UNITED STATES DEPARTMENT OF AGRICULTURE

FOOD SAFETY AND INSPECTION SERVICE

Via WebEx

Thursday, September 24, 2020

The above-entitled matter came on for

hearing, pursuant to notice, at 9:30 a.m.

FACILITATOR: DR. MINDY BRASHEARS VALERIE GREEN APRIL REGONLINSKI

APPEARANCES

Facilitator and Presenters:

VALERIE GREEN Designated Federal Officer National Advisory Committee on Meat and Poultry Inspections

MINDY BRASHEARS Under Secretary for Food Safety, USDA

KRISTINA BARLOW Senior Microbiologist Science Staff Office of Public Health Science Food Safety and Inspection Service

ROSALYN MURPHY-JENKINS Director, Labeling and Program Delivery Staff Office of Policy and Program Development Food Safety and Inspection Service

SALLY JONES
Senior Staff Officer, Labeling and Program
Delivery Staff
Office of Policy and Program Development
Food Safety and Inspection Service

MERYL SILVERMAN Senior Staff Officer Risk Management and Innovations Staff Office of Policy and Program Development Food Safety and Inspection Service

ROBERT WITTE Senior Staff Officer Policy Development Staff Office of Policy and Program Development Food Safety and Inspection Service

Committee Members:

THOMAS GREMILLION Consumer Federation of America

JAMES JENKINS Louisiana Department of Agriculture and Forestry

DR. AMILTON DE MELLO University of Nevada

TINA RENDON Pilgrim's Pride Corp

KIMBERLY RICE Rose Acre Farms

DR. JIMMY L. AVERY Mississippi State University

WILLIAM H. BATTLE Pride of the Pond and Battle Fish North

TINA CONKLIN Michigan State University

DR. PATRICIA ANN CURTIS North Carolina State University

DR. JENNIFER A. EBERLY Maine Department of Agriculture

CASEY LYNN GALLIMORE North American Meat Institute

DR. JOSEPH JAY HARRIS Southwest Meat Association

DR. BYRON WILLIAMS Mississippi State University

SHERRI L. WILLIAMS JBS USA, LLC

GREGORY GUNTHORP Gunthorp Farms

SARAH SORSCHER Center for Science in the Public Interest

DR. CURTIS LYNN KNIPE Ohio State University

MISHA ROBYN Centers for Disease Control and Prevention

INDEX ITEM PAGE Welcome 7 Mindy Brashears Agency Updates Kristina Barlow 17 FSIS Response to NACMPI 2016 Meeting Consideration of FSIS Best Practices Guidance for Controlling Lm in Retail Delicatessens 28 Rosalyn Murphy-Jenkins Sally Jones 35 FSIS response to NACMPI 2016 Meeting Consideration of Mandatory Labeling Features for Certain Processed Not Ready to Eat Meat and Poultry Products NACMPI Charges 40 Meryl Silverman Validation of Ready to eat (RTE) Shelf Stable Multi-hurdle Lethality Treatments Robert Witte 63 FSIS Testing of Boxed Beef Primal and Sub-Primal Products for Shiga toxin-producing E. coli (STEC) 106 Subcommittee I 206 Closing Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1 PROCEEDINGS 2 (9:41 a.m.) 3 AUTOMATED RECORDING: Your line is now 4 unmuted. AT&T EVENT PRODUCER: Welcome and thank you 5 6 for joining today's conference, the National 7 Advisory Committee on Meat and Poultry Inspection Public Meeting. Before we begin, please make sure 8 9 you open a member's chat panel by using the 10 associated icon looking at the bottom of your 11 screen. If you require technical assistance, please 12 send a chat to the event producer. 13 To submit a written question, select All 14 Panelists from the dropdown menu in the chat panel, 15 type your question in the message box and send. With that I will turn the call over to 16 17 Valerie Green, moderator and Designated Federal 18 Officer for the Committee. Valerie, please go 19 ahead. 20 MS. GREEN: Thank you. Good morning, 21 everyone. My name is Valerie Green and I'm with the 22 Office of Policy and Program Development within the 23 Food Safety Inspection Service. I'm the Designated Federal Official for the National Advisory Committee 24 25 on Meat and Poultry Inspections and I will also be Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 serving as the moderator today and tomorrow.

