality control staff at your feed mill about your feed can help build that teamwork.

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