

HACCP-Based Specialized Processes for Retail Food

Presented by

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Goal

The overall goal of this presentation is to provide an increased awareness of specialized processes at retail food establishments that require a HACCP plan so they can be identified and brought into compliance with current regulations.

Objectives

- Identify specialized processes that require a HACCP plan under *105 CMR 590.000: State Sanitary Code Chapter X: Minimum Sanitation Standards for Food Establishments*
- Recognize if a retail food establishment is conducting one or more specialized processes during an inspection
- Determine regulatory action to be taken if a retail establishment is conducting one or more specialized processes without prior approval and/or a HACCP plan

Specialized Processes Requiring a HACCP Plan

A HACCP plan is required for all specialized processes

- Smoking* food as a method of food preservation rather than as a method of flavor enhancement ^{Pf}
- Curing* food^{Pf}
- Using food additives or adding components such as vinegar (i.e. sushi, fermentation):^{Pf}
 - (1) As a method of food preservation rather than as a method of flavor enhancement
 - (2) To render a food so that it is not a time/temperature control for safety food (TCS)
- Packaging TCS food using a reduced oxygen packaging method (ROP)
- Operating a molluscan shellfish life-support system display tank used to store or display shellfish that are offered for human consumption (must obtain additional variance for wet storage systems from DPH (105 CMR 500.021(D)) ^{Pf}
- Custom processing animals that are for personal use as food and not for sale or service in a food establishment ^{Pf}
- Sprouting seeds or beans^{Pf}
- Preparing food by another method that is determined by regulatory authority to require a variance (such as drying*, which could render the food shelf stable)^{Pf}

*We will often see overlap in these processes curing/drying/smoking, curing/smoking, etc.

Processes Requiring a HACCP Plan

Process	Variance Required	HACCP Plan Required	Variance Exception	HACCP Plan Exception
Smoking to preserve food or extend shelf life	YES	YES	Smoking for flavor enhancement, color, or part of the cooking process	Smoking for flavor enhancement, color, or part of the cooking process
Curing	YES	YES		
Adding food additives or components to render food non-TCS or extend shelf life (i.e. acidification, fermentation)	YES	YES		
Operating Live Molluscan Shellfish System	YES	YES		
Custom Animal Processing	YES	YES		
Sprouting	YES	YES		
Reduced Oxygen Packaging (ROP)	YES/NO	YES	Methods under 3-502.12 with validated process	
Other Methods (like drying)	YES	YES		

HACCP Plan – No Variance

(1) TCS food that is packaged using ROP method, maintained at 41°F or less an

Has a water activity of .91 or less;

Has a pH of 4.6 or less;

Is a meat or poultry product cured at a food processing plant; regulated by the USDA; or

Is a food with a high level of competing organisms

HACCP Plan – No Variance

- (2) Fish that is frozen before, during, and after packaging using a ROP method (3-502-11)
- (3) Food that is prepared and packaged using a cook-chill or sous vide method (3-502-11)
- (4) Specific cheeses that are packaged using a ROP method (3-502-11)
- (5) Juice packaged in a food establishment without a warning label (3-404.11)
- (6) Unpackaged juice prepared in a food establishment serving a highly susceptible population (3-801.11)

Determining if the establishment is conducting a specialized process...

- Start by reviewing the menu
- Look at the obvious equipment
- Look for signs of specialized processes in:
 - refrigerator(s)
 - freezer(s)
 - storage areas
 - areas they seem hesitant to show you
 - areas they say are not under their control

Menu Assessment

Ask specific questions:

- What foods do you make from scratch (prepared on premise)?
- Do you use any special ingredients or equipment?
- Do you have any seasonal items?
- Do you bring in any foods made at your home, or at another location?
- Do you conduct any specialized processes? (Have your list ready)

Note: You have the right to ask for invoices if you are not sure where a product, or an ingredient originated. You also have a right to ask to see a recipe to verify ingredients.

