**NACCHO Reduced Oxygen Packaging Chat Log  
April 25, 2018**

Francis Higgins:If you have questions related to the presentation please feel free to post them at any time in the chatbox. We will compile questions and read them back during the Q&A

Jennifer Pasuit:Is this webinar approved for continuing education hours (CEU's)?

Amy Chang:No, the webinar is not approved for CEU's.

Michael Greene:I"M OUT!!! JK

Amy Chang:Hahaha. Oh no...

Matthew Wildhagen:Shows that it pays to have spent many years in service industry. A commend well-rounded/informed inspectors

Michelle Butler 2:Question for Q&A: I find that often times capacity (both in space, equipment, & personnel) is the limiting factor. How do we communicate this concern to operators without sounding like we are just saying "no"? At least in my jurisdiction, the downtown (aka oldest) area is where most of these SPs are taking place.... limited room in the kitchen already and adding more processes makes this worse.

Francis Higgins:Thanks Michelle

Melissa Hardin:Do they hit the kill step temp in the bath?

Francis Higgins:Thanks Melissa

Danielle Tippins:Question for Q&A: When thawing vacuum packaged fish, are the bacteria of concern(s) clostridium botulinum and listeria only? I have seen facilities thawing single portions of frozen fish in the vaccum packaging under refrigeration. The packaging states that the fish shall be removed before thawing. I want to be sure I understand the science behind it

Francis Higgins:Thanks Danielle

Michael Greene:Usually a combination of Time and Temperature to hit kill levels in Sous Vide.

Wendy Cochran:It is our LHD’s experience that facilities add these SP without approval or even notifying our office. Oftentimes the facilities do not have the space or proper equipment to do the SP. Operators may think that regulators do not understand kitchen processes, but operators frequently do not understand all the hazards involved with these SP. Further, if a facility/operator cannot maintain compliance with basic HACCP/food safety – why would additional approval be granted for advanced SP that are more involved and complex?

Francis Higgins:Thanks Wendy and Michael

Melissa Hardin:Michael, just to clarify: it was stated that the food product (for example, chicken) can be held sous vide in the bag overnight because of the controlled environment. Is it safe to say that the temperature on the water bath is high enough that the chicken has hit the kill step before it is allowed to hang out overnight in the water bath?

Matthew Wildhagen:For other inspectors or presenter. How have you been establishing sell-by-date for fermented foods? Are you requiring a process review authority (lab)?

Michael Greene:iIt's basically a long, low and slow cooking process (think BBQ). Most bacteria will start being killed off at 130F (Roast Beef = 130F for 121 minutes!).

kenneth eng:does SP systems take into consideration power loss during overnight processing or when staff not present?

Beth Conrad:I woeked in the restaurant industry & food safety before a health depatment.

Beth Conrad:worked

Don Brizes:you can safely hold sous vide for long periods of as long as proper temps are maintined

Wendy Cochran:Fermentation SP would require a Process Authority, however a sell-by date is not enforced...

Jonathan Rubingh:A question for attendees and presenters: Where do you send people for for information in developing a ROP HACCP plan? or do you provide one-on-one consultations?

Anna Johnson:HACCP templates for some ROP products were presented as an Issue at the Conference for Food Protection last week. They were accepted and should be posted to [www.foodprotect.org](http://www.foodprotect.org) soon.

Lindsey Doolittle:Nevada here -- we require process authority for anything held more than 7 days unless explicitly allowed by the food code.

Jonathan Rubingh:Personally, I've referred people to the Minneapolis website

Courtney Mickiewicz:We have some HACCP templates and we also refer them to a Process Authority

Don Brizes:JWU Charlotte is developing a HACCP training program for chefs and inspectors. Stay Tuned

Wendy Cochran:In Maryland, ROP must still meet final cook/kill standards. Alternate cook temperature/times would have to be evaluated by a Process Authority.

Emilee Follett:Just called in. Sounds much better. Thanks!

