Quarterly Trends Update: Annual Update and Action Plan 2020:

2019-Q3

Webinar: Tuesday, October 1, 2019

2:00 to 3:00 PM ET

John Spink, PhD & Douglas C Moyer, PhD

Director & Assistant Professor, Food Fraud Initiative

<NEW> Eli Broad Business College, MSU

<NEW> Department of Supply Chain Management

Introduction to Supply Chain Management (SCM 303)

Procurement and Supply Management (SCM 371)

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Food Fraud Curriculum

Massive Open Online Course (MOOC – free, open, online)

- With a 'certificate of completion' based on an assessment
- On-demand, monthly instances, Ten Contact Hours
- **Food Fraud Overview MOOC**
- Food Fraud Audit Guide MOOC
- Food Defense Audit Guide MOOC
- Training: FF VACCP (Vulnerability Assessment & Food Fraud Prevention Strategy)

Conference (High-level update on key topics)

- Food Fraud Prevention Annual Update 2019 & Workshop
 - Oct 15-16 & Jan 14-15, 2020

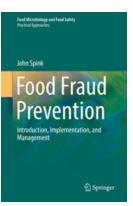
Executive Education (In-depth education)

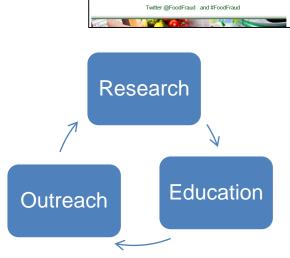
- Food Fraud Management Strategy & FFVA Workshop
 - Sept 10-11-12, 2019 & Feb 4-5-6, 2020

Textbook: Food Fraud Prevention

Release November 3, 2019







5^{rs} Food Fraud

Audit Guide MOOC

November 30 & December 7, 2017

FFVA & FFPS

Development MOOC

June 18, 25 & July 2, 2018: 1pm to 2pm ET FoodFraud.msu.edu



Our Approach:

The Science and Sciences of Food Fraud Prevention



Quarterly Trends Update Webinars Series

- 2018-3Q
- Nonconformity
- PESC 22000 FF & FD Guidance documents
 Voluntary report food and the pince of the pi

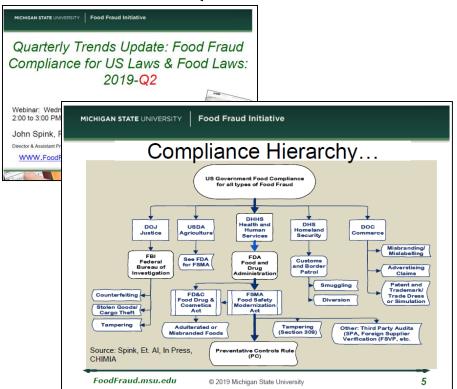
- 2018-4Q
- GFSI FF Document



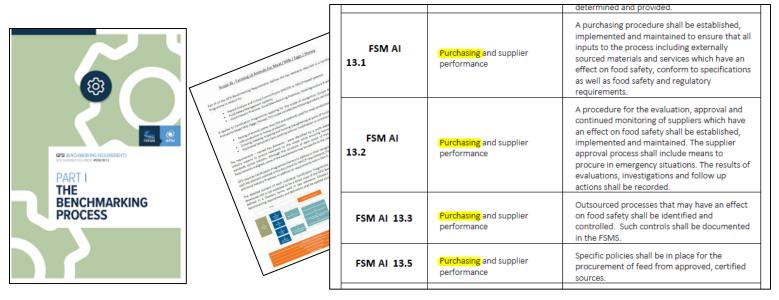


Quarterly Trends Update Webinars Series

2019-3Q



- Future...
 - Codex?
 - Brexit/ EU?
 - ISO 28000 Supply Chain Security?

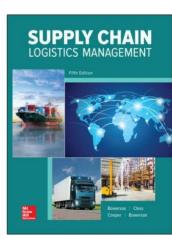


Food Safety Management System (FSMS) requirements for commercial standards by BRC, IFS, SQF, FSSC 22000, etc.

GFSI REQUIREMENTS FOR PURCHASING

Modern "Integrated Supply Chain Management"

- "a multi-firm <u>collaboration</u> within a framework of key resource flows and constraints.
- ...<u>structure and strategy</u> results from efforts to operationally align an <u>enterprise</u> with customers as well as the supporting distributor and supplier networks to gain a competitive <u>advantage</u>"(B).
- Challenges: Globalization, Disruptors, Quality Management, and Risk Management
- Adaptation: Dis-Continuity (5/436 pages)
- Reference: Bowersox, Closs, Cooper & Bowersox (2020), Supply Chain Logistics Management, McGraw-Hill



SCM Uncertainty

Quality: performance, reliability, durability, conformance, features, aesthetics, serviceability, and perceived quality.

- Risk Management
 - Demand uncertainty
 - Lead time uncertainty
 - Complexity management
 - Security

- "Protecting the product from theft or damage"
- "import/export of contraband"
 - raceability:
 "...counterfeiting,
 raw material
 falsification, and
 theft for resale...
 provide many
 opportunities for
 sale through gray
 markets..."

