FSPCA WEBINAR

Updates to FDA's Draft Guidance for Industry: Hazard Analysis and Risk-Based Preventive Controls for Human Food: Spotlight on Appendix 1

February 22, 2024

FSPCA
FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE

IFSH INSTITUTE FOR FOOD SAFETY AND HEALTH ILLINOIS TECH
Innovation Through Collaboration

WELCOME AND INTRODUCTIONS

Kathy Gombas

President, FSMA Solutions
FSPCA Human Food Trainer of Trainers Work Group Co-Chair

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Agenda

DESCRIPTION	PRESENTER	TIME
Housekeeping	Kathy Gombas	1:00 – 1:05 CT
FSPCA News	Kathy Gombas	1:05 – 1:15 CT
Updates to FDA's Draft Guidance for Industry: Hazard Analysis and Risk-Based Preventive Controls for Human Food: Spotlight on Appendix 1	Lillian Hsu	1:15 – 2:15 CT
Q&A	All	2:15 – 2:30 CT

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Webinar Presentation and Recording

- Along with a PDF of the presentation, a portion of this webinar will be recorded and posted to the FSPCA website post-event.
  - The webinar recording is **view only**, download is not available
  - The Q&A portion of the webinar will **not** be recorded

- Please allow 5 business days for the presentation and recording to be published

FSPCA Events webpage: https://www.fspca.net/events

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Q&A

- All attendees are muted
- Ask questions by typing into the Chat box
  - Click on the Chat icon
    - To pose a question, begin by typing into the box that is provided on the screen and tap "Enter"
  - We will do our best to answer as many questions as time allows but we may not be able to address every question
  - Questions not relevant to this webinar topic, or questions that the presenters cannot provide a response to at this time will not be addressed

Attendees: Please do not answer questions posted in the Chat

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NEWS

FSPCA Newsletter

- The FSPCA quarterly newsletter is a great way to receive the most current information related to FSPCA activities, such as educational and training opportunities, events, FSMA updates, and more.
- Join the FSPCA Listserv
- Read our latest newsletter or view a past newsletter
  - March newsletter coming soon!


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FSPCA FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE
December 2023 Newsletter
Volume 3: Issue 4
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In this issue:
Notes from the FSPCA Director
New FSPCA Website
2023 FSPCA Annual Conference
2023 FSPCA Lead Instructor (LI) Courses
2023 FSPCA Webinars
FSM Article: FSPCA Preventive Controls Updated Curriculum Highlights - Advantages for Food Safety Management
Jason Wan, Ph.D.
FSPCA Director
Institute for Food Safety and Health (IFSH)
Notes from the FSPCA Director
As we complete the year for the well-deserved holiday season, it is a good time to pause and reflect many of the significant achievements FSPCA has made over the past year in assisting the food industry in Food Safety Modernization Act (FSMA) implementation through FSPCA training and outreach activities. Here are a few highlights for the year 2023:
- FSPCA was awarded the prestigious International Association for Food Protection (IAFP) Food Safety Award for 2023.

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Upcoming FSPCA Webinars

- **Animal Food Rule Inspectional Findings and Supplemental Resources for FSPCA Animal Food Lead Instructors**
  - Webinar registration is limited to FSPCA Animal Food Lead Instructors only
  - **February 29** from 1:00 – 2:30 pm U.S. Central

REGISTER

- **FSPCA Food Traceability Rule Awareness for Industry Module Webinar**
  - Webinar registration is limited to FSPCA Lead Instructors only
  - **April 9, 2024** from 1:00 – 2:30 pm U.S. Central (English)
  - **April 11, 2024** from 1:00 – 2:30 pm U.S. Central (Spanish)

These webinars will be recorded. The presentation and a portion of the recording will be posted on appropriate Instructor Resource Portals post-event.
Note: Q&A portion will not be recorded.