Don Brizes:I believe labeling requirements depend on which version of the food code your state follows.

Erica Colbert:Nebraksa has a food processing center at the University that helps with training and the scienctific aspects of the plan development. Also, there are HACCP trainings held through the extension center we refer operators to

Lane Drager:We have tools to assist retail food operators build HACCP plans on our website

Desaree Masters:We have more issues with facilities starting these special processes with HACCP plans and proper equipment.

Lane Drager:www.BoulderCountyFoodSafety.org

Stefanie Smith:Will this presentation be available for viewing after the presentation?

Desaree Masters:without

Don Brizes:yes on the NACCHO website

Stefanie Smith:Thank you!

Amy Chang:https://www.naccho.org/programs/environmental-health/hazards/food-safety

Francis Higgins:The presentation will be available following meeting conclusion at the above link

Kimberly Barnes:It is helpful if more food operators understood that regulators are available to be liasons to work with, however, a lot of food firms implement a SP without obtaining approval from the regulators. So risks can be properly identified.

Susan Shelton:For Q/A: Does Maricopa use a matrix or other system to determine if a facility is capable of doing HACCP? Or do they review plans from all establishments, including those with recent compliance difficulties?

Don Brizes:we understand its easier to ask for forgiveness rather than permission. However< we strees to chefs that permission and safe handling are keys to success.

Rebecca Keller:Is there a website to get a list of approved and unapproved foods items that can be packaged under ROP?

Francis Higgins:Thanks Rebecca and Susan

Michael Greene:Forgiveness is usually a lot more expensive than permission...

Susan Shelton:Question for the group: has anyone found a good list of process authorities? Especially for curing meat at retail?

Sarah Good:AFDO's list of process authorities: <http://www.afdo.org/foodprocessing>

Susan Shelton:Thanks for the AFDO link--I asked them a few months ago if they were planning to identify the specialty of the authority (so, Juice, Meat, Fermentation, etc.). I'll check to see if they've updated it.

Carolyn Linster:What is the average amount of time that it takes to go through this process with the establishments that apply for a SP variance?

Francis Higgins:Thanks Carolyn

Don Brizes:depends on the state variance approval committee and

Cristy Jones:What is the 48 hour Rule?

Monique Crawford:If they hold the ROP for 48 hours or less....at 41\*F or below...no HAACP is needed

Monique Crawford:The ROP must be labeled accordingly

Cristy Jones:OH! Thank you!

Sarah Good:48 hour rule: see 3-502.12(F)

Jonathan Rubingh:I've tried contacting process authorities with the AFDP list, many are no longer in operation

Jonathan Rubingh:\*AFDO

Jim Topie:(F)A HACCP Plan is not required when a FOOD ESTABLISHMENT uses a REDUCED OXYGEN PACKAGING method to PACKAGE TIME/TEMPERATURE CONTROL FOR SAFETY FOOD that is always:(1)Labeled with the production time and date,(2)Held at 5°C (41°F) or less during refrigerated storage, and(3)Removed from its PACKAGE in the FOOD ESTABLISHMENT within 48 hours after PACKAGING.101

Sarah Good:Average time for applicant to get a varaince is 4-6 months in VA

David Fischer:A list of process authorities is helpful, but is there a list available that specifies what foods can and cannot be processed using ROP and Sous Vide methods?

Adam Inman:AFDO would be happy to update the Process Authority list. Just email them. [afdo@afdo.org](mailto:afdo@afdo.org)

Carolyn Linster:Thank you Sarah!

Shanna Lively:great job

Don Brizes:I would venture to say most restaurants dont remove the food within 48 hours.

Beth Conrad:good presentation. thanks

Andres Martin:That was great. Thank you.

Don Brizes:Thanks for listening

Desaree Masters:Depending on the state there may be specific requirements outlined in the code.

Nick Koreen:Chef's what types of protein are most commonly sous vide? What temperatures are chefs sous viding beef steaks?