It's my pleasure to introduce the Under Secretary of Food Safety, Dr. Mindy Brashears, who will give the welcome and opening remarks.

Dr. Brashears?

5

6 DR. BRASHEARS: Thank you so much. Good 7 morning, everyone. I am Dr. Mindy Brashears and I am the USDA's Under Secretary for Food Safety and 8 9 the NACMPI Chair. I want to welcome all of you to 10 our virtual NACMPI meeting. As always, I wish we 11 were all sitting at the table together but I am 12 thankful and grateful we can get together in a 13 virtual setting and, hopefully, one day we will be 14 sitting together face to face.

15 This is our first meeting of the Committee 16 since 2016 and I'm really excited about what you 17 have accomplished over the next couple of days. 18 There are some specific issues we are going to ask 19 the Committee to evaluate and address at the 20 meeting. However, before we get started on that I 21 want to remind everyone of the important role that 22 NACMPI's Committee plays in food safety.

NACMPI was established almost 50 years ago, in 1971, and six years prior to the creation of what is now known as FSIS.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

The role of the Committee is to advise the 1 2 Secretary of Agriculture on food safety concerns and 3 policies that will contribute to USDA's regulatory 4 policy development. The Committee should be balanced in terms of the point of view represented, 5 6 geographical representation and food safety 7 interests and as you look at the Committee members you'll see members with a wide range of expertise 8 9 and various backgrounds.

I want to encourage you to listen to one another and to consider other points of view as you make your -- as you contemplate the questions we've put before you.

Recently, we announced the appointment of the final two members of the Committee. All 20 members bring a multitude of perspectives from the industry, academia and the public sector. I want to thank all our members for their contributions. Each of you bring a unique expertise, experience and viewpoint to this forum.

This Committee which provides science-based advice on the inspection of FSIS-regulated products, helps ensure that our regulatory system is relying upon the latest evidence. We are also counting on your expert knowledge of food safety to advise on Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

how FSIS should apply the latest science to our 1 2 regulatory systems. Now we can move on to our 3 specific issues to be addressed at this meeting. 4 Over the course of the next two days we will listen to relevant updates from Agency 5 6 officials and comments from the public. We will 7 also charge the Committee with deliberating and providing recommendations on two important issues. 8 9 First, FSIS is seeking guidance on what 10 steps the Agency should take to ensure better 11 control of artisanal shelf-stable, ready-to-eat, 12 fermented, salt-cured or dried products that rely on 13 multiple hurdles for lethality. This is an 14 opportunity for the Committee to deliberate on how 15 the Agency should react when it determines an 16 establishment lacks scientific support for their 17 lethality treatment. 18 We also want you to consider how we can 19 better assist the industry in gathering the 20 necessary data to support lethality treatments. 21 Second, FSIS would like the Committee to 22 advise whether the Agency should continue to not 23 test boxed beef primal and sub-primal products for 24 Shiga toxin-producing E. coli, also known as STEC, 25 if they are intended for intact cuts. We know that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 processors located downstream are often unaware of 2 the producers' intended intact use or the risks of 3 grinding these particular products.

We look forward to your recommendations on best practices for sampling and testing so we can reduce STEC-positive outbreaks, recalls and deaths. These are two equally important matters and in the interest of time and discussion the Committee will divide into two subcommittees, one to evaluate each issue.

Each subcommittee will provide a report of their comments and recommendations to the full Committee before the meeting concludes tomorrow.

As you deliberate in your subcommittee remember the important role you play in food safety. Your insight and remarks may shape regulatory policy and impact public health for years to come. Not only do we encourage and appreciate your feedback, we depend upon it.

20 I look forward to what this Committee can achieve over the next two days. With the breadth of 21 22 expertise gathered in this meeting, I am confident 23 that we will advance the Agency's efforts in food 24 safety policies to further protect public health. 25 Now, it's time to get to work and thank you Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 so much for your time. I will turn it back to our 2 moderator.

