Conference for Food Protection
Committee Report
July 26, 2011

Committee:

Date of report: July 26, 2011

From: Brian Nummer, Chair

Committee Charge:

The Conference recommends the formation of a new committee that is charged with the following:

1.) create a guidance document detailing the scientific evidence of ROP HACCP controls and preventive measures and provide implementation suggestions.

2.) recommend clarifications to the Food Code based on charge one.

3.) report back to the Conference in 2012.

Committee members: Attached

Progress Report:

The committee has continued to meet monthly via phone conference and emails. The committee has established a Google documents site located at https://docs.google.com/leaf?id=0Bx-grmwZp8OaNDE3NGVmMGItODUxYS00NjdkLTk2MTctYWI1M2Q2ZDAzOTdm&hl=en. It houses copies of all references used by the committee and can be accessed openly.

A table of definitions and suggested changes and issues raised and voted on in committee are attached. Two issues remain that are currently in subcommittee. These will likely be resolved in the next month. The plan of the committee is then to draft code changes that accurately reflect the committee's issues. It is expected that the committee will require the remaining four months to accomplish

that task and be prepared for issue and committee submissions to the 2012 biannual meeting.

Requested Board (or other) actions

None.

Recommendation(s) for future charge

The CFP ROP committee is continuing to work on its charge. It is early in the process, but the committee's goal is to complete its charge and dissolve at the 2012 biannual meeting.

Committee Approved Issues:

The Conference for Food Protection Committee on Reduced Oxygen Packaging should:

1. Recommend that the ROP committee draft an issue to amend the US FDA model food code section *3-502.12 Reduced Oxygen Packaging Without a Variance, criteria to*:
Permit reduced oxygen packaging (including vacuum packaging, MAP, cook-chill and sous vide) storage of potentially hazardous foods at ≤ 41°F for a 7 day shelf life under this section (no variance required) **provided the establishment has a 24/7 refrigeration monitoring SOP as outlined in the current FC and does not sell product to the public.**

Reason: The conservative safety shelf life under the Skinner Larkin model at 41°F is 9 days. This shelf life was chosen to coincide with current date marking code. This will permit an easier understanding and enforcement by regulatory and industry. The addition of the sale to public exclusion is due to the lack of refrigeration control.

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2. Recommend that the ROP committee draft an issue to amend the US FDA model food code section 8-201.13 to:

Clarify that the intent of paragraph (B) so that operators do not have to seek pre-approval via a variance process of their HACCP plans under this section AND

Change section (B) to require operators "file" their HACCP plan(s) with the RA prior to commencing ROP under this section. Filing or submitting implies that the RA does not have to approve of the plan before operators can commence ROP under this section.

Reason: the committee felt that filing the HACCP plan would provide the RA a chance to review HACCP plans for problems, know who is performing ROP, and prepare for ROP-HACCP based inspections.

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3. Recommend that the ROP committee draft an issue to amend the US FDA model food code section *3-502.12 Reduced Oxygen Packaging Without a Variance, criteria to*:

Modify section 3-502.12 Reduced Oxygen Packaging without a variance to permit 30 days storage at ≤41°F of ROP foods provided the pH of the product is *≤5.0.* If pH is used as a hurdle or barrier to ROP hazards, then operators must provide a digital pH measurement and calibration SOP in their HACCP program. *T*he establishment must meet all other requirements of this section (HACCP and SOPs, especially refrigeration SOP) and does not sell this product to the public.

Reasons: Research data was provided to the committee demonstrating that no growth occurs by either C. botulinum or L. monocytogenes at ≤41°F.

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4. Recommend that the ROP committee draft an issue to amend the US FDA model food code section *3-502 Reduced Oxygen Packaging, criteria to*:

Designate ROP of non-potentially hazardous foods do not require a HACCP Plan or variance.
(a) Clarify that non-PHF/non-TCS foods for the purposes of this exclusion are determined by using the interaction Tables A and B –AND
(b) Are as received and not modified in the operation – AND
(c) Should be labeled as non-PHF

Reason: Interaction tables A and B provide intrinsic pH and Aw values that limit growth of both C. botulinum and L. monocytogenes at room temperature. Low oxygen environments or potential temperature abuse by operators or consumers would not impact the safety of the ROP product(s).