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SAVE THE DATE! FSPCA 2024 Annual Conference

- The **8th Annual FSPCA Conference** will be held in person at the Chicago Marriott Southwest at Burr Ridge on November 19-20, 2024
- More information to come!
  - Agenda
  - Venue
  - Registration

Past FSPCA Annual Conference presentations are available on the FSPCA website

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UPDATES TO FDA'S DRAFT GUIDANCE FOR INDUSTRY: HAZARD ANALYSIS AND RISK-BASED PREVENTIVE CONTROLS FOR HUMAN FOOD: SPOTLIGHT ON APPENDIX 1

Lillian Hsu

Policy Analyst, Office of Food Policy and Response (OFPR)
U.S. Food and Drug Administration (FDA)

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FDA U.S. FOOD & DRUG ADMINISTRATION

Draft Guidance for Industry: Hazard Analysis and Risk-Based Preventive Controls for Human Food: Spotlight on Appendix 1

FSPCA Lead Instructor Webinar
February 22, 2024

Lillian Hsu
Policy analyst | OFPR OPPI

Agenda

DESCRIBE THE REVISIONS MADE TO INTRODUCTION

DESCRIBE THE REVISIONS MADE TO APPENDIX 1: KNOWN OR REASONABLY FORESEEABLE (“POTENTIAL HAZARDS”)

DEMONSTRATE HOW REVISED APPENDIX 1 CAN BE USED AS A RESOURCE IN CONDUCTING THE HAZARD ANALYSIS

Revised Introduction

- New title: Introduction and General Information Applicable to This Guidance
- Revised Introductory text to match changes to the way FDA describes part 117 since we first developed this Introduction, and to streamline it
- Definitions
  - Added ALL the terms defined in the regulation
  - Added definitions for terms that are for “the purpose of this guidance”, including from later chapters
- Added section on training
- Added a new section on “Resources”
  - Includes titles and links to many FDA documents that are available on the internet (CPGs, Guidance for Industry, Import Alerts), Codex documents, resources specific to designing validation studies, and then a grab bag of “other resources”
- Added all the references used in all the chapters

Revised Appendix 1

Revisions driven by stakeholder comments/concerns:

- Inconsistencies/concerns with certain hazard/commodity associations
  - Removed process-related hazards tables (formerly "Table 3" series)
    - Replaced with a discussion of the most relevant potential process-related hazards
  - Reorganization/revision of Food Groups, Categories, Subcategories, and certain hazards
    - Removed "Multi-component Foods" (Table K)
    - Added caveats (footnotes) for specific hazards marked as potential (with an "X")
  - Provided scientific, technical, or regulatory information to support certain potential hazard designations
- How FDA/State inspectors are using Appendix 1 during inspections
  - Added extensive introductory text to re-emphasize that **Appendix 1** provides information on **potential hazards** (*not* a list of hazards requiring a PC)
- Other changes
  - Added sections on current food safety topics of interest (e.g. infant foods, chemical hazards)
  - Added discussion of "exceptional lethality"

Appendix 1 – Food Groups

Bakery Items	Beverage Items	Food Additives, Color Additives, and GRAS Substances	Chocolate and Candy
Dairy	Dressings, Condiments, and Dips	Egg and Egg Products	Fruits and Vegetables
Game Meat Products	Grains, Pulses, Flours, and Starches	Nuts and Seeds	Oil and Oil Products
Snack Foods	Soups and Sauces	Spices and Herbs	Food Sweeteners

Food Hazards and Controls Guide: Appendix 1

Ingredient/Food-related Biological Hazards Tables

Table 1A: Known or reasonably foreseeable ("potential") food-related biological hazards for Bakery Items

Category	#	Subcategory	Storage Conditions	*Bacillus cereus*	*Clostridium botulinum*	*C. perfringens*	*Brucella* spp.	*Campylobacter* spp.	Pathogenic *E. coli*	*Salmonella* spp.	*L. monocytogenes*	*S. aureus*	Parasites	Viruses	Comments
Bread, Biscuits, Rolls, Brownies, Cookies, Pizza, Pie Crust	1	- Unbaked Bakery Items - Ready-To-Bake (RTB) Dough - RTB Crust - With or Without Inclusions[1]	Refrigerated or Frozen						X	X	X				Includes bagels, croissants, puff pastry, phyllo

Tables 1A through 1P do not identify any hazards requiring a preventive control in any Food Subcategory. It is the responsibility of the owner, operator, or agent in charge of each food facility to determine, through hazard analysis, whether a biological hazard identified in Tables 1A through 1P as a known or reasonably foreseeable ("potential") biological hazard is a hazard requiring a preventive control in the facility's food product.

