



## Mercer Milling Company Safe Feed Safe Food Quality Program Manual



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## **Purpose and Scope**

The purpose of this Safe Feed Safe Food Quality Program Manual is to provide a central information source for all our protocols. This manual will be available to all employees and outline hiring, training, standard procedures, documentation, and corrective measures.

## **Safe Feed Safe Food Policy**

Mercer Milling Company is devoted to adhere to the legislative and regulatory guidelines for livestock feed and shall resolve to comply with the Safe Feed / Safe Food Program. The mission of the Safe Feed/Safe Food Certification Program is to establish and promote generally accepted food safety guidelines designed to ensure continuous improvement in the delivery of a safe and wholesome feed supply for the growth and care of animals.

The Safe Feed/Safe Food Certification Program is a voluntary, third-party-certified initiative designed for feed mills and feed- and ingredient-related facilities in the United States and Canada. The program establishes comprehensive standards of excellence that go beyond existing regulations to show leadership and maximize food and feed safety. Communicating food safety risks to the industry, building consensus among the segments of the industry, continuing the education process and enhancing consumer confidence in the feed and food supply are all important aspects of the program.

At Mercer Milling Company we are adopting the Facility Certification Institutes motto of healthy, productive animals mean a safe, sound food supply. And it starts with "Our Responsibility, Our Promise" to provide the best feed for dairy and beef cattle, swine, horses, poultry and companion animals.

## **A. Safe Feed/Safe Food Policy, Management, Control of Documents and Records Communication and Review**

Mercer Milling Company has a Safe Feed Safe Food Policy that has been communicated to all employees. The copy of the statement is in the employee break room by the time clock. In addition, all management personnel received an electronic copy. The management group meets on a regular basis to cover all areas including quality assurance. The minutes are kept and recorded on the S Drive, which is our public drive. All records for formula changes and modifications and tags are kept in the General Managers office. Ingredient specifications and technical information is in the upstairs office. Production records are kept for at least 3 years and the last two years are in the Director for Quality Assurances office. The samples of the production lots are kept for at least 14 months in a designated place in the warehouse. In addition, all bulk incoming and bulk out going products are kept in monthly retains box in the warehouse.

The production records are reviewed by two different parties within the mill. A daily quality report is sent to the management group.

- SOP002 – Product Check and Sampling
- SOP016 - Daily Production Review and Product Approval
- SOP018 – Product Review and Quality Check
- SOP029 – Mineral Oil Calibration
- SOP034 – Formula Change and Documentation
- Safe Feed/Safe Food MMC Policy
- Minutes from Management Meetings
- Daily QA Reports since Nov 2008 to current day.
- QA Monthly Report
- WEM Computer System Daily Backup
- Form 1. B-Line Daily Production Sheets New
- Form 2. Bulk Daily Production Sheet
- Form 4. MMC Daily Medication Log
- Form 11. Daily Bag Weight Log
- Form 8. Abort Log and Down Time Report
- Form 13. Formula Change Report

## **B. Human Resources and Training**

### **New Employee Training Policy**

Prior to starting any employee in a new position the following must occur.

1. Classroom structured training to include the following
2. Employee manual review (if new hire).
3. Employee paperwork completion (if new hire).
4. SOP training for specific department that the employee will be working in. (Production, 1-2 hours conducted by Quality assurance Department or GM) (ADMIN Office Management) (Warehouse, QA or Logistics)
5. On the job training (OJT) for specific department that the employee will be working in. (observed by appropriate management personnel.)
6. Employee signs off on specific SOP for job assignment.
7. Timely follow and observation by appropriate management personnel in order to assure that SOP's are being followed.
8. Employee will be required to redo this process upon 3 violations of SOP's
9. Yearly retraining at anniversary of employee.

Written by Rene Lavoie II, 6/24/2009

Mercer Milling Company Employee Handbook

## **C. Facility Planning and Control**

### Mercer Milling Company Safe Feed Safe Food Hazard Analysis

#### CHEMICAL

The following Standard Operating Procedures and outlined policies were developed to limit and/or stop chemical hazards from entering and occurring in our facility. The possible cross contamination of medicines and other feed additives was identified as a major hazard and many of the SOPs are written to avoid this possibility. The second identified major hazard was the contamination of incoming products through the receiving system.