MS. GREEN: Thank you, Dr. Brashears. Next
4 slide, please.

I'd like to briefly review the agenda for 5 6 todav. We'll start with the Agency Updates. As Dr. 7 Brashears mentioned earlier, this is the first meeting of the Committee since 2016 and today we 8 9 want to update from the charges presented at that 10 last meeting. We will then move forward to the 2020 11 NACMPI charges. Next slide. And after lunch, the 12 Committee will be divided into subcommittees to 13 address the charges.

There is a slight change in the schedule today. We did not receive any requests for public comments so we will extend the deliberation period to 4:45 p.m. and at that time we will reconvene for the day's wrap up. Next slide.

19 Now, let's turn to the introduction of the20 Committee members. Next slide.

21 We're going to go in order in which they 22 appear on the slide. Before we begin, I would like 23 to inform everyone to please state your name and 24 affiliation for the official record before you speak 25 or ask a question for the duration of the meeting. 26 Free State Reporting, Inc. 1378 Cape St. Claire Road 27 Annapolis, MD 21409 28 (410) 974-0947

1 Now, let's start with Mr. Gremillion. Mr. 2 Gremillion --3 MR. GREMILLION: I'm sorry. 4 MS. GREEN: Okay. MR. GREMILLION: This Thomas Gremillion, 5 6 Director of Food Policy, Consumer Federation of 7 America. MS. GREEN: Mr. Jenkins? Okay. 8 Mr. 9 Jenkins is the Director of the Louisiana Egg 10 Commission. 11 AT&T EVENT PRODUCER: Looks like Mr. 12 Jenkins is on the attendee line. Your line is now 13 unmuted. Please go ahead. 14 MR. JENKINS: This is Jim Jenkins. I'm the 15 Director of the Louisiana Egg Commission for the 16 Department of Agriculture and Forestry. 17 MS. GREEN: Dr. De Mello? 18 DR. DE MELLO: My name is Amilton De Mello, 19 Meat, Science and Food Safety Advisor for the 20 University of Nevada in Reno and the State 21 Specialist for Meat, Science and Food Safety. 22 MS. GREEN: Next slide. 23 MS. RENDON: Hi. This is Tina Rendon. I 24 do Food Safety and Quality Assurance for Pilgrim's 25 Pride Corporation. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. RICE: Kim Rice, Vice President of Food 1 2 Safety and Quality for Rose Acre Farms. 3 MS. GREEN: Dr. Avery? 4 AT&T EVENT PRODUCER: Dr. Avery, if you 5 have joined the attendee line can you please press 6 #2 so that I can unmute your line? Dr. Avery, your 7 line is unmuted. Please go ahead. 8 DR. AVERY: This is Jimmy Avery. I'm 9 Extension Professor and Extension Aquaculture Leader 10 with Mississippi State University. I'm also 11 currently serving as President of the World 12 Aquaculture Society. MS. GREEN: Next slide. William Battle? 13 14 AT&T EVENT PRODUCER: William, your line is 15 now unmuted. Please go ahead. 16 MR. BATTLE: I'm Bill Battle, Tunica, 17 Mississippi, owner of Pride of the Pond Catfish, 18 Battle Fish Farms. 19 MS. CONKLIN: This is Tina Conklin. I am 20 the Associate Director of the Michigan State 21 University Product Center and the Director of our 22 Food Processing and Innovation Center. 23 MS. CURTIS: Hi. This is Pat Curtis. I'm 24 the Department Head for the Prestige Department of 25 Poultry Science at North Carolina State University. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

DR. EBERLY: Hi. I'm Jennifer Eberly. I'm
 the State Director for Maine's Meat and Poultry
 Inspection Program.

MS. GALLIMORE: Casey Gallimore, Director
of Scientific and Regulatory Affairs at the North
American Meat Institute.

7 DR. HARRIS: Joe Harris, President of the8 Southwest Meat Association.

9 AT&T EVENT PRODUCER: Dr. Lynn Knipe, if 10 you're on this attendee line please press #2 so that 11 I can unmute your line. Your line is now unmuted. 12 Please go ahead. Dr. Knipe, please unmute your 13 device. Dr. Knipe, we're still not able to hear 14 you. Can you please unmute your device?