Food Hazards and Controls Guide: Appendix 1 Ingredient/Food-related Chemical Hazards Tables

- **Food Group 2A: Known or reasonably foreseeable ("potential") food-related chemical hazards for Bakery Items**
- This Appendix does not include a Table of known or reasonably foreseeable ("potential") food-related chemical hazards for Bakery Items. Instead, for known or reasonably foreseeable ("potential") food-related chemical hazards for Bakery Items, you should see the Table(s) associated with the ingredients in your Bakery Item. For example:
- If your Bakery Item contains chocolate, you should consult Table 2D regarding known or reasonably foreseeable ("potential") food-related chemical hazards for Chocolate and Candy.
- If your Bakery Item contains eggs, you should consult Table 2G regarding known or reasonably foreseeable ("potential") food-related chemical hazards for Egg and Egg Products.
- If your Bakery Item contains wheat flour, you should consult Table 2J regarding known or reasonably foreseeable ("potential") food-related chemical hazards for Grains, Pulses, Flours, and Starches.
- If your Bakery Item contains fruit, you should consult Table 2H regarding known or reasonably foreseeable ("potential") food-related chemical hazards for Fruits and Vegetables.

Food Hazards and Controls Guide: Appendix 1 Ingredient/Food-related Chemical Hazards Tables

Table 2J: Known or reasonably foreseeable ("potential") food-related chemical hazards for Grains, Pulses, Flours, and Starches

Category	#	Subcategory	Storage Conditions	Drug residues	Arsenic	Cadmium	Lead	Mycotoxins/ Natural toxins	Pesticides	Comments
Grains, Non-Rice	1	Whole and milled grains (e.g., flour and bran)	Ambient					X[1]	X	Wheat, Rye, Sorghum, Oats, Barley, Triticale, Buckwheat, Corn, Amaranth, Millet, Quinoa (RACs and milled grain products)
Rice, Milled Rice Products	2b	Rice (whole and milled) and rice products	Ambient		X	X		X[2]	X	White or Brown Rice, Rice protein, Sticky/sweet Rice, Basmati Rice, Jasmine Rice, Arborio rice, Rice-based noodles, Rice-based cereal

The Tables of Known or Reasonably Foreseeable ("Potential") Food-Related Chemical Hazards do not identify any hazards requiring a preventive control in any Food Subcategory. It is the responsibility of the owner, operator, or agent in charge of each food facility to determine, through hazard analysis, whether a chemical hazard identified in these Tables as a known or reasonably foreseeable ("potential") chemical hazard is a hazard requiring a preventive control for the facility's food product.

Potential Process-related Hazards

Bacterial Pathogens – Presence/growth/toxin production due to survival of a lethal treatment	Undeclared food allergens – Incorrect label
Bacterial Pathogens – Growth and/or toxin production due to poor time/temperature control	Unintended food allergen presence – Allergen cross-contact
Bacterial Pathogens – Growth and/or toxin production due to poor formulation control	Chemical hazards due to mis-formulation (e.g., sulfites, yellow #5)
Bacterial Pathogens – Growth and/or toxin production due to reduced oxygen packaging (ROP)	Process-contaminant hazards in certain plant-based foods
Bacterial pathogens – Presence due to ingredients added after process controls	Metal
Bacterial Pathogens – Presence, growth, or growth with toxin production due to recontamination due to lack of container integrity	Hard plastic
Environmental Pathogens – Presence due to recontamination from the processing environment	Glass

Food Hazards and Controls Guide, Appendix 1, section A1.7 Process and Facility Related Hazards

Bacterial Pathogens – Presence/growth/toxin production due to survival of a lethal treatment

- Concern is vegetative pathogens surviving lethal treatment
- Lethal treatments include heat (most common), and non-thermal processes such as high-pressure processing (HPP), irradiation
- Typically, lethal treatment step will be a process preventive control that is validated
  - Validation can be in-house study or reference to reputable published information
- Exceptionally lethal heat treatments do not need to be identified as a process preventive control
  - Product undergoes severe heat process that vegetative pathogens cannot survive even in the absence of a preventive control or product would not be acceptable from a quality perspective if under-processed to the point where vegetative pathogens could survive

References
Section 3.3.4.1
Section 4.3.1
Table 5-1
Chapter 6

Bacterial Pathogens – Growth and/or toxin production due to poor time/temperature control