Sample Menu Items

Lomo Margherita *(cure)*

Cured Pork Loin, San Marzano Tomatoes, Fresh Mozzarella, Basil

Pastrami *(cure)*

Swiss, Deli Mustard, Sauerkraut (fermented)

Andouille

Smoked Sausage (cure)

Little Smokies

Smoked Sausage (cure)

Mango Lassi *(homemade yogurt - fermentation)*

Cured Egg Yolks *(additives – no curing salts)*



Recognizing Signs of Specialized Processing

SMOKING



Smoker



Photo: MASTERBUILT

**This smoker can be mistaken
for a BBQ oven**



Photo: Home Depot

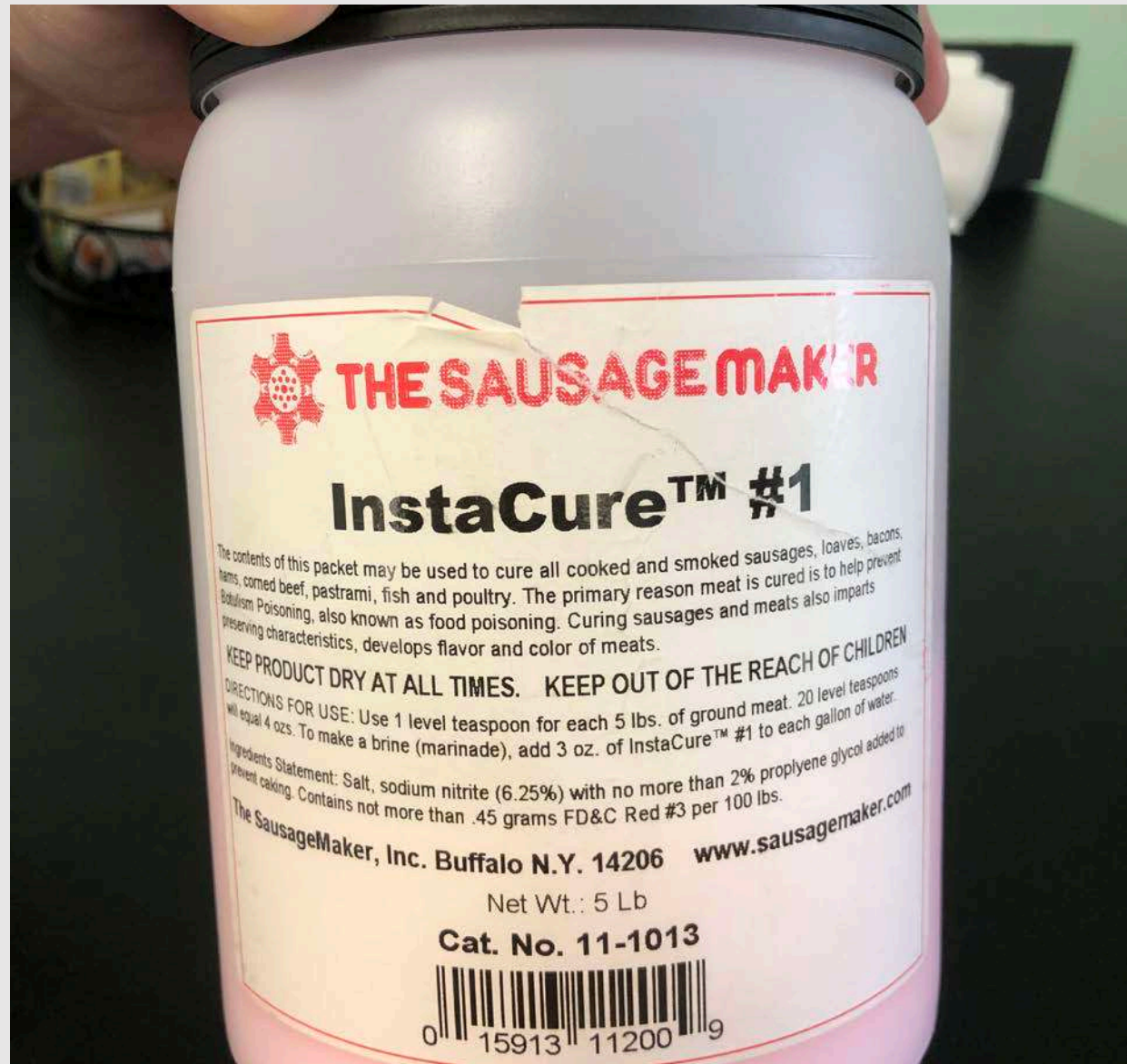
Smoking or Drying Oven

Check for certification symbol
(NSF, ANSI, ETL, UL, etc.)