Modern "Procurement"

Procurement

Integrated Supply Chain Management

Purchasing

Bid

Bid/ RFP: request for proposal – posting a request for any who respond

- Purchasing: the process of buying learning of the need, locating and selecting a supplier, negotiating the price, and ensuring delivery and payment."
- Procurement: the integration of related functions to provide effective and efficient materials and services to the enterprise.
- Supply Chain Management: an extended term minimizing costs and lead times across tiers and echelons balancing the total cost of ownership and the total product experience for the final consumer.
- Reference: Johnson (2020). Purchasing and Supply Chain Management, McGraw-Hill Education.

Procurement "Top-10"?

- Top focus areas
 - Total Cost of Ownership (TCO)
 - Balanced with Total Product Experience (TPC)
 - While considering "What could go wrong?"
 - Managed by "Plan-Do-Check-Act"
- Top-10?
- Balanced Scorecard—overall competence: You're getting fired, and your boss!

Topic	Detail	Rank	Warning
а	а	1	
b	b	2	
С	С	3	
d	d	4	
е	е	5	
f	f	1	
g	g	2	
h	h	3	
h	h	4	
h	h	5	
h	h	6	
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h	h	20	

The GFSI Requirements for: Procurement

- There are specific Food Safety
 Management System requirements for:
 - (1) purchasing of ingredients and all materials
 - Glossary: "Acquiring raw materials, ingredients, inputs or other product needed to produce the site's end product(s), or
 - buying a service such as pest control, laundry, etc."
 - (2) traceability
 - Glossary: Not defined; "...to ensure product identification from the supplier (minimum one step back) through... recipient of the product... (minimum one step forward).

Note

• NOTE: v7.2

- 1. GFSI FSMS requires FFVA/ FFPS
- FSMA/FDCA requires a hazard analysis

Al	Purcha	The standard shall require that the organisation controls
15.1	sing	purchasing processes to ensure that all externally sourced
		materials and services, which have an effect on food safety
		conform to food safety management, including food fraud
		mitigation plan requirements

Changed to v8.0

FSM	Purchasing	A purchasing procedure shall be established, implemented
Al	and supplier	and maintained to ensure that all inputs to the process
13.1	performance	including externally sourced materials and services which
		have an effect on food safety, conform to specifications as
		well as food safety and regulatory requirements.

Scope AI - Farming of Animals for Meat/ Milk / Eggs / Honey SECTION 2: FOOD SAFETY MANAGEMENT REQUIREMENTS

13.1	Purchasing	A <u>purchasing procedure</u> shall be <u>established</u> , <u>implemented</u> and <u>maintained</u> to
	and supplier	ensure that all inputs to the process including externally sourced materials and
	performance	services which have an effect on food safety, conform to specifications as well
		as food safety and regulatory requirements.
13.2	Purchasing	A procedure for the evaluation, approval and continued monitoring of suppliers
	and supplier	which have an effect on food safety shall be established, implemented and
	performance	maintained
13.3	and supplier	Outsourced processes that may have an effect on food safety shall be identified and controlled. Such controls shall be documented in the FSMS.
	performance	Hazard Analysis
13.5	Purchasing	Specific policies shall be in place for the procurement of feed from approved,
	and supplier	certified sources.
	performance	GFSI Compliant

Agents, Brokers, Suppliers, etc.: Definitions

Agent	An organisation or individual that does not own but trades any type of food, feed and/ or	
	packaging. Such activities exclude production, storage and any physical handling of the	
	product; they can be performed under specific customer requirements or not.	
Approved	A supplier that has been evaluated to demonstrate conformance to specific requirements	
supplier	by the audited site. See also "Supplier" definition.	
Broker	See "agent"	
Consumer	A person who is a member of the public, takes possession of food, is not functioning in the	
	capacity of an operator of a food establishment or food processing plant, and does not offer	
	the food for resale.	
Customer	Person or organization that could or does receive a product or a service that is intended for	
	or required by this person or organization.	
Outsourcing	A firm, company or individual carrying out a process or activities on behalf of the site	
	audited.	
Raw material	A component of a food, feed or packaging that has not undergone processing.	
Supplier	An entity from whom the audited site purchases raw materials, ingredients, products,	
	and/or services.	

Agents, Brokers, Suppliers, etc.: Requirements

- How far back? Until YOU have to test/ trust
 - "Trust but verify".

N FII	Agent	Buying and selling of food, feed and/ or packaging products, excluding the production, storage and any physical handling of the product.
FSM FII 8.4	Food fraud	The agent / broker shall ensure that their suppliers comply to key elements FSM 8.1, 8.2, 8.3.

8.1	Food Fraud	(Food Fraud Vulnerability Assessment)
8.2	Food Fraud	(Food Fraud Prevention Strategy)
8.3	Food Fraud	(Connect FFPS to FSMS)

WHAT IS "REGULATORY COMPLIANCE"?