Food Code	Recommended Changes	Rationale
1-201.10 (1) Reduced oxygen packaging means:		
a) The reduction of the amount of oxygen in a PACKAGE by removing oxygen; displacing oxygen and replacing it with another gas or combination of gases; or otherwise controlling the oxygen content to a level below that normally found in the atmosphere (approximately 21% at sea level); and		
b) A process as specified in Subparagraph (1) (a) of this definition that involves a FOOD for which the HAZARDS Clostridium botulinum or Listeria monocytogenes require control in the final PACKAGED form:		
1-201.10 (2) Reduced oxygen packaging includes:		
a) Vacuum PACKAGING, in which air is removed from a PACKAGE of FOOD and the PACKAGE is HERMETICALLY SEALED so that a vacuum remains inside the PACKAGE;		
b) Modified atmosphere PACKAGING, in which the atmosphere of a PACKAGE of FOOD is modified so that its composition is different from air but the atmosphere may change over time due to the permeability of the PACKAGING material or the respiration of the FOOD. Modified atmosphere PACKAGING includes reduction in the proportion of oxygen, total replacement of oxygen, or an increase in the proportion of other gases such as carbon dioxide or nitrogen;		
c) Controlled atmosphere PACKAGING, in which the atmosphere of a PACKAGE of FOOD is modified so that until the PACKAGE is opened, its composition is different from air, and continuous control of that atmosphere is maintained, such as by using oxygen scavengers or a combination of total replacement of oxygen, no respiring FOOD, and impermeable PACKAGING material;		
d) Cook chill PACKAGING, in which cooked FOOD is hot filled into impermeable bags which have the air expelled and are then sealed or crimped closed. The bagged FOOD is rapidly chilled and refrigerated at temperatures that inhibit the growth of psychotropic pathogens; or		
e) Sous vide PACKAGING, in which raw or partially cooked FOOD is placed in a hermetically sealed, impermeable bag, cooked in the bag, rapidly chilled, and refrigerated at temperatures that inhibit the growth of ~~psychotropic~~ psychrotrophic pathogens.	Sous vide PACKAGING, in which raw or partially cooked FOOD is ~~placed in a hermetically sealed~~ vacuum packaged in an impermeable bag, cooked in the bag, rapidly chilled and refrigerated at temperatures that inhibit the growth of ~~psychrotropic~~ psychrotrophic pathogens.	Adding the vacuum packaging language brings this in line with the accepted understanding of sou~~i~~s vide and with the process outlined in Annex 6 2 (B) 4b

Annex 6 2 (B) Definitions: The term ROP can be used to describe any packaging procedure that results in a reduced oxygen level in a sealed package. The term is often used because it is an inclusive term and can include packaging options such as:		
1) Cook-chill is a process that uses a plastic bag filled with hot cooked food from which air has been expelled and which is closed with a plastic or metal crimp.	Cook-chill is a process that uses a plastic bag filled with hot cooked food from which air has been expelled ~~and which is closed with a plastic or metal crimp.~~ [and are then sealed or crimped closed.] Suggest: Cook-chill is a process that uses a plastic bag filled with hot cooked food from which air has been expelled and which is sealed or closed with a plastic or metal crimp.	Alignment with definitions in 1-201.10
2) Controlled Atmosphere Packaging (CAP) is an active system which continuously maintains the desired atmosphere within a package throughout the shelf-life of a product by the use of agents to bind or scavenge oxygen or a sachet containing compounds to emit a gas. CAP is defined as packaging of a product in a modified atmosphere followed by maintaining subsequent control of that atmosphere.		
3) Modified Atmosphere Packaging (MAP) is a process that employs a gas flushing and sealing process or reduction of oxygen through respiration of vegetables or microbial action. MAP is defined as packaging of a product in an atmosphere which has had a one-time modification of gaseous composition so that it is different from that of air, which normally contains 78.08% nitrogen, 20.96% oxygen, 0.03% carbon dioxide.		
4) Sous Vide is a specialized process of ROP for ingredients that require refrigeration or frozen storage (PHF/TCS food) until the package is thoroughly heated immediately before service. The sous vide process is a pasteurization/cooking step that reduces bacterial load but is not sufficient to make the food shelf-stable. The process involves the following steps:		
a) Preparation of the raw materials (this step may include grilling or broiling for color of some or all ingredients):		
b) Packaging of the product immediately before cooking, application of vacuum, and sealing of the package;		
c) Pasteurization/cooking of the product using required time/temperature parameters;		
d) Rapid and monitored cooling of the product at or below 3ºC (38ºF) or 1ºC (34ºF) or frozen; and		
e) Reheating of the packages 74ºC (165ºF) for hot holding or to any temperature for immediate service before opening and service.		
5) Vacuum Packaging reduces the amount of air from a package and hermetically seals the package so that a near-perfect vacuum remains inside. A common variation of the process is Vacuum Skin Packaging (VSP). A highly flexible plastic barrier is used by this technology that allows the package to mold itself to the contours of the food being packaged.	Vacuum Packaging reduces the amount of air from a package and hermetically seals the package so that a ~~near-perfect~~ vacuum remains inside. A common variation of the process is Vacuum Skin Packaging (VSP). A highly flexible plastic barrier is used by this technology that allows the package to mold itself to the contours of the food being packaged.	The phrase near-perfect is vague and non quantifiable.

Committee Name:

Committee Name: Reduced Oxygen Packaging - Council III

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