CURING

Pink Salt



Bacon

ROP & Cure



Photo: VacMaster

Bacon Curing



Brine Injector Needles



Photo: PreMiala

Smoking and/or Curing



DRYING

Drying/Curing KIT



Casing Kit



Beef Jerky

Start of process



Beef Jerky

End of process



Drying and/or Curing



Beef Jerky



Dehydrator

Check for certification symbol
(NSF, ANSI, ETL, UL, etc.)



Dehydrator

Commercial drying oven



Drying Cabinet

Check for certification symbol
(NSF, ANSI, ETL, UL, etc.)



Drying or Smoking Oven

Check for certification symbol
(NSF, ANSI, ETL, UL, etc.)



REDUCED OXYGEN PACKAGING (ROP)

Cook-chill / Sous Vide







Sous vide



Photo - Plascon USA

Cook-Chill or Sous vide



Cook Chill

Ice Bath



Photo - Plascon USA

Vacuum Packaging Machines

Tabletop and floor model



ROP

Vacuum packaging
machine stored so it's
not obvious



ROP

Small heat sealer



Immersion Circulator & Bath



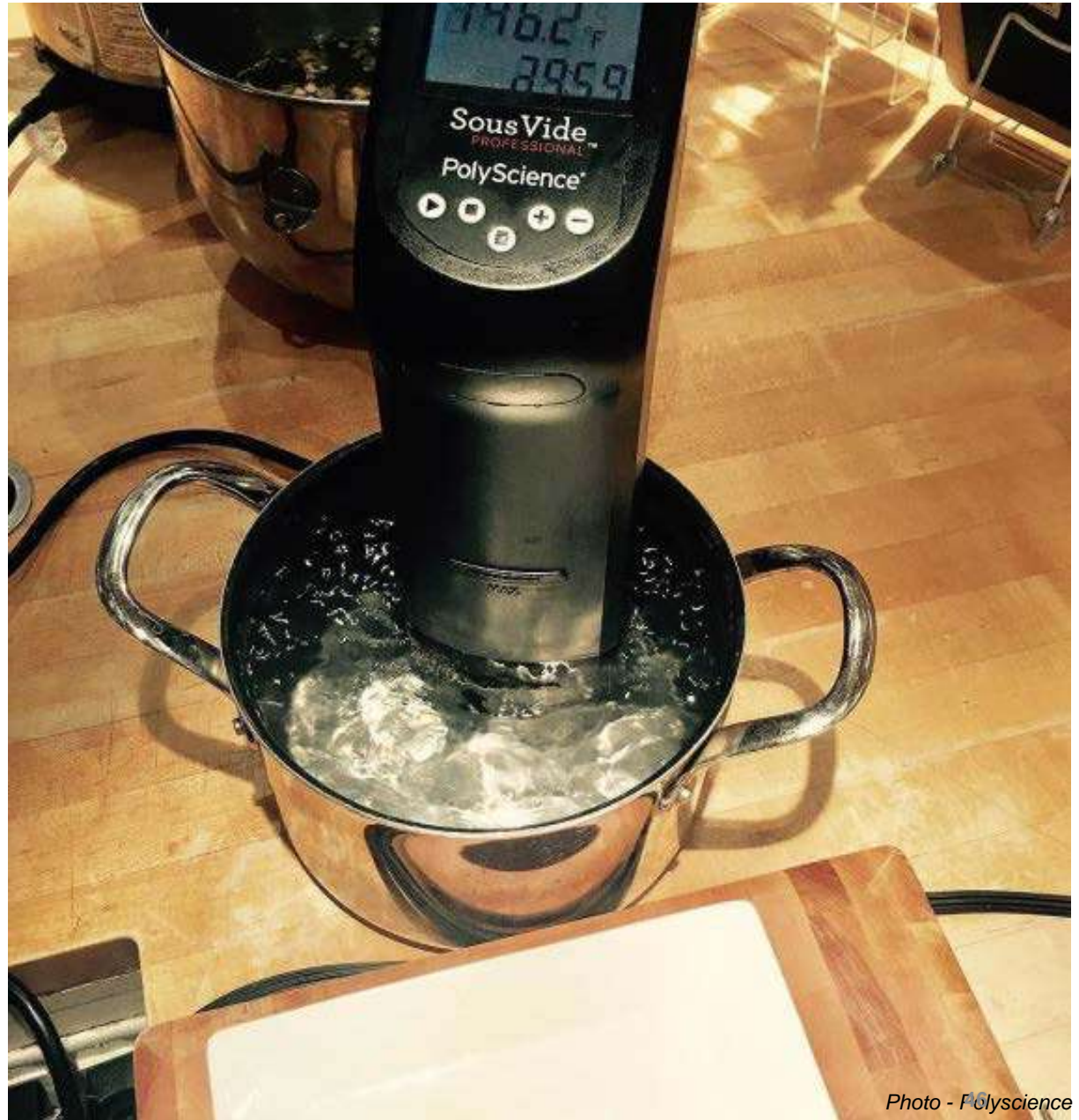
