Regulatory Requirements Associated with Reduced Oxygen Packaging
Andrea Bethke
So you want to ROP...

Things you might need to do:
• HACCP plan
• Variance
• Validation

Call your inspector prior to implementation!
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!
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)
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!
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

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

*Might be considered another special process
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
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?