Don Brizes:Lets us know if we can help. JWU Charotte

Seth Edmunds:Any regs on sealing leftovers?

TREVOR VANDERPLAATS:Hey Andres Martin

Liza Frias:Have you ever denied approval based on history of compliance and lack of managerial control?

Don Brizes:Most common is beef, pork and poultry

Susan Shelton:Great job, Vas. Wonderful to see you at CFP!

Desaree Masters:In Ohio it would typically require a variance because of the lack of competing organisms as a barrier for pathogen growth.

lana schmidt:can you please roll back to the previous slide with the links to Maricopa county?

Sarah Pistillo:Can you use the 48hr rule with product which will be sous vide?

Becky Steiner:One thing to consider on ROP cook-chill/sous vide review... We had a recent HACCP submission for home delivery service of ROP sous vide meals. Per 3-502.12, food must be prepared & consumed on the premises or within the same business entity. (Unless through variance evaluated by process authority).

Jonathan Rubingh:I've been asked about re-ROP on 48 hour cycles to maintain the exemption from HACCP. Does anyone allow this?

Michael Greene:Great resources!

Wendy Cochran:How is that kill step VERIFIED?

Adam Inman:Kill step validation?

Royann Bossidy:Do they deny any establishments from producing food under HACCP based on inspection history? Do you have special training requirements for them to do before they can reapply?

Don Brizes:kill step can be verified using the FDA time and temp charts

Adam Inman:Are people using foam tape for the temp probe for cooking temp measurement?

Susan Shelton:Q/A for Chef: Do they recommend using internal thermometer probes with the special tape, or do you just go on water temp?

Jennifer Schroeder:Since the graph showed that pickling and fermentation are the most used SP, is there info available on that elsewhere? I have a hard time finding good procedures or regulatory information on pickling/fermenting (especially of vegetables)

Wendy Cochran:FDA Chart doesn't list all time/temps used in Sous Vide for all foods...

Adam Inman:Many folks are reportedly wanting to cook to only 100 - 120, which is not in the codes

Don Brizes:not all SousVide has to be ROP

Faith Ray:Jonathan, we have that exemption here in VA

Susan Shelton:Most use the USDA Lethality Chart Appendix A to determine time/temp requirements for lethality.

Melissa Nichols:3-401.11 starting on page 84 in the 2017 food code - food cook temperatures and time at the temperture to reach a sufficient kill step

Jim Topie:USDA cooking charts: <https://meathaccp.wisc.edu/validation/assets/App%20A%20Poultry.pdf>

Don Brizes:Thank you Melissa and Jim

Don Brizes:Susan thank you also.

Adam Inman:appendix A only goes down to 130 deg F, right?

Ryan Lowe:https://www.fsis.usda.gov/wps/wcm/connect/bf3f01a1-a0b7-4902-a2df-a87c73d1b633/Salmonella-Compliance-Guideline-SVSP-RTE-Appendix-A.pdf?MOD=AJPERES

Susan Shelton:Here's the most recent copy I've seen. <https://www.fsis.usda.gov/wps/wcm/connect/bf3f01a1-a0b7-4902-a2df-a87c73d1b633/Salmonella-Compliance-Guideline-SVSP-RTE-Appendix-A.pdf?MOD=AJPERES>

Ryan Lowe:Details from FSIS

Jim Topie:Thanks for the updated charts

Susan Shelton:Adam--Yes. I've only seen beef go down to 130F. Hence my need to find a meat process authority. :)

Adam Inman:Over 10,000 Oxygen Transmission Rate >10K OTR bags are usually labeled.

David Lerma: How do you prove proper cooling temperatures when you vaccum seal packaged foods?

Adam Inman:Model Food Code requires breaking vacuum seal when thawing fish

Jim Topie:Fish(C)Except for FISH that is frozen before, during, and after PACKAGING, a FOOD ESTABLISHMENT may not PACKAGE FISH using a P REDUCED OXYGEN PACKAGING method.