Food Fraud Compliance Requirements: Dates

- GSFI (FSSC, SQF, BRC, IFS, etc.) January 2018
 - Food Fraud Vulnerability Assessment (all fraud)
 - Food Fraud Prevention Strategy (all products)
 - No documents = audit non-conformance
- GFSI Some mentions (BRC, IFS, etc.) July 2015
- FSMA-Preventive Controls September 2016
 - "The hazard analysis must be written regardless of its outcome" [21CFR507.33 (a)(2)]
 - "The hazard may be intentionally introduced for purposes of economic gain." (iii)
- Food Drug & Cosmetics Act & Adulterated Foods 1938
 - Adulterated Foods
 - Misbranded Foods
 - + others such as Sec. 301 Smuggling
- Sarbanes-Oxley Act 2002 and 2007
- ISO 22000: now added note of Food Fraud and Food Defense (Food Safety)
- ISO 12931, 22380, 27000, 28000 Supply Chain Security, etc. (Product Fraud)
- Codex Alimentarius: Food Fraud being defined with a management system

UPDATING YOUR PLAN FF ANNUAL UPDATE

GFSI Issue 8 Food Fraud Requirements



FSM AI 21 Food fraud vulnerability assessment

- The standard shall require that the organisation has a documented food fraud vulnerability assessment procedure in place to identify potential vulnerability and prioritise food fraud mitigation measures.
 - GFSI/ FSMS = At least annually

FSM AI 22.1 Food fraud mitigation plan

- The standard shall require that the organisation has a documented plan in place that specifies the measures the organisation has implemented to mitigate the public health risks from the identified food fraud vulnerabilities.
 - GFSI/ Demonstrate Implementation

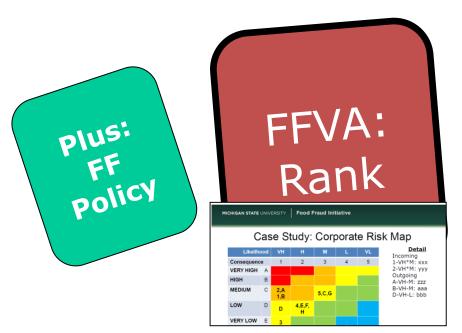
Food Fraud Annual Update: Process Review

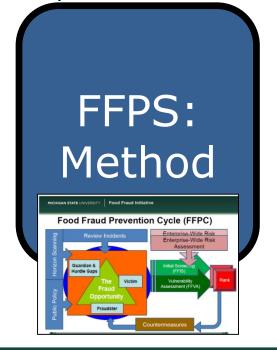
- 1. Update incidents, review incident collection method and competence
- 2. Consider best practices and changes in the requirements
- 3. Develop modification plan
- Get approval
- 5. Implementation plan for 2020 document, get approval, schedule
 - 1. Finalize incident review for all fraud and all products
 - 2. Update FF vulnerability assessment -- document, get approval
 - 3. Update FF Prevention Strategy -- document, get approval
 - 4. Adjust all methods and processes -- get approval
 - 5. Prevent, Mitigate or **DISCLOSE** all unacceptable risks document, get approval

SSSSOOOO WHAT???

Required Documents

- Food Fraud Vulnerability Assessment
 - Clarify details: at least annual, etc.
- Food Fraud Prevention Strategy
 - Clarify details: covers all fraud and all products, etc.







MIVERSITY | Food Fraud Initiative

rade Journal Articles on Food

Food Fraud Compliance Requirements: Scope

pliance Requirements for GF. "Food Fraud Compliance Requirements — The general compliance requirements for Food Fraud prevention are:

- Conduct a Food Fraud Vulnerability Assessment (Y/N)
- Written (Y/N)
- Create a Food Fraud Prevention Strategy (Y/N)
- Written (Y/N)
- <NEW> Demonstrate Implementation (Y/N)
- <NEW> Executive Level Sign-off (Y/N)
- Minimally conduct an annual Food Fraud Incident Review (Y/N)
- <NEW> Method to review your incidents and general market incidents (Y/N)
- Note: Address all types of Food Fraud (Y/N) 9.
- Note: Address all products from both incoming goods (e.g., ingredients) and 10. outgoing goods (e.g., finished goods) through to the consumer." (Y/N)
- Reference:
- Food Safety Magazine, Feb 2017, "Food Fraud Vulnerability Assessment and Prefilter for FSMA, GFSI and SOX Requirements", http://www.foodsafetymagazine.com/magazine-archive1/februarymarch-2017/food-fraud-vulnerability-assessment-and-prefilter-for-fsma-gfsi-and-soxrequirements/

New Food Magazine, Feb 2017: Food Fraud Prevention - how to start and how much is enough?", http://www.newfoodmagazine.com/33890/newfood-magazine/past-issues/issue-1-2017/issue-1-2017-digital-version/



"Just a Check Box" - yes and no

- There is often a criticism that some audits are just a checkbox – did it, check.
- Is this OK for Food Fraud? For this stage right now?
- YES!!!!
- The formal and official process has started



Q: YES OR NO?

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- The Citadel: Dr. Roy Fenoff

Discussion

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MOOC programs: www.FoodFraud.msu.edu/mooc/