MS. GREEN: Well, Dr. Lynn Knipe is the Extension Processed Meats Specialist and Associate Professor of Food Science and Technology, Animal Sciences at Ohio State University. We'll go on.

19 Dr. Byron Williams.

20 DR. WILLIAMS: Hi. Good morning. I'm 21 Byron Williams the Associate Extension Professor 22 with the Department of Food Science, Nutrition and 23 Health Promotion at Mississippi State University. Ι 24 serve as the State Processing Specialist for all 25 muscle food products including Food Safety, Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1 Regulatory and Processing.

2	DR. WILLIAMS: Hi. Sherri Williams with
3	JBS USA Food Company and I'm the head of Technical
4	Services for our Regional Beef Division.
5	AT&T EVENT PRODUCER: Gregory Gunthorp, if
6	you're on this attendee line please press #2.
7	MR. GUNTHORP: Hello. Greg Gunthorp, a
8	farmer and a USDA inspected processing plant owner
9	of pigs and poultry in Northeast LaGrange, Indiana.
10	MS. GREEN: And Dr. Alice Johnson, she is
11	the Vice President of Food Safety and Animal Care
12	with Butterball and, unfortunately, she's not able
13	to be with us to make the meeting today. Denise
14	Perry?
15	AT&T EVENT PRODUCER: Denise, please press
16	#2 if you're on the attendee line. I do not see her
17	on the attendee line.
18	MS. GREEN: Okay. Dr. Denise Perry the
19	Food Safety and Handling and Regulatory Manager at
20	Lorentz, Incorporated. Sarah Sorscher?
21	MS. SORSCHER: Good morning. I'm this
22	is Sarah Sorscher. I'm the Deputy Director of
23	Regulatory Affairs at Center for Science in the
24	Public Interest.
25	MS. GREEN: And Teresa Schwartz. She's
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

retired. She was with the Center for Foodborne 1 Illness Research and Prevention and she's not able 2 3 to make the meeting today, as well. And that concludes our introductions so 4 thank you all. Oops, one more person. 5 6 Last but not least. I would like to 7 introduce an Ex-Officio member of the Committee, Dr. Misha Robyn. She's from the U.S. Centers for 8 9 Disease Control and Prevention. Dr. Robyn, would 10 you like to say a few words? 11 DR. ROBYN: Yes, everybody. Good morning. 12 Thank you. I'm Misha Robyn and I'm the lead for the 13 Prevention and Evaluation Activities within the 14 Outbreak Response and Prevention Branch at CDC which 15 is in the division that covers foodborne 16 illnesses -- thank you. 17 MS. GREEN: That concludes our 18 introductions. Before we begin with the Agency 19 Updates, I would like to inform the audience and Committee members that we will take questions after 20 21 each presenter. To ask a question please use the 22 chat function. Type your name, affiliation and your 23 question and I'll present your question to the speaker. Next slide. 24 25 I'd like to introduce Kristina Barlow. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

She'll be discussing the Agency's response to
 NACMPI's recommendation for controlling Listeria
 monocytogenes (Lm) in retail delicatessens.
 Kristina?

5 DR. BARLOW: Hello. Good morning, 6 everyone. So as part of this presentation I'll be 7 giving you a little bit of background about the 8 charge that we presented to NACMPI in 2016, as well 9 as FSIS's response to the charge and then the 10 methodology that we used to respond to the charge.

11 So as part of our response to the charge we 12 performed a focus group study so I'll be presenting 13 the focus group questions that we used, as well as 14 the results of the focus group study and then our 15 next steps moving forward. Next slide, please.

So FSIS presented the Best Practice
Guidance for Controlling Listeria monocytogenes (Lm)
In Retail Delicatessens charge to NACMPI in March of
2016.

20 NACMPT recommended that FSIS coordinate 21 outreach and enhance communication on retail best 22 practices with our public health partners in the 23 retail industry, state and local health departments 24 and academic cooperative extension specialists. So 25 the purpose of this was to ensure that our outreach Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

on Listeria at retail is practical, easily understandable and available to all audiences. The Committee also recommended that we collaborate with our public health partners on any updates to the Food Code that we would recommend. Next slide, please.