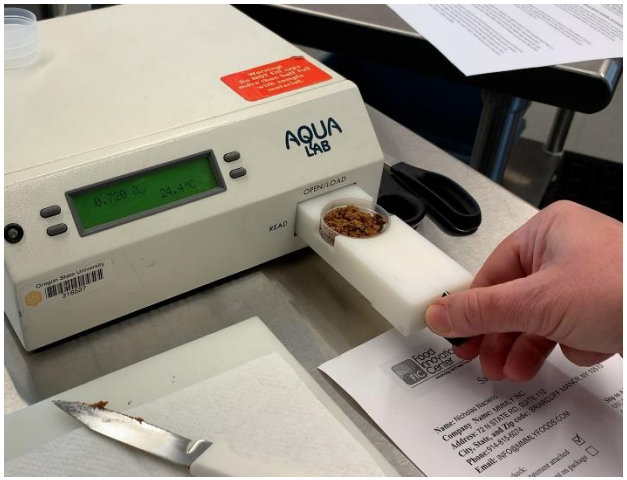
- Concern is pathogens growing in food that must be time/temperature controlled for safety (TCS)
- Controls:
  - **Refrigerated storage** of TCS food is likely a process preventive control
    - Includes RTE finished product food and work-in-process food that will not undergo lethal treatment
    - Could include ingredients or work-in-process food that will be cooked if heat-stable toxin could form due to time/temperature abuse before cooking
  - **Measures to control time/temperature exposure during <u>unrefrigerated</u> processing** of RTE food or work-in process food that could support pathogen growth and/or toxin formation likely are process preventive controls
  - **Cooling hot food** at time/temperature parameters to control pathogen growth/toxin formation likely is a process preventive control

References
Section 3.3.4.2.1
Section 3.3.4.2.1
Section 4.3.2
Table 5-1

Bacterial Pathogens – Growth and/or toxin production due to poor formulation control

- Concern is pathogens growing in a shelf-stable food that is supposed to be formulated to prevent such growth
- Formulation controls necessary to achieve shelf-stability likely would be process preventive controls including:
  - Water activity
  - pH
  - Water phase salt
  - preservatives

References
Section 3.3.4.2.3
Section 4.3.3
Section 4.3.4
Table 5-1



Bacterial Pathogens – Growth and/or toxin production due to reduced oxygen packaging (ROP)

- Concern is *Clostridium botulinum* growing and forming toxin in food that is in reduced oxygen packaging (ROP)
- Refrigerated storage of food that can support *C. botulinum* growth and toxin formation likely a process preventive control
  - Includes finished product in ROP
  - Includes ingredients and work-in process food that are in ROP or in an anaerobic environment

References
Section 3.3.4.2.4
Table 5-1

Bacterial Pathogens – Presence, growth, or growth with toxin production due to recontamination due to lack of container integrity

FDA

- Concern is pathogens getting into packaged food due to loss of container's seal integrity
- Example:
  - RTE food pasteurized in a jar and then submerged in a cooling water tank
    - If pathogens are in the cooling water, they could be drawn into the hot jar via defective container closures or improper seals
- Measures such as checking containers, treating cooling water for pathogens are likely process preventive controls

References

Section 3.3.4.4

Environmental pathogens – Presence due to recontamination from the processing environment

- Concern is recontamination of RTE foods with environmental pathogens before packaging when product does not undergo subsequent lethal treatment and can support pathogen persistence/growth
- Environmental pathogens include *Salmonella* and *Listeria monocytogenes*
- RTE food includes finished products, and work-in-process foods or raw materials/ingredients that do not undergo a lethal treatment, such as:
  - Finished products: peanut butter
  - Work-in process foods or raw materials/ingredients: roasted ground peanuts added to peanut butter paste, fresh-cut produce in salad

References
Section 3.3.5
Section 4.4
Table 5-2

Environmental Pathogens – Presence due to recontamination from the processing environment (*cont'd*)

- Factors to consider in determining if the hazard is significant include:
  - Likelihood of environmental pathogens being in the facility
  - Potential routes of environmental pathogens to RTE food
    - Pathogens from plant environment to food-contact surfaces and RTE food
    - Pathogens getting into RTE food via employees
  - Likelihood of environmental pathogens being able to survive in the RTE food
- Sanitation preventive controls
  - Likely required at steps where RTE food is exposed to the environment
  - Includes cleanliness of RTE food-contact surfaces and employee practices
  - Environmental monitoring required as a verification activity

Bacterial pathogens – Presence due to ingredients added after process controls

- Concern is *ready-to-eat* ingredients added to a product after a process control that could be contaminated with pathogens and there is no subsequent kill step after these ingredients are added
- Examples include:
  - Seasonings added to potato chips after the frying step
  - Walnuts added as a topping to a cake after the baking step
- Preventive controls could include
  - Sanitation controls at facility where the RTE ingredients are exposed and handled during ingredient addition and product packaging steps
  - Supply-chain program to ensure that supplier(s) controlled pathogens that may be associated with the RTE ingredients

