Recent Food Safety Actions Affecting Bulk Grain Markets

Howard Shepherd

IGQI Advisory Meeting
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FDA - Food Safety Modernization Act

• Important Sections Impacting Bulk Commodities – Grain and Grain Processors

• Previous Acts, Programs and Guides and the Food Safety Act

• Bulk Commodity Facilities – Need to do???
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Sec. 101. Inspections of records.

Expand the authority to inspect records related to food, including to:

(1) allow the inspection of records of food in a similar manner as an adulterated food

(2) require that each person who manufactures, processes, packs, distributes, receives, holds, or imports an article of food permit inspection of records

Change: Not just in response to a problem!
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Sec. 102. Registration of food facilities

• require registration every two years
• to suspend the registration of a food facility if the food manufactured, processed, packed, or held by a facility has a reasonable probability of causing serious adverse health consequences or death to humans or animals.

Change: Now must be updated and maintained
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Sec. 103. Hazard analysis and risk-based preventive controls.

Requires each owner, operator, or agent in charge of a food facility to:

(1) evaluate the hazards that could affect food;
(2) identify and implement preventive controls;
(3) monitor the performance of those controls; and
(4) maintain records of such monitoring.

Change: Now a food safety plan is required.
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Sec. 111. Sanitary transportation of food.
Requires the HHS Secretary – to promulgate regulations on sanitary transportation practices for the transportation of food.

Impact: Carriers hauling animal-based products.
Also carrier certification and exam
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Sec. 204. Enhancing traceback and recordkeeping.

(1) improve tracking and tracing
(2) establish standards for the type of information, format, and timeframe for persons to submit records in such tracking and tracing.

Change: Beyond bioterror; accuracy guidelines
Sec. 207. Mandatory recall authority.

(1) responsible party – cease distribution and recall an adulterated or misbranded article of food

(2) provide notice to relevant persons – if the responsible party does not voluntarily cease distribution of or recall such article of food

(3) determines that removal of the article from commerce is necessary, only after providing an opportunity for a hearing.

Change: FDA now can force a recall
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Sec. 211. Improving the Reportable Food Registry

Require a responsible party to submit consumer-oriented information regarding a reportable food:

(1) a description of the article of food

(2) affected product identification codes, such as UPC, SKU, or lot or batch numbers sufficient for the consumer to identify the article of food;

(3) contact information for the responsible party

Change: Better website; apply to mycotoxins???
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Immediate Impact

- Facility Registration
- Mandatory Recall
- Traceability and Recordkeeping
- Inspection
- Exemption
  - Farms – production
  - Farms and Food Producers – sales less than $500000 and sell within state directly to consumers and restaurants and retailers
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Previous Acts, Programs, Guides

• Bioterrorism Act of 2002
• Reportable Food Registry 2007
• Good Manufacturing Practices
• HACCP – Hazard Analysis and Critical Control Points
Non-transporters (e.g., manufacturers) must establish and maintain records that identify *both* the transporter and non-transporter IPS and ISR (indicated with solid red arrows above).
Example 1: Common Storage Silo for An Ingredient (e.g., Flour)

Information reasonably available is the identity of all potential sources of the flour for each finished product.
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Bulk Commodity Targets

• Bulk Grains are Food
• Bulk Commodity Facilities – not registered
• Bulk Commodity Facilities with Feed Mills
• Feed Mills
• Ethanol Plants
• Facilities processing bulk commodities into food, feed or ingredients
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Bulk Commodity Facilities – Need to??? – Register

• If not Registered – do immediately
• If Registered
  • Responsible manager – current name and contact information
  • All facilities need separate registrations
  • Locations with both grain and feed functions should register separately
• Registration renewal will be every two years
• FDA has the authority to suspend registration
When does quality matter?