7 So in response to the NACMPI recommendations, FSIS developed an interagency 8 9 Listeria Working Group to coordinate and enhance our 10 communicated material. We also performed focus 11 group studies to determine if the information was 12 practical, easily understandable and available to 13 all audiences. We also assessed the focus group 14 study results to determine if changes are needed to 15 the Food Code.

16 And so as part of our original presentation 17 we provided information from the surveillance that 18 FSIS performs at retail. This surveillance is 19 performed by our investigators in our Compliance 20 Investigation Division to go out to retail delis to 21 perform outreach regarding our recommendations and 22 our best practices, guidelines for retail delis and 23 they also determine whether retailers are following 24 the recommendations and the guidelines to control 25 Listeria.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 So as part of the outreach they hand out 2 materials, which I'll be talking about on a later 3 slide, and so we performed the focus group studies 4 to determine the utility of those materials that are 5 handed out.

6 So based on these focus group findings we 7 plan to coordinate with our public health partners, 8 revise our guidance and outreach materials and 9 engage with industry associations and others to 10 review and distribute the information.

We do not plan to recommend Food Code changes at this time because our surveillance data shows that a high percentage of retailers are following our FSIS recommendations which is really good news. Moving on to the next slide.

16 So part of the methodology for performing 17 the focus groups, as I said previously, we performed 18 them to determine the effectiveness of our guidance 19 materials and any other information that we provide 20 and so we performed the focus groups using the 21 following -- I'm sorry. The focus groups were 22 composed of the following major groups. We had 12 23 participants across large, retail groups, 54 24 participants from state and local agriculture 25 departments and one focus group with five academic Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

participants consisting of cooperative extension specialists familiar in the retail area. The focus groups were recorded with participants' permission and this effort was approved by Office of Management and Budget and announced in a Federal Register Notice.

7 The focus groups were connected virtually allowing for the simulation of an in-person 8 9 experience so they were performed using webinars and 10 people were able to get the same feeling as if they 11 were together in a room to be able to provide 12 feedback about their experiences using FSIS and 13 other outreach information. Next slide, please. 14 So I'll also mention that we do have a 15 handout that provides additional detailed 16 information about the focus group methodology and 17 the study results so we'll be making that handout available on our website. 18 19 So the first question that we asked as part 20 of the focus groups was about the distribution and 21 availability of communication material. So we asked 22 about how and through what format participants

23 receive food safety information.

24 The second group of questions narrowed down 25 to Lm-specific communication content. We asked the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

participants about the type, clarity, quality,
 usefulness and consistency of the food safety
 information that they had received.

And the last group of questions focused in
on FSIS-specific Lm communication tools. So we
asked whether participants had ever seen FSIS's Lmspecific documents including the <u>Retail Lm</u>
<u>Guidelines</u> and <u>Lm Brochure</u> and the Lm <u>Self-</u>
<u>Assessment Tool</u> and from what source they received
that information. Next slide.

So the results of the focus group studies we broke down by the type of participant, state and local participants, the retailers and the academics.

14 So for the state and local participants 15 they received the information mainly from federal 16 agencies including CDC, FSIS and FDA and the most 17 sourced formats of communication were websites, 18 webinars and training as where they received the 19 materials.

For the retailers, they received information from federal agencies, state or local agencies and industry associations, specifically the Food Marketing Institute or FMI.

24 Both the state and local participants and 25 the retail participants indicated that they prefer Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 email distribution and web updates of information rather than written documents or brochures that are handed out. So that just told us at the Agency that we need to focus more on electronic formats with information and less on, you know, handing out brochures or having written documents. So that's something that we'll look at moving forward.

The academics stated that they work with 8 9 both the large and small retailers implying that 10 they could be a conduit to these groups. So moving 11 forward we plan to work more with our cooperative 12 and state and extension specialists to be able to 13 distribute the material as well as other industry 14 associations such as FMI and AFDO to be able to 15 distribute information and review it before we put 16 it out to retailers and others. Next slide, please.

