



## Hygienic Practices in Feed Manufacturing

OFFICE OF THE TEXAS STATE CHEMIST  
Texas Feed and Fertilizer Control Service • Agriculture Analytical Service

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Animal feed plays a leading role in the global food industry and it is the largest and most important component to ensure the sustainable production of safe and affordable animal proteins. Feed safety is a prerequisite for food safety and human health, as well as a necessity for animal health and welfare. Personnel hygienic practices play a key role in ensuring the safety of animal food throughout the feed manufacturing process. This presentation will highlight FSMA requirements related to personnel hygienic practices and their role in maintaining personnel cleanliness.

## Hygienic Practices in Feed Manufacturing

- Necessary to protect against contamination of animal food
- All persons working in direct contact with animal food must conform to hygienic practices and maintain personal cleanliness
  - Adequate personal cleanliness
  - Handwashing
  - Securing jewelry and other objects
  - Employee facilities and support services
    - Storage of personal belongings
  - Other necessary precautions

Personal hygienic practices and an environment that fosters these practices are the first line of defense against product contamination.

The facility's management to take reasonable measures and precautions to ensure that all persons working in direct contact with animal food and related materials conform to hygienic practices as necessary to protect against the contamination of animal food.

In addition, Animal food production personnel should understand and follow basic food protection practices and maintain personal cleanliness.

All animal facility personnel should follow the basic hygienic practices that are outlined on the slide.

## Maintaining Adequate Personal Cleanliness

- Employees should maintain a clean body, hair and clothing
  - Management should provide clean uniforms and protective clothing/equipment on premises
- Sick or injured persons should not handle animal food
  - Especially flu, respiratory problems, or food borne illness
  - Establish company policies for when employees should:
    - Not report to work and how to notify management
    - Return to work after illness
  - Workers should not be punished for reporting illnesses
- Managers and supervisors should be able to identify sick or injured employees

All personnel who come in contact with animal food and related materials must maintain good personal hygiene to prevent contamination of animal food. A clean body, hair, and clothing are the keys to maintaining good personal hygiene.

To minimize contamination of all kinds, a facility's management should provide clean uniforms and protective clothing including hairnets and gloves, if necessary. In addition, management should set expectations for personnel cleanliness based on facility, type of food manufactured and the individual's role in the manufacturing process. For example, a pet food plant may have more strict requirements for clothing and equipment than a livestock animal food facility.

The company should have policies in place that prevents sick or injured persons from handling animal food. These policies should address when employees, in case of illness, should not report to work and when they can return to work after recovery. Manager and supervisors should have the training and observation skills necessary to identify symptoms that may indicate that an employee could pose a contamination risk.

## Handwashing

- Frequent and effective handwashing is the best way to prevent the spread of foodborne illnesses and other sicknesses
- Animal food handlers should wash hands:
  - After using the restroom
  - After eating, drinking, smoking, coughing or sneezing
  - After handling trash or cleaning dirty utensils or surfaces
  - As required by company policy

Proper handwashing plays a key role in preventing microbiological contamination. A large number of illnesses could be prevented if frequent and effective handwashing practices were strictly followed because it removes bacteria and microorganisms from the surface of hands. All animal food handlers, especially those that come in direct contact with animal food, must wash their hands before beginning work and at specific times such as after using the restroom and handling trash. Other instances, when handwashing is required, may depend on the type of food being manufactured and the specific duties of the employee.

The company policy should define when employees should wash their hands and make employees aware of these expectations.

## Handwashing

- Provide facilities for handwashing with appropriate supplies, including dry washing (hand sanitizers)
- Handwashing facilities must have adequate lighting to ensure effective handwashing.
- Have a procedure for handwashing and drying and train employees in implementing procedure

Handwashing areas should be provided as part of toilet facilities and in areas where employees transition from one type of processing area to another (switching between non-food-contact surfaces and food-contact surfaces, or switching between handling raw materials or ingredients and finished animal food).

Warm water is generally more comfortable than cold water and encourages handwashing for the recommended duration. The water temperature used in handwashing can also affect the solubility or emulsification of some soils. Warm water is more effective than cold water in removing fatty soils. An adequate flow of warm water will cause soap to lather and aid in flushing soil quickly from the hands. Hand drying is a vital part of the handwashing process because thorough hand drying can provide an added reduction of microorganisms on the hands.

In addition, If soap and water are not available, the CDC recommends using an alcohol-based hand sanitizer that contains at least 60 percent alcohol to reduce the number of germs on your hands. However, hand sanitizers do not eliminate all types of germs, are not as effective when hands are visibly dirty or greasy, and may not remove harmful chemicals.

The facility should have a procedure in place for handwashing and train employees in implementing the procedure. In some facilities, procedures for documenting and verifying employee hand washing may be appropriate.

## Securing Jewelry and Other Objects

- Remove or secure anything that could contaminate animal food, equipment, or containers
  - Jewelry
  - False nails, false eyelashes or wigs
  - Cell phones
  - Caps
- Hair must be secured by caps and/or nets
  - Preferably provided by the facility
- Have a policy on what is allowed, what should be secured and how it should be secured

Before entering the animal food production area, all personnel must remove or secure jewelry and other objects that might fall into animal food, equipment, or containers. These include, but are not limited to, jewelry, sunglasses, pens, cell phones, false nails or eyelashes. The facility should have policy in place that clarifies what objects an employee can wear and/or carry into animal food manufacturing areas.

## **Employee Facilities and Support Services**

- Provide adequate toilet, medical and first aid facilities
  - Should be in areas other than where animal food is exposed or where equipment or utensils are cleaned
- Provide lockers and locker rooms for employees to change clothes and leave their valuables
- Provide clean uniforms and protective clothing/equipment on premises
- Establish policies that address eating, drinking, and smoking
  - Provide lunch and break rooms
  - Designate smoking areas

Management can facilitate personal hygienic practices by providing employee facilities and support services, as needed. Management must provide the following:

1. Safe locker rooms for employees to change and store their valuables
2. Adequate toilet and handwashing facilities that are clean and well supplied and well lit
3. First Aid stations and/or kits
4. Uniforms and protective clothing as needed.
5. If appropriate, laundry service for uniforms
6. Areas for eating and drinking, including food storage facilities
7. Designated Smoking areas away from production areas

## Other Necessary Precautions

- Additional hygienic practices vary by facility
- Production processes and ingredients
- Transitioning between different areas of a facility
- Piercings, tattoos, etc.

The key to successful adoption of an hygienic program in a facility is clear communication of expectations to all personnel and providing the necessary training and equipment as needed. All employees should be aware of their roles and responsibilities in maintaining personal hygiene.

Facilities will need to determine which practices they need to implement depending on the type of animal food, processes, ingredients, etc to minimize the risk of contamination of animal food.

You will find videos/resources on handwashing and other important hygienic practices including SOPs and documentation templates on this project's web site. Please review/view.



## Resources

- [Personal Hygiene: A Basic Prerequisite Program for Ensuring Food Safety \(Food Safety Magazine 2012\)](#)
- [The Five W's of Handwashing \(Food Safety Magazine 2007\)](#)
- [Personal Hygiene and Food Safety Tips \(Food Safety and Quality 2006\)](#)
- [A Food Handlers Guide to Personal Hygiene \(Australian Institute of Food Safety\)](#)

**Prabha Vasudevan**  
Education/Outreach Coordinator  
Office of the Texas State Chemist