Photo: Web Restaurant



Photo: Web Restaurant

Immersion Circulator

Calibration test



Blast Chillers




FOOD ADDITIVES

Sushi

Acidification





 **mizkan.** Bringing Flavor to Life™

FUJI™ 富士™
VINEGAR SEASONING
VINAGRE PARA CONDIMENTAR

Distributed by:
Mizkan Americas, Inc.
Mt. Prospect, IL 60056



0 73575 13086 1

PRODUCT OF U.S.A.
NET: 5.28 GALLONS (20 LITERS)

09/11/12 CA

INGREDIENTS: DISTILLED VINEGAR,
RICE VINEGAR, HIGH FRUCTOSE
CORN SYRUP, SALT AND CARAMEL
COLOR.
DILUTED WITH WATER TO 4.2%
ACIDITY (42 GRAIN)

1955

1173



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FUJI™ 富士™
VINEGAR SEASONING
VINAGRE PARA CONDIMENTAR

Kombucha

Fermentation



Kombucha



Yogurt Maker and Starter Culture

Fermentation



Large Fermenting Bucket

Can make up to 15 gallons



Yogurt

Fermenting in a warm
place



KIMCHI

Finished product



SAUERKRAUT



LIVE MOLLUSCAN SHELLFISH LIFE-SUPPORT SYSTEM



Don't just look
for typical
"TANKS"