17 So moving on to the Lm-specific 18 communication results, the state and local 19 participants stated that the style of messaging was 20 slightly different depending on what agency had 21 provided the outreach materials, FSIS, FDA or CDC. 22 Therefore, we're planning to work with our public 23 health partners to make sure we harmonize our 24 information that we're providing.

25 They also recommended tailoring some of the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 information to inspectors and other information to 2 retailers. So we will hit that, as well.

3 The retail groups indicated that FSIS's 4 materials were clear for corporate participants but not necessarily for frontline deli operators. 5 So an 6 example of that that we discussed could have been 7 that for, example, FSIS recommends using antimicrobial agents and products formulated with 8 9 antimicrobial -- and that is information that could 10 be useful for corporate participants who are 11 ordering the products to be used in the deli but not 12 necessarily for the person who's operating the 13 slicer within the deli. The person operating the 14 slicer may be more interested, for example, with 15 specific information on how to clean the slicer and 16 what are the steps to breaking down the slicer to be 17 able to clean it to address Listeria. 18 So those are some of the ideas that we're 19 working through to increase the utility of our 20 materials. 21 The retailers also recommended that FSIS 22 work with trade associations such as FMI to 23 distribute the outreach materials so they reach a 24 wider audience. 25 The academic participants recommended first Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

establishing a foundation of minimum sanitation 1 requirements of the Food Code and then addressing 2 3 So they recommended increasing awareness of Lm. 4 Food Code requirements and teaching about the specific recommendations that are in the Food Code 5 6 and then focusing in drilling down to the Lm 7 recommendations. So that's another recommendation that we'll take into account working with our public 8 9 health partner, primarily the FDA, to look at the 10 Food Code recommendations and then addressing Lm 11 specifically and how it fits into the Food Code. 12 Next slide.

13 So that's looking specifically at the 14 materials that FSIS hands out and distributes. The 15 state and local health departments indicated that 16 they need materials that are simple to understand 17 and that they can easily distribute to retailers. 18 Several mentioned having more visually-based 19 materials such as posters that could be hung up in a 20 break room. So that's something that we'll take 21 into account ensuring that we include pictures and 22 more easily understandable materials.

23 Retailers also recommended that FSIS build 24 relationships and communication channels with state 25 and local regulators. They mentioned that the state 26 Free State Reporting, Inc. 1378 Cape St. Claire Road 27 Annapolis, MD 21409 28 (410) 974-0947

and local and retail participants were not aware of 1 the retail Lm brochure that we're currently handing 2 3 out. And so we're looking at our distribution 4 channels and working on additional relationships that we can build with the state and local 5 6 regulators and the retail industry groups and 7 others, as I mentioned, so that we can build that network to be able to further distribute our 8 9 materials and make sure that people are aware of 10 Listeria control recommendations. The academics indicated that the Lm 11 12 brochure and the Self-Assessment Tool could be 13 improved by simplifying the format and adding more 14 visuals. So as I said earlier, that's something 15 that we'll continue to work on. Next slide. 16 So next steps, we plan to update the Retail 17 Lm Guideline to serve as a guidance document to 18 improve the consistency, clarity and overall 19 content. We plan to update it with pictures and 20 images, as suggested by the focus group 21 participants. We also plan to simplify our 22 recommendations to increase clarity. 23 We plan to coordinate with our public 24 health partners, the CDC and FDA, to harmonize our 25 outreach to be more consistent with the content that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

has been developed by other groups and agencies. We 1 2 also plan to work more closely with groups such as 3 FMI, AFDO, cooperative extension specialists and 4 others to review and distribute our materials. And as I mentioned at the beginning of this 5 6 presentation, we also have a handout which has 7 additional information about all of this as well as 8 the next steps that we plan to use moving forward. 9 We also have a retail website that I don't 10 have on this slide but it's in the handout and so to 11 find it you would be able to search retail guidance, 12 not retail guidelines but retail guidance, on the 13 FSIS website and I will bring you right to that 14 retail web page where we plan to post most of our 15 materials and will be posting additional materials 16 there at that website moving forward. 17 So by making these changes in our outreach 18 materials and the way that we provide outreach 19 materials we hope to help ensure that our guidelines 20 are useful to retailers and we can drive adoption of 21 food safety practices moving forward. Next slide 22 and I'll take questions. 23 Thank you, Kristi. MS. GREEN: To ask a 24 question, please use the chat function. Type your

