Model Animal Food Safety Plan for Medicated and Non-medicated Livestock Feed

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List of Product Ingredients and Incoming Materials Form

Bulk Ingredients	Bag, and Hand Add Ingredients	Medications/Drugs
Cottonseed Meal	Copper Sulfate	Monensin Sodium
Cottonseed Hulls Alfalfa	Feed Grade Urea	
Pellets Whole Corn	Vitamin/Mineral Premix	
Barley		
Wheat Middlings		
Soyhull Pellets		
Liquids	Packaging Materials	Other Additives
Molasses	New lined 50lb bags	None

Product Description Form

1. Product name(s)	Beef and Dairy Cattle Feeds
2. Product safety properties (Moisture,	None Identified
Temperature, NPN, etc.)	
3. Intended use and customer	End User
4. Type of packaging	Bulk and bagged
5. Shelf life	30 Days
6. Where will the product be sold?	wholesale and retail
7 Labeling instructions	Handfeed 1lb per 100lb of animal
8. Special distribution control	None identified

Product Description Form

1. Product name(s)	Horse feeds
2. Product safety properties (Moisture,	None identified
Temperature, NPN, etc.)	
3. Intended use and customer	End user
4. Type of packaging	Bulk and bagged
5. Shelf life	30 Days
6. Where will the product be sold?	Wholesale and retail
7. Labeling instructions	Hand feed 1lb. per 100 lb. of animal
8. Special distribution control	None identified

Product Description Form

1. Product name(s)	Sheep/goat feeds
2. Product safety properties (Moisture,	None identified
Temperature, NPN, etc.)	
3. Intended use and customer	End user
4. Type of packaging	Bulk and bagged
5. Shelf life	30 Days
6. Where will the product be sold?	Wholesale and retail
7. Labeling instructions	Hand feed 1lb. per 100 lb. of animal
8. Special distribution control	None identified

Process Flow



Hazard Analysis Form

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability (Yes/No)	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
Formulation Procurement	Biological None identified at this time				
	Chemical Drugs NPN Copper Physical None identified at	No	Animal drugs NPN and copper can pose a hazard when added in error of their approval. SOPs will prevent formulation errors.		
Bulk Receiving	this time Biological Cross contamination	No	Check carrier for potential biological hazards following receiving SOP		
	Chemical Aflatoxin Fumonisin DON	Yes	There is a high likelihood of aflatoxin in corn and cottonseed meal. There is a high likelihood of fumonisin in corn originating from Texas. There is a high likelihood of DON in Wheat Products and Barley from the Northern Tier of US and Canada	Process Control Testing upon receipt.	Yes CCP1
	Physical Metal, Glass, Plastic, Wood	No	Foreign materials managed through SOPs for magnets and screens to remove metal, glass, wood, and plastic. Likelihood is low		
Magnet & Screens, Storage	Biological None identified at this time Chemical None identified at this time				
	Physical Metal, Glass, Plastic, Wood	No	SOP's will prevent the absence of screens and magnets to control metal, glass, plastic and wood. Likelihood is low.		
Bulk Ingredient Batching	Biological None identified at this time				
	Chemical Aflatoxin	No	Store with aeration and temperature cables and monitor daily to control moisture, temperate and increase of aflatoxin—storage SOP		
	Physical None identified at this time				
Liquid Ingredient Receiving	Biological None identified at this time				
	Chemical None identified at this time				
	Physical Metal, Glass	No	Handled with screen at next step.		