Erica Colbert:Listeria is not a major concern

Adam Inman:Unless held at "incubation" temps, Dr. Nummer says the science supports the 48 hour ROP exemption for fish.

Stephen Hammond:As the cooking temperature for the sous vide water bath is at a lower temperature than traditional methouds, how does one know the minimum amount of time needed to reach the necesary intertnal kill temps

Don Brizes:I believe the kill carts mentioned give the time and temp requirements

Ryan Lowe:Regarding Cooling and can be used to track Sous Vide low temp cooking. There are thermometers with special tape to puncture bag without breaking the vacuum.

Wendy Cochran:You don't, that is why a Process Authority is needed.

Ryan Lowe:https://www.thermoworks.com/ThermaQ-Sous-Vide-Kit

Ryan Lowe:This is one example.

Jim Topie:According to Processing Authority Dr. Nummer, for Beef it is captured in the food code under the cooking roasts section 3-401.11 (B). The code lists 134°F with a hold time at 134°F for 47 minutes. It is generally known that a sous vide set up will heat the water to a temperature and the food in it will get to approximately 0.5F lower than the water. So, if the operator tests the come up time as 30-60 minutes (time to reach 134 in the meat interior), then the needed safety time is 60 minutes to reach 134 + 47 minutes at 134F = 107 minutes. Anything over that is acceptable provided the cooking temperature does not drop below 130 (cooking or incubation - C. perfringens will start growing at about 126F).

Carolyn Linster:Thank you Ryan!

Don Brizes:Use many Thermoworks products for monitoring

Raj Chauhan:Is it a good idea to recommend having item lab tested before approving process. So we can be sure the cooking process and time is occuring acurately. Like a shielf life study?

Wendy Cochran:YouTube Channel - Sous Vide Everything <https://www.youtube.com/channel/UCpFuaxD-0PKLolFR3gWhrMw>

Don Brizes:I use a lab in Tenn to test some of the products

Susan Shelton:Thank you for the webinar and answering all of the questions!

Susan Shelton:Don--you test for sous vide?

Donna Scharding:thank you for all of the excellent questions!

Michael LaGrow 2:Vas great presentation

Don Brizes:on some of the recipes we develop to make sure that time and temps meet FDA guidelines.

Jonathan Rubingh:Thank you for hosting this and putting this all together!

Carol Hurley:Thank you

Pete Salsbury:excellent session. Thanks!

Sue Cozzens:Thank you

Laurie Jahn 2:Great presentation!

Don Brizes:Thanks Everyone

Brian ODonnell 2:thank you . Great information

Amber Patch:Thank you!

Matthew Wildhagen:Thank you

Kim Burns:Dr. Nummer's ROP training instructs that internal food termperatures must be taken for each bach of food.

Ki Straughn:Will the ppt be posted on FOODSHIELD?

Susan Shelton:Please share contact info of attendees if you can. Thank you!

Jason Guzman:Great Webinar...thanks agiain.

David Lerma:\*claps\*

Javier Lopez:claps

Emily Hovis:Thank you!

Michael Greene:xoxo

Jill Zednick 2:Enjoyed the webinar

Susan Shelton:Well played. Thank you!

Kenethia Charity:What is the kill step for chicken and what is the time it is cooking to? What is the verification on it. I'm more concern with chicken than beef. Thank you in advance.

Francis Higgins:Questions recorded in this chatbox will be documented and we will try to get you answers to each. Thanks!

Susan Shelton:Kenethia--I really encourage you to read that USDA link. It includes lethality for both meat and poultry. <https://www.fsis.usda.gov/wps/wcm/connect/bf3f01a1-a0b7-4902-a2df-a87c73d1b633/Salmonella-Compliance-Guideline-SVSP-RTE-Appendix-A.pdf?MOD=AJPERES>

Jill Zednick 2:Great Job!!!

Francis Higgins:If there are no more questions we will conclude the meeting