25 name, affiliation and your question and I'll present Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

your question to the speaker. I don't see any 1 2 questions so we'll move on. Next slide. 3 MS. EDELSTEIN: Actually, there is a 4 question that just appeared. MS. GREEN: Okay. Thank you. This 5 6 question is from Dr. Eberly in Maine. Can you tell 7 us why the focus groups were conducted? DR. BARLOW: Hello. Yes, we did perform 8 9 the focus groups to evaluate the usefulness and the 10 clarity of FSIS outreach materials that we're 11 providing to retail delis. That was one of the 12 recommendations from the previous NACMPI Committee, 13 that we evaluate the usefulness of our outreach 14 materials to make sure that they were useful to 15 retailers and then use this information to further 16 revise our materials moving forward so that we can 17 ensure that -- better ensure that retailers are 18 following the recommendations that control -- delis. 19 MS. GREEN: Thank you. And when were the 20 focus groups conducted? 21 MS. BARLOW: The focus groups were conducted in July and August of 2019, so relatively 22 23 recently, and we have this information now to be 24 able to present to the Committee. 25 MS. GREEN: Thank you. Are there any other Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 questions? Okay. We'll move on.

Next is Rosalyn Murphy-Jenkins and Sally Jones. They will be discussing the Agency's response to NACMPI's recommendations on labeling features for certain processed not ready-to-eat meat and poultry products.

MS. MURPHY-JENKINS: Thank you, Val. Good morning, everyone. As Val mentioned, my name is Rosalyn Murphy-Jenkins. Sally Jones and I will provide you with an update on the 2016 report and recommendations on the Consideration of Mandatory Labeling Features for Certain Processed Not-Readyto-Eat Meat and Poultry Products. Next slide.

14 First, I will briefly provide a short 15 summary of the 2016 presentation to give context to the recommendations -- the three recommendations 16 17 from the Committee, and Sally Jones will continue 18 with the information on focus group research studies 19 on safe handling instructions and further work that 20 will be done in this area on safe handling 21 instructions and manufacturer cooking instructions. 22 Next slide.

The 2016 NACMPI presentation began with the differences between ready-to-eat and not-ready-toeat products. Some standards of identity in the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 regulation require that products be ready-to-eat,
like hot dogs or bologna. For other products
consumers generally expect them to be ready to eat,
such as pâté. However, there are products that can
be both ready-to-eat and not-ready-to-eat based on
how the manufacturer chooses to market their
products.

8 For example, if a plant chooses to classify 9 a ready-to-eat product as not-ready-to-eat, for 10 example a product like meatballs and sauce, they 11 must provide assurance for either manufacturing, 12 sanitation practices and validated cooking 13 instructions that the product will be safe for 14 consumption.

15 Thus, the label must clearly indicate to 16 consumers that the product is not-ready-to-eat and 17 must be fully cooked prior to eating. Such labeling 18 features include a statement on the principal 19 display panel, that the product needs to be cooked, 20 cooked thoroughly or cook and serve, share safe 21 handling instructions if the meat or poultry portion 22 is raw or partially cooked, have nutrition 23 information based on the ready-to-cook reference 24 amount and cooking instructions. Those cooking 25 instructions should not be misleading and should Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

adequately reflect -- related to the proper use,
 cooking and handling of the product.

3 As we explained previously at NACMPI so in 2010 FSIS contracted out to conduct consumer focus 4 groups to evaluate several things including consumer 5 6 understanding of several labeling features regarding 7 the safe handling of meat, poultry and egg products, preparation instructions, prepared but not-ready-to-8 9 eat meat and poultry products and safe cooking 10 temperatures for raw meat.