Source: Grain Journal Nov 4 2010
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Bulk Commodity Facilities – Need to??? – develop Hazard Analysis Plans

• Written a Hazard and Risk Prevention Plan
  • Managing grain coming into – moving through – exiting the facility as grain or processed grain
  • Determine which standards will be used to develop hazard and risk analysis – ISO 22000, HACCP, ect.
  • Determine hazards and risk levels along the flow path of grain and processed grain – transportation, quality management, maintenance, safety management
• Develop prevention controls for each risk
• Document control measures
Wet Corn!
Ear rot assessments – percent severity; rot present

- Cladosporium
- Gibberella
- Fusarium
- Penicillium
- Trichoderma
- Fusarium
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Bulk Commodity Facilities – Need to?? – develop Hazard Analysis Plans

• Add a Defense Plan into written plan
  • Managing defense of facility
  • Determine external and internal risks
  • Develop preventative controls
  • Document preventative controls
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Bulk Commodity Facilities – Need to?? – implement Traceability and Recordkeeping

• Implement Traceability and Recordkeeping
  • ISO 22000, HACCP, Baker standard

• Traceability starts with what you know
  • Customer accounting programs
  • Scale accounting programs record information
    • weight, moisture, quality, commodity
    • Customer name, driver name, delivery equipment
    • Dump pit number, first bin
    • Transfer accounting

• Customer quality demands – quality management
Traceability - Multipurpose Activity

Ability to trace the history, application or location of an entity by means of recorded identifications. (EU #1830)

- Respond to security threats
- Respond to food safety problems
- Document chain-of-custody
- Document production practices (e.g., organic)
- Meet consumer desires or social preferences
- Provide safety/quality assurance or uniformity
- Protect integrity of brand name; control risk
- Authenticate claims (e.g., Regional foods)
- Regulatory compliance
- Improve logistics and reduce production costs
- Organized, uniform response to unusual conditions
- Carbon foot printing
ISO 9000 + HACCP

ISO 22005:2007 Traceability in feed and food

ISO 22006:2009 Farming

Likely framework for Food Safety plans, activities; auditable
DON and ZEN in 2009 Corn from Iowa
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Bulk Commodity Facilities – Need to know?? – Reportable Food Registration

• Reportable Food Registration – first step to Recall
• Reportable Food Registration is mandatory
• Reporting adulterated grain and feed
  • Flooded grain in bin or in the field
  • Aflatoxin levels in grain and feed which cause injury
  • Ingredients – wheat gluten, bone meal
• Inspections – consequence of Recalls
Recalls - Dog Food for Aflatoxin

Kroger, December 2010

Diamond, Fall 2005

PET PRIDE CAT FOOD, 18 LB, PET PRIDE TASTY BLEND POULTRY & SEAFOOD CAT FOOD, 3.5 LB, PET PRIDE CAT FOOD, 3.5 LB, PET PRIDE KITTEN FORMULA FOOD, 3.5 LB, KROGER VALUE CAT FOOD, 3 LB, KROGER VALUE CHUNK DOG FOOD, 50 LB, OLD YELLER CHUNK DOG FOOD, 50 LB, PET PRIDE TASTY BLEND POULTRY & SEAFOOD, 18 LB, KROGER VALUE CHUNK DOG FOOD, 15 LB, OLD YELLER CHUNK DOG FOOD, 22 LB
Wheat Gluten in Pet Food

Mass recall of dog and cat food after pets die

Breaking News From FDA Confirms ASPCA's Suspicions on Pet Food Toxin
Presence of Melamine Identified in Contaminated Food

Egg Farmer Cites Chicken Feed in Salmonella Recall
September 22, 2010, 5:18 PM EDT
Flooded Corn – August 2010
Summary

• Real food safety issues will increase with production volume, user demands and climate change.
• Organized, multi-purpose, auditable management systems can make steady progress in controlling them.
• Organized systems reduce pressure to regulate.
• FSMA provides FDA with new authority.
• The best system will become the regulatory and world trade standard.
Iowa Grain Quality Initiative

www.iowagrain.org

Howard Shepherd

howard@iastate.edu
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