References
Section 3.3.4.3
Table 5-1

Undeclared food allergens – Incorrect label

- Concern is allergen that is intended to be in the food (i.e. part of the formulation) but is not declared on the label
- Currently, nine major food allergens
  - Food itself could be an allergen, or contain allergenic ingredients

References
Section 3.4.2
Section 3.4.2.1.2
Section 3.4.2.1.3
Section 3.4.2.2.3
Table 5-4
Chapter 11

Undeclared food allergens – Incorrect label (*cont'd*)

- Preventive controls to ensure proper labeling covers both:
  - Label content: accuracy of allergen declaration
    - Verify which allergens are supposed to be in the food
    - Develop label that correctly declares the allergens (label proofs)
    - Checking labels to make sure allergens are correctly listed either before accepting the labels for use or at the labeling/packaging step
  - Label application: correct label for the intended product
    - E.g. peanut butter cookies are packaged in containers labeled as peanut butter cookies

Unintended allergen presence – allergen cross-contact

- Concern is allergen(s) present in a food that is not supposed to have the allergen(s) in it
  - Foods that contain different allergens
  - Foods with and foods without allergens

References
Section 3.4.2
Section 3.4.2.1.4
Table 5-4
Chapter 11

Allergen cross-contact may be due to:	Controls
Using shared equipment	• Cleaning between products with unlike allergens or between allergen-containing and non-allergen-containing products • Thoughtful production scheduling
Airborne transfer of allergens in processing areas	• Performing production activities in ways that minimize likelihood of airborne transfer
Employee handling	• Ensuring proper employee handwashing, changing of gloves, garments, etc
Storage in exposed packaging/containers	• Separating and identifying allergens in storage and keeping packages closed
Addition of the wrong ingredient that introduces an allergen	• Ensuring the right ingredients are used

Allergen cross-contact: role of voluntary allergen advisory statements

- Allergen advisory statements
  - Voluntary
  - E.g. "may contain [allergen]"
  - May be appropriate if facility cannot provide adequate assurance that food has been protected from allergen cross-contact, even with appropriate CGMPs and allergen cross-contact preventive controls in place
    - **Does not remove obligation to adhere to CGMP and preventive controls requirements, as applicable**
  - Must be truthful and not misleading
  - Strategically designed/placed so noticeable by the allergic consumer
- If the PCQI determines allergen advisory statements are appropriate:
  - PCQI should provide written justification in the food safety plan as to why existing control measures cannot ensure the food is protected from allergen cross-contact

Chemical hazards due to mis-formulation (e.g., sulfites, yellow #5)

- Concern is presence of a food or color additive associated with a food intolerance in a food that either is not formulated to contain that additive, or presence at levels beyond the maximum use level for safety

References
Section 3.4.2.2
Section 3.4.2.2.2
FDA Website: Substances added to Food

Examples	Controls
Mis-formulation resulting in Yellow #5 being in a product that is not supposed to have it	• Ensure yellow #5 is not mistakenly added
Mis-formulation resulting in sulfiting agents present when not supposed to be in the product	• Ensure that sulfites are not mistakenly added
Mis-formulation resulting in an additive or GRAS substance present in excess of maximum use levels for the food	• Ensure that excessive amounts of the additive are not used

Process-contaminant hazards in certain plant-based food (produced during heating)

- Concern is formation of chemical contaminants during high heating of certain products that could pose a health concern
- Examples:
  - Acrylamide in starchy products such as potato chips
  - 3-monochloropropane-1,2-diol esters (3-MCPDEs) and glycidyl esters (GEs) in refined oils
- Recommend reviewing the following resources, as appropriate:
  - Guidance for Industry: Acrylamide in Foods
  - FDA website: 3-Monochloropropane-1,2-diol (MCPD) Esters and Glycidyl Esters

References
Section 3.4.2.3
Guidance for Industry: Acrylamide in Foods
FDA website: 3-Monochloropropane-1,2-diol (MCPD) Esters and Glycidyl Esters

Metal

- Concern is metal inclusion in food
- Sources can include:
  - Metal machinery
  - Metal parts in equipment
  - Raw materials
- Controls can include:
  - Metal detectors
  - Magnets and screens/sieves
  - Visual inspection of equipment for damaged or missing parts
  - X-ray detection system

References
Section 3.5
Table 3-9
Section 4.3.8.1
FDA Compliance Policy Guide (CPG) 555.425