11 The findings were that consumers were 12 increasingly relying on prepared meat and poultry 13 products because they are convenient, quick and 14 easy. At that time there were several foodborne 15 illness outbreaks which suggested that some 16 consumers were not properly preparing these foods to 17 ensure the products were safe to eat.

18 Based on that consumer research there was 19 confusion about whether the prepared frozen meat and 20 poultry products were ready-to-eat or not-ready-to-21 eat. The participants in the study did not 22 distinguish between different products and brands. 23 Some participants considered all frozen items to be ready-to-eat and thus, not-ready-to-eat products may 24 25 not be prepared properly.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 Also intriguing was that most participants 2 did not know the wattage of their microwave and 3 thus, did not make adjustments for cooking times. 4 They did not use a meat thermometer, but instead 5 relied on past experiences and that they were 6 confused about the purpose of the rest time. Also included in the NACMPI 2016 7 presentation was a discussion on the Salmonella 8 9 outbreak-related recall for products that were 10 The recalled products included uncooked uncooked. 11 breaded, stuffed poultry products, poultry pot pies 12 and uncooked frozen poultry products. 13 Thus, FSIS presented charges to NACMPI in 14 2016 based on the recalls mentioned, as well as the 15 fact that there are no specific regulations that 16 require a manufacturer to label a product as raw, 17 uncooked, not-ready-to-eat or other such features. 18 The next two slides include information 19 about the three charges and the recommendations of 20 the Committee. Next slide.

This was the first charge. Should FSIS require statements such as raw, uncooked or ready to cook and labeled as raw products that may appear ready-to-eat to convey that these products are notready-to-eat?

1 The Committee believes that a mandatory 2 statement should be used to differentiate these 3 products. The Committee stated that changes to 4 required labeling should be based on the findings 5 from the 2010 focus group work on the previous 6 slide.

7 The Committee also stated the industry 8 should conduct a new focus group study to understand 9 the optimal messaging and design of packaging to 10 ensure consumers properly understood that not-ready-11 to-eat products need to be cooked for lethality.

12 They suggested that the focus group design 13 should determine what messages such as raw, 14 uncooked, ready to cook, raw-must cook to X degrees 15 Fahrenheit or raw-must cook to X degrees Fahrenheit 16 for safety, would have the desired impact.

The focus groups should also utilize openended questions. For example, what information on this package would help you understand that this product is raw and needs to be cooked or what information on the package makes you think that the product is ready-to-eat and not raw?

In addition, the focus groups should evaluate the effectiveness of standardized locations of these statements on labels. For example,

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

evaluate placement and features in the top left
 corner and evaluate various color options, fonts and
 other display options to determine what best stands
 out to consumers.

5 Lastly, the Agency should use the focus 6 groups to evaluate how best to convey rest times and 7 it's purpose to consumers as well as evaluate the 8 effect of finished product vignettes pictured on the 9 label. Next slide.

10 The second charge was should FSIS require 11 that such products bear validated cooking 12 instructions? If so, aside from (a) the method of 13 cooking, (b) endpoint temperatures of 165 degrees 14 Fahrenheit, (c) instructions that the endpoint 15 temperature is measured by use of a thermometer, 16 what other information is needed?

17 The Committee agreed the validated cooking 18 instructions should be required for these products. 19 The validated cooking instructions should include 20 the method of cooking, the endpoint temperature for 21 safety and instructions that the endpoint 22 temperature is measured by a thermometer. 23 In addition to that information, the 24 Committee recommended that the cooking instructions 25 should include a disclaimer to not use a microwave, Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 if applicable, that labels should include the 2 appropriate method for taking product temperature 3 and that the instructions should make it clear to 4 consumers which steps should be followed for safety. 5 Next slide.

And the last charge was, are there other steps that FSIS should consider requiring to prevent illness involving these products? The Committee recommended the following.

10 FSIS should develop a risk assessment to 11 determine the risk of these types of products and 12 the Agency should work with other agencies like FDA. 13 The Committee also stated that the Agency should 14 continue to educate consumers on food safety issues. 15 As part of this, the Agency should develop messaging 16 that focuses on issues related to this topic to 17 include