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability (Yes/No)	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
Liquid Screen and Storage	Biological None identified at this time				
	Chemical None identified at this time				
	Physical Metal, Glass	No	Foreign material control SOP.		
Bag Receiving	Biological Cross contamination	No	Check carrier for potential biological hazards following receiving SOP.		
	Chemical Cross contamination	No	Check carrier for potential biological hazards following receiving SOP.		
	Physical None identified at this time				
Warehouse storage	Biological None identified at				
	this time Chemical Cross contamination by medicated articles or feed	No	Medication stored separately and inventory managed by drug room storage SOP.		
	Physical None identified at this time				
Micro-ingredient Batching	Biological None identified at this time				
	Chemical Drugs NPN Copper	Yes	Animal drugs, NPN, and copper can pose a hazard when added in error of their approval.	Process Control Daily Drug, NPN and copper Inventory and sequencing feeds.	Yes CCP 2
	Physical None identified at this time				
Mixing	Biological None identified at this time				
	Chemical Drugs NPN Copper	Yes	Some deficiencies or toxicities (Monensin in horse feed, Copper in Sheep Feed, and High Non-Protein Nitrogen in cattle and sheep feed) can result in immediate health effects.	Process Control Mixing times are monitored by computer and SOP's for mixer test performed biannually.	Yes CCP 3
	Physical None identified at this time				
Pellet Mill	Biological None identified at this time				
	Chemical Industrial material	No	Use of food grade grease as specified in maintenance SOP.		

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability (Yes/No)	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
	contamination				
	Physical None identified at this time				
Pellet Cooler	Biological	No	Moisture content managed as contained		
	Salmonella		in pelleting SOP.		
	Chemical Industrial material contamination	No	Use of food grade grease to avoid contamination – Maintenance SOP.		
	Physical None identified at this time				
Automated Bagging	Biological None identified at this time				
	Chemical Industrial material contamination	No	Processing/bagging SOP		
	Physical None identified at this time				
Warehouse/Distribution	Biological Rodent and bird contamination	No	Controlled with Pest Control SOP		
	Chemical None identified at this time				
	Physical None identified at this time				
Bulk Storage and Distribution	Biological None identified at this time				
	Chemical Incorrect feed	No	Managed through labeling and distribution prerequisite program.		
	Physical None identified at this time				
Rework	Biological Potential cross contamination	No	Managed through customer complaint prerequisite program.		
	Chemical None identified at this time.				
	Physical None identified at this time				

Identifying Critical Limits, Monitoring and Corrective Actions Form

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
Receiving/CCP1	Aflatoxin 20 ppb Fumonisin 5 ppm DON 5 ppm	What will be measured? Aflatoxin, Fumonisin, and DON	Cause of the deviation? Toxin levels over the CL.
		Where will the CL be measured? Bulk Receiving Lab/Office	How will the process be corrected? Reject load Notify supplier
		How will the CL be measured? GIPSA approved equipment in lab.	Product disposition? Return to shipper.
		Who will monitor the CL? Bulk Receiving Manager/Analysist.	Measure to prevent recurrence? Encourage supplier to join the One Sample Strategy program or work with State Chemist Office to improve their testing.
		How often will the CL be measured? Every truckload	Who is responsible for implementing the CA? Quality manager

Identifying Critical Limits, Monitoring and Corrective Actions Form

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
Batching and weighing CCP 2	Plus or Minus Drug 3% NPN 3% Copper 3%	What will be measured? Weight of monensin, NPN, and Copper Inventory reconciliation at the end of shift	Cause of the deviation? Improper amounts added to batches or incorrect ingredient added.
		Where will the CL be measured? Drug room and hand add storage.	How will the process be corrected? Hold and assay products in question.
		How will the CL be measured? Scale Compare theoretical inventory to actual inventory.	Product disposition? Hold for rework or disposal.
		Who will monitor the CL? Mixer Operator	Measure to prevent recurrence? Training on Mixing procedures
		How often will the CL be measured? Every batch for ingredients Every shift for reconciliation	Who is responsible for implementing the CA? Quality assurance manager