Glass

- Concern is glass fragments in food when product is packed/packaged in glass containers
- Handling/packing/packaging methods for glass containers can result in broken/chipped glass getting into the food
- Controls include:
  - Visual inspection of containers for damage
  - Visual inspection of packaging line for broken glass
  - X-ray detection system

References
Section 3.5
Table 3-9
Section 4.3.8.2

Hard plastic

- Concern is hard plastic inclusion in food which can be a health hazard
- Sources of hard plastic can include:
  - Equipment
  - Utensils
  - containers
- Controls include:
  - Visual inspection of containers, equipment, utensils for damage or missing pieces
  - X-ray detection system

References
Section 3.5
Table 3-9
FDA Compliance Policy Guide (CPG) 555.425

Finished Product: Potential Hazards

- For the finished product, do not use Tables 1 & 2 in Appendix 1
  - Those hazards will be addressed in the ingredient hazard analysis
- Use section A1.7 Process and Facility Related Hazards in Appendix 1
  - Process-related hazards for the finished product
    - Biological, chemical, or physical hazards related to the processing of the finished product at the facility

Finished Product: Potential Process-related Hazards

Bacterial Pathogens – Presence/growth/toxin production due to survival of a lethal treatment	Undeclared food allergens – Incorrect label
Bacterial Pathogens – Growth and/or toxin production due to poor time/temperature control	Unintended food allergen presence – Allergen cross-contact
Bacterial Pathogens – Growth and/or toxin production due to poor formulation control	Chemical hazards due to mis-formulation (e.g., sulfites, yellow #5)
Bacterial Pathogens – Growth and/or toxin production due to reduced oxygen packaging (ROP)	~~Process contaminant hazards in certain plant-based foods~~
~~Bacterial pathogens – Presence due to ingredients added after process controls~~	Metal
Bacterial Pathogens – Presence, growth, or growth with toxin production due to recontamination due to lack of container integrity	Hard plastic
Environmental Pathogens – Presence due to recontamination from the processing environment	Glass

Section A1.7 Process and Facility Related Hazards in Appendix 1

Ingredients: Potential Hazards

- Use Appendix 1 to identify potential hazards for the ingredients
  - Use Tables 1 and 2 to identify ingredient-related biological and chemical hazards
  - Use section A1.7 to identify process-related hazards
    - We have streamlined them for simplicity and efficiency

Ingredients: Streamlined Section A1.7 Process and Facility Related Hazards

Do process-related pathogen hazards* (e.g., presence, survival, growth, toxin formation, recontamination) at the supplier require a PC for this ingredient?
Do undeclared allergens (intentional allergens not declared on label) at the supplier require a PC for this ingredient?
Does allergen cross-contact (from unintentional incorporation of allergens) at the supplier require a PC for this ingredient?
Do chemical hazards due to mis-formulation (e.g., addition of food/color additives such as sulfites or yellow #5) at the supplier require a PC for this ingredient?
Do metal or hard plastic at the supplier require a PC for this ingredient?
Does glass at the supplier require a PC for this ingredient? (only applicable if ingredient packed in glass containers)

- Bacterial Pathogens – Presence / growth / toxin production due to survival of a lethal treatment
- Bacterial Pathogens – Growth and/or toxin production due to poor time/temperature control.
- Bacterial Pathogens – Growth and/or toxin production due to poor formulation control.
- Bacterial Pathogens – Growth and/or toxin production due to reduced oxygen packaging (ROP)
- Bacterial pathogens – Presence due to ingredients added after process controls.
- Bacterial Pathogens – Presence, growth, or growth with toxin production due to recontamination due to lack of container integrity
- Environmental Pathogens – Presence due to recontamination from the processing environment.

*Also includes pathogen cross-contamination (from Fresh-cut Produce guidance)

Essentially, 8 process-related pathogen hazards are consolidated and considered together (i.e., pathogens in ingredients at the supplier level)

Summary:
Identifying potential hazards using Appendix 1

- Use Appendix 1 (and Chapter 3 as appropriate) to identify potential hazards for the finished product and ingredients

Hazard Analysis	Tables 1 & 2	Section A1.7 Process and Facility Related Hazards
Finished Product		x
Ingredient	x	x

- Then, **evaluate the potential hazards to determine whether each of them requires a preventive control**

Questions?

If you have any questions,
please contact the FSPCA at
fspca@iit.edu
or or visit the FSPCA website at
https://www.fspca.net/
for resources on preventive controls, lead instructor applications, and details of other FSPCA activities.

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THANK YOU!

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