

# Regulatory Requirements Associated with Reduced Oxygen Packaging

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FROM  
THOUGHT**



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# So you want to ROP...

Things you might need to do:

- HACCP plan
- Variance
- Validation

Call your inspector prior to implementation!



# HACCP

## What is a HACCP plan?

- Describes the process of a product from receiving to serving.
- Identifies all the possible hazards, when they could occur throughout the process and how to control.
- Certain points of process that monitoring must be done, action taken, and records must be kept.



# HACCP

## When do I need a HACCP plan for ROP?

- All processes involving reduced oxygen packaging need an approved HACCP plan
- **EXCEPT** ROP'd items that are held at 41°F and **removed** from package **48 hours** after packaging. **Must have date and time of packaging on bag.**



# HACCP

## When to provide?

- By code, HACCP Plan must be provided prior to implementation of ROP process
- Must be available for review upon inspection
- Monitoring records maintained for review (sous vide and cook chill 6 months)

Check with your inspector!



# Variances

## What is a variance?

- Explains how you are going to do something that is not specifically addressed in the code (i.e. vary from the code)
- Must provide evidence of how hazards will be controlled (HACCP, **validation studies/processes**)



# Variances: Validation

## What is validation?

- When recipe and process are reviewed and tested by an approved process authority (like UNL Food Processing Center!) to ensure safety

**Makes sure it is safe!**



# Variances

## When do I need a variance when doing ROP?

- For products that do not have a validated secondary barrier mentioned in the code

## Examples of processes that require a variance:

- Cooking chicken to 145°F instead of 165°F by extending cook time
- Holding ROP'd cooked pulled pork for 30 days at 41°F





# The Code: Secondary Barriers

Validated secondary barriers in the code:

- $a_w$  of 0.91 or less\*
- pH of less than 4.6\*
- Cured meat processed in a USDA facility (ex. Ham, roast beef, but not some deli turkeys)
  - Nitrates/nitrites
- Raw product with competing organisms

\*Might be considered another special process

Items listed above can have 30 day shelf life  
if kept at 41°F



# The Code: Sous Vide and Cook Chill

## Sous Vide and Cook Chill:

- Must be prepared and consumed on site or within business
- Cannot be sold directly to consumer
- Must be placed in bag prior to cooking or placed in bag prior to cooling below 135°F
- Cooled to 41°F in package



# The Code: Sous Vide and Cook Chill

- When cooled to 41°F, can keep for 7 days
- Chill to 34°F within 48 hours, can store for 30 days
- Store in freezer indefinitely (great way to store!)
- Units must be electronically monitored, visually checked twice daily
- Labeled with product name and date packaged



# The Code: Fish

Fish must be **FROZEN** before, during and after packaging!

Fish can be contaminated with *C. botulinum* type E that occurs naturally in their gut. Spores can germinate and grow as low as 34°F!

\*If getting commercially packaged ROP fish, remove from packaging prior to thawing.



# The Code: Cheese

- Hard cheeses, pasteurized cheese, and semisoft cheese with NO ingredients added (can't brine cheese) can be ROP'd without variance
- Cannot ROP soft cheese like brie, cottage cheese, etc.
- Can be held for 30 days then discarded



# Ask Yourself

Do I have the right equipment? Do I have enough space?

Are my staff and managers capable of monitoring?  
Taking corrective action? Keeping records?

Do I have enough staff? Do my staff have time?

Have I talked to my inspector?



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