- MMCSOP001 – Line Selection and Clean Out
- MMCSOP002 – Product check and Sampling
- MMCSOP004 – Medication Staging
- MMCSOP005 – FMM Operation
- MMCSOP011 – Receiving Bulk Trucks
- MMCSOP014 – Production Line Flush after Blood Meal
- MMCSOP014A - Production Line Flush after Medicines
- MMCSOP025 Sampling and Testing DDG
- MMCSOP022 Receiving System Flush Procedure
- MMCSOP030 Mixer Homogeneity and Cross Contamination Test
- MMC Vender / Supplier MSDS Specification Letter 032210
- MMC Returns Policy 101309
- MMC Product Testing Schedule
- Form 14. MMC Visitor Log
- Form 15. MMC Trucker Log

#### BIOLOGICAL

The following Standard Operating Procedures and outlined policies were developed to limit and/or stop biological hazards from entering our facility. The whole facility and receiving systems are locked and safeguarded by a surveillance system.

- MMCSOP023 Handling of Dog and Cat Food Bags
- Mercer Milling Company Prohibited Materials Policy
- Vendors and Carriers Letter 061209
- Form 9. Mercer Receiving Truck Inspection Certification
- Form 10. Mercer Truck Inspection Certification
- MMC Animal Protein Letter 111909
- Form 14. MMC Visitor Log
- Form 15. MMC Trucker Log

## **D. Manufacturing and Processing**

Mercer Milling keeps the production records for at least three years and a sample of the production lot for at least 14 months. The production record includes but is not limited to the following: sequence, flushing, lots, and handling of medicated feeds, feed specification, formula, and special manufacturing instructions.

Mercer Milling has in place a system to calculate the expected versus actual production. The system allows Mercer Milling to account for ingredients and accuracy of mixing. The system is stopped if there is an issue with a lot.

Equipment is maintained by in-house personnel and calibrated by a third party business on at least an annual basis. The mineral oil is inventoried monthly and is purchased through a qualified supplier. All ingredients are inventoried monthly and differences are reconciled at that time. Medicines and select vitamins are inventoried daily, with medicines reconciled daily.

SOP002 – Product Check and Sampling

SOP016 - Daily Production Review and Product Approval

SOP018 – Product Review and Quality Check

SOP029 – Mineral Oil Calibration

SOP021 – WEM Operator Document Procedures

SOP001 Line Selection and Clean Out

SOP014 – Production Line Flush after Blood Meal

SOP014A – Production Line Flush after Medication

SOP009 – Setting Bagging Scales

Work Sheet 2. Mill Inspection Report

## E. Monitoring Devices

### Mercer Milling Company Mycotoxin Policy

Mercer Milling Company will test quarterly the incoming Dried Distillers Grains (DDGs). We will accept up to 10 ppm of DON and 20 ppb aflatoxin. We prefer that the levels be zero to 5 ppm of DON and zero to 10 ppb of aflatoxin. DDGs are primarily used as a dilution/bulking product in our finished products. The maximum feeding rate of our mineral/vitamin/medicated mixes is 4 to 6 oz/animal/day.

At this low inclusion rate, the dilution effect of the toxins in the DDGs will be under concern levels in the total ration dry matter (Table 1.).

Table 1. Guide for Interpretation of Mycotoxin Tests  
Toxin level in total ration dry matter

MYCOTOXIN	CONCERN LEVEL	POTENTIALLY HARMFUL LEVEL	
		Cattle	Swine
Aflatoxin	20 ppb	20-300 ppb	20-100 ppb
Zearalenone	0.56 ppm	3.9- 7 ppm	0.6-3.9 ppm
DON	0.50 ppm	1.0- 2 ppm	0.6-1.0 ppm
DAS	0.25 ppm	0.7-1.5 ppm	0.4-1.0 ppm
T-2 0	0.25 ppm	0.7-1.5 ppm	0.7-1.5 ppm
HT-2	0.25 ppm	1.5- 3 ppm	1.5- 3 ppm

Source: Mold and Mycotoxin Problems in Livestock Feeding  
Penn State Cooperative Extension DAS 93-21

### Mercer Milling Company Testing Schedule

#### CHEMICAL

- Mycotoxins – Quarterly sampling
- Cross-contamination – 1x/yr – November
- Mixer Performance/uniformity – 1x/yr – November
- 20 Random Samples – 1x/yr – Spring
- Heavy Metals – Macro-mineral testing 2x/yr
- All new supplier of Macro-minerals - heavy metal testing.
- Medicated Feeds – 2 times per year – Rumensin and Bovatec.

#### BIOLOGICAL

- BSE – no testing -- RUPP free-manufacturing
- Pathogenic enteric microbes – no testing.

Mercer Milling Company Safe Feed Safe Food Quality Program Manual

## **F. Infrastructure- Building, Equipment, and Grounds**

All visitors and truckers must sign in to our log in the office. This allows Mercer Milling personnel to track non-employees in case of emergencies. In addition, this increases the biosecurity of the mill.

A mill inspection report is performed weekly. The inspection scores the facility from the outer appearance to the maintenance of the equipment (See Work Sheet 2. Mill Inspection Report). The areas in the inspection report that did not receive a high score become high attention work areas.

Equipment is maintained by in-house personnel and calibrated by a third party business on at least an annual basis. The mineral oil is inventoried monthly and is purchased through a qualified supplier.

F.J. Pugliese Pest Solutions, Incorporated wrote and maintains Mercer milling's Pest Control program. Areas for entry into the building are evaluated weekly using the mill inspection report. Areas that are found with the mill inspection report or by the Pugliese Pest Solutions monthly visits are addressed by the mill maintenance personnel.

A mixing homogeneity and cross contamination test is performed yearly on the equipment. All equipment is maintained to prevent lubricants and coolants from contacting finished product and food grade is used in areas of possible exposure. All agrichemicals are stored in the segregated maintenance area.

MMCSOP001 Line Selection and Clean Out

MMCSOP030 Mixer Homogeneity and Cross Contamination Test

Work Sheet 2. Mill Inspection Report

Form 14. Visitor Log

Form 15. Trucker Log

F.J. Pugliese Pest Solutions Mill Inspection Binder – Payables Office

## **G. Ingredient Purchasing Process and Controls**

Mercer Milling Company buys ingredients from our approved supplier list. The ingredients must meet the specifications that we developed. The company does not utilize restricted use protein product (RUPP). All the incoming bulk material are reviewed and sampled. If the material does not conform the load is rejected or bagged off and sold as an inferior product.

Any load that is quarantined upon receiving (ie. FDA) will be placed into the quarantine area on the mill and placard on four sides as a quarantined product. The product will be noted as quarantined in the receiving log and followed weekly until the quarantine is lifted.

Samples of the incoming bulk ingredients will be analyzed on a quarterly basis for Dried Distiller Grains (DDG) and twice yearly on other minerals (limestone, sodium bicarbonate, magnesium oxide, dicalcium phosphate, urea, dynamite, potassium chloride and calcium sulfate). All results will be reviewed and a second sample drawn and tested if the sample is out of conformance.

All bulk loads are inspected upon arrival and certified RUPP free. The load is checked with the bill of lading and purchase order. At this time, the driver completes the truck inspection certification stating what product he hauled before loading and that he cleaned the truck.

All products made within the facility are reviewed twice for visual and quantity conformation. Products that are out of conformance are labeled with an orange HOLD tag until the product is sampled and reworked or disposed of depending on the issue. Products that are externally recalled are picked up at the earliest available time and sampled upon arrival at the mill. The products that are contaminated with farm debris are sampled and thrown into the dumpster without entering the mill.

Mercer Milling Company Prohibited Materials Policy  
SOP002 – Product Check and Sampling  
SOP010 -- Receiving Bags  
SOP011 – Receiving Bulk Trucks  
SOP012 – Receiving Bulk Rail Cars  
SOP015 – Receiving high Grade Urea Bulk Rail Cars  
SOP016 - Daily Production Review and Product Approval  
SOP025 – Sampling and Testing DDG  
Form 9. Mercer Receiving Truck Inspection Certification  
Work Sheet 3. Mercer Milling Company Approved Supplier List

## **Mercer Milling Company Prohibited Materials Policy**

The following listing of Restricted Use Protein Products (RUPP) was taken from AAFCO Official Publication and FDA Guidance Document 21 CFR 689.2000 and 689.2001. Mercer Milling will be following this RUPP listing and will reject loads that have hauled the RUPP before our load without clean out certificates.

The following products are typically of ruminant animal origin – an animal with four-chambered stomach, including but not limited to, cattle, sheep, goats, buffalo, elk, and deer.

“Meat, Animal By-Product Meal, Glandular Meal & Extracted GM Meat by-products, Restaurant Food Waste, Unborn calf Carcasses, Meat Meal Tankage Fleshings, Hydrolysate, Animal Digest, Meat Meal, Meat & Bone Meal Tankage, Cooked Bone Marrow, Animal Liver, Hydrolyzed Hair, Stock Dried Meat Solubles, Hydrolyzed Leather, Meat Food Processing Waste, Meat Protein Isolate, Stock/Broth, Meat and Bone Meal, Mechanically Separated Bone Marrow, Salvage Pet Food, Chondroitin Sulfate, Bone Meal (Cooked or Steamed)”

The following protein products derived from mammals are exempt (accepted into facility):

Blood and Blood Products, Pure Porcine (Pork) Protein, Inspected Meat Products, such as plate waste (heat processed), Pure Equine (Horse) Protein, Milk Products (Milk & Milk Proteins), Gelatin

Other exemptions:

Poultry, Marine (Fish), Vegetable Protein Products, Grease, Fat, Amino Acids, Tallow with under .25% solids, Oil, and Dicalcium Phosphate.

Non-animal derived restricted materials that are not allowed to be hauled before Mercer Milling Company loads.

- Chemicals
- Coal
- Electronic parts
- Fertilizers
- Glass
- Hazardous materials
- Metal – wire, scrap metal
- Trash
- Treated Seed
- Wood

## **H. Identification and Traceability Protocols**

All products in the mill are assigned lots from the WEM Batching System. The lots are printed on the label or the bag by ink roller. All pallets have two pallet placards with the lot number and the quantity of the product. On multiple pallet batches, the number of the pallet will be noted in the upper left hand corner of the placard.

A lot number from Mercer Milling Company will look like 1930811015. The lot system is 1 for the mill, the next digit is the last digit of the year (for example 9 for the year 2009), Julian date next 3 digits, and last 4 to 5 digits are the unique lot number for the batch code.

All bulk ingredients will be identified through the WEM Batching System as first in first out of the bulk bins. The ingredient utilized through the microbins and super sack systems are recorded in a dated filling log. The hand add ingredients and medicines used in the mill will be noted on the hand add sheet, medication log system, and Monthly Medication Log.

All production forms are retained for 3 years and samples are retained for 14 months.

To follow these protocols, the following SOP and Logs are used in the mill process.

- SOP/MMC/002 – Product Check and Sampling
- SOP/MMC/017 - Product Sample and Production Weight Check
- SOP/MMC/017 - Product Review and Quality Check
- Form 1. Line B Daily Production Sheet
- Form 2. Bulk Daily Production Sheet
- Form 3. Mercer Milling Company Placard
- Form 4. Daily Quality Report
- Form 6. Daily Medication Log
- Form 7. Microbin Filling Log
- Form 8. Abort Product and Downtime Log
- Monthly Medication Log

## **I. Customer – Related Processes**

The customer provides the specifications for the finished products. A process for formula change is in place to track all changes to the specifications and tags.

The Quality Assurance office files all complaints and follows the resolution of complaints. Quality audits will be performed by customer service as needed.

SOP034 Formula Change and Documentation

Form 13. Formula Change Form

Form 18. Customer Complaint Form

## **J. Control of Non-conforming Product**

All products made within the facility are reviewed twice for visual and quantity conformation. Products that are out of conformance are labeled with an orange HOLD tag until the product is sampled and reworked or disposed of depending on the issue. Products that are externally recalled are picked up at the earliest available time and sampled upon arrival at the mill. The recalled products that are contaminated with farm debris are sampled and thrown into the dumpster without entering the mill (See Letter addressing returns).

Any load that is quarantined will be placed into the quarantine area on the mill and placard on four sides as a quarantined product. The product will be noted as quarantined in the receiving log and weekly followed until quarantine is lifted.

SOP002 – Product Check and Sampling

SOP010 -- Receiving Bags

SOP011 – Receiving Bulk Trucks

SOP012 – Receiving Bulk Rail Cars

SOP015 – Receiving high Grade Urea Bulk Rail Cars

SOP016 - Daily Production Review and Product Approval

SOP025 – Sampling and Testing DDG

Form 9. Mercer Receiving Truck Inspection Certification