CUSTOM ANIMAL PROCESSING

Deer Meat



Photo credit: Brady Miller



Photo credit: Brady Miller



Photo credit: Dan Wilde



CUSTOM PROCESSING

Unsafe practice:
Cross-contamination



CUSTOM PROCESSING

Unsafe practice:
Cross-contamination



SPROUTING

Variety of Sprouts



Radish Sprouts



Photo credit: Wikipedia

Red Clover Sprouts



Photo credit: Wikipedia

Alfalfa Sprouts



Photo credit: Wikipedia

Mung Bean Sprouts



Photo credit: Wikipedia

Broccoli Sprouts



Photo credit: Wikipedia

Wheatgrass



Photo credit: Wikipedia

Small Scale Sprouting

Beginning Stage



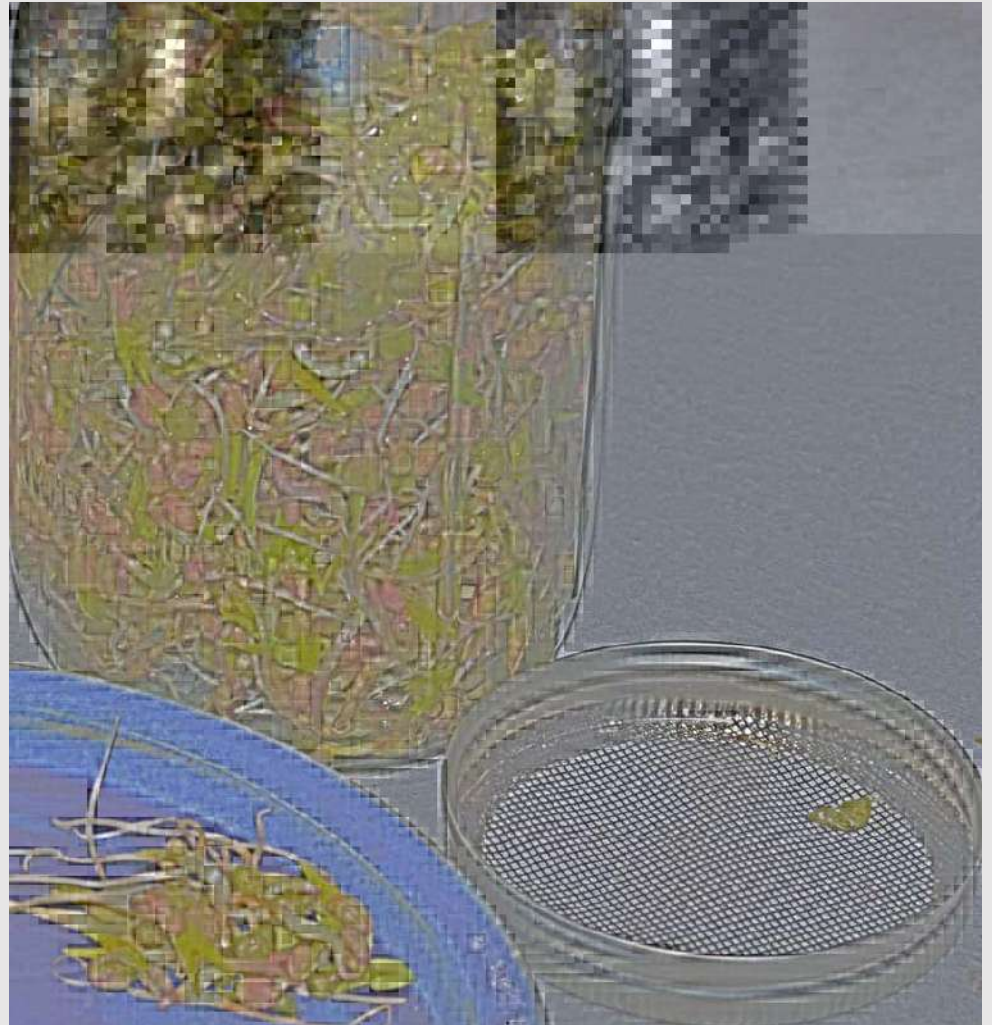
Small Scale Sprouting

Mid stage



Small Scale Sprouting

End Stage



Juice

Packaged Juice with a Warning Label



Regulatory Actions for Non-compliance

During the inspection, you discovered that the establishment is conducting a specialized process. What do you do?

Specialized Processes – Applicable Regulations

- **3-502.11 Variance Requirement**
- **3-502.12 Reduced Oxygen Packaging Without a Variance, Criteria**
- **8-103.10 Modifications and Waivers**
- **8-103.11 Documentation of Proposed Variance and Justification**
- **8-103.12 Conformance with Approved Procedures**
- **8-201.13 When a HACCP Plan is Required**
- **8-201.14 Contents of a HACCP Plan**

Helpful Resources

Validation and Verification of HACCP Plans in Retail Food Establishments: A Course for Retail Food Regulators

<https://core.ac.uk/download/pdf/146675642.pdf>

Validation and Verification of HACCP Plans in Retail Food Establishments: A Course for Retail Food Regulators

<https://foodsafety.ces.ncsu.edu/retail-haccp/>

FDA 312: Special Processes at Retail

<http://www.vet.utk.edu/cafsp/courses/pdf/FD312Brochure.pdf>

<https://www.fda.gov/training-and-continuing-education/ora-university-orau/state-local-and-tribal-regulatory-partners-welcome-oted>

NACCHO Sharing Session Specialized Processes-Reduced Oxygen Packaging. April 25, 2018

<https://www.naccho.org/uploads/card-images/environmental-health/Specialized-Processes-ROP-FINAL.pdf>

Validation and Verification of HACCP Plans in Retail Food Establishments

(Food Service and Retail Food Stores)

A Course for Retail Food Regulators

Learner Guide



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Massachusetts Department of Public Health

Revised August 2003

Retail HACCP
Validation and
Verification



TRAINING MANUAL

Validation and Verification of HACCP Plans in Retail Food Establishments:
A COURSE FOR RETAIL FOOD INDUSTRY

February 2019