Identifying Critical Limits, Monitoring and Corrective Actions Form

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
Mixing CCP 3	Zero tolerance for not following correct discharge, cleaning, sequencing, and flushing procedures.	What will be measured? Mixer cleanliness. Sequencing and flushing followed SOP.	Cause of the deviation? Improper mixer discharge, sequencing, or flushing.
		Where will the CL be measured? Mixing area	How will the process be corrected? Hold and assay products in questions.
		How will the CL be measured? Visual inspection of mixer. Batching and flushing protocol followed.	Product disposition? Hold for rework or disposal.
		Who will monitor the CL? Mixer Operator	Measure to prevent recurrence? Training on mixing procedures
		How often will the CL be measured? Every batch	Who is responsible for implementing the CA? Quality manager

Record Keeping and Verification Form

Process Step/ CCP	Hazard	Records	Responsibility	CCP Verification?
Receiving/ CCP1	Aflatoxin Fumonisin DON	In House testing results Bill of lading Receiving records Training records Corrective Action records	Receiving personnel Receiving personnel Receiving personnel Quality manager Quality manager	Short term Daily verification of mycotoxin testing and receiving records by QA Manager.
				Long term Audit approved suppliers and records every 6 months by QC team. Training employees on sampling, and testing techniques annually.
Batching and Weighing/ CCP2	Monensin NPN Copper	Batching records (hand add) Daily inventories of monensin, NPN and Copper. Training records Corrective action records.	Mixer operator Mixer operator Quality manager Quality manager	Short term Verification of batching records and reconciliation records. Long term Audit records every 6 months by QC Team. Annual training employees on mixing and recordkeeping.
Mixing CCP3	Monensin NPN Copper	Mixing records (hand- add) Training records Corrective action records	Mixer operator Quality manager Quality manager	Short term Verification of batching records, flush, sequencing by QA manager at the end of each shift. Long term Audit records every 6 months by QC Team. Annual training employees on mixing and recordkeeping.

SOPs for Heat treated Pet Food

PREREQUISITE PROGRAM FOR HAZARDS

Manufacturers of Medicated and Non-medicated Feed

1. Formulation

SOP for formulation accuracy and safety SOP for label verification SOP for Sample retention

2. SOP for receiving ingredients.

3. Magnets and screens

SOP for inspection of screens and magnets

SOP for inspection of feed ingredients when unloading.

4. Mixing and Pelleting

SOP for theoretical vs actual inventories

SOP for mixing times, monitoring computer, bagging and bulk shipment

SOP for mixer and pellet mill maintenance

SOP for mixer evaluations (biannually)

- 5. Sanitation Housekeeping SSOP Personal Hygiene Training
- 6. Pest Control SOP
- 7. Recall Procedures SOP Mock Recall SOP
- 8. Maintenance SOP for inspection of equipment.
- 9. Labeling and distribution
- **10.** Customer complaint

Animal Food Safety Plan Summary Form

Process step and CCP	Hazard	Critical Limits for each CCP (parameter value)	Monitoring				Corrective Action	Verification Activities	Record- keeping
			What	How	Frequency	Who			Procedure
Bulk Receiving CCP 1	Aflatoxin Fumonisin Don	Aflatoxin 20 ppb Fumonisin 5 ppm DON 10 ppm	Aflatoxin Fumonisin DON	Test Kit	Every load	Receiving technician	Product will be rejected	Daily review of logs by mill manager	Testing records Bill of Lading Training Corrective action
Batching and receiving/ CCP 2	Monensin NPN Copper.	Drug 3% NPN 3% Copper 3%	Batching records Inventories of: Monensin NPN & Copper	Weighing ingredients, Calculate theoretical inventory to actual inventory	Every batch, Daily	Mixer Operator	Hold and Assay products in question; Retraining	Daily verification these products are within the CL Verification of inventory	Daily inventories of drugs Batching records Training Corrective action
Mixing CCP 3	Monensin NPN Copper.	Zero tolerance	Correct mixer discharge, sequencing, flushing	Visual	Every batch	Mixer operator	Hold and Assay products in question; Retraining	Review mixing records for correct sequence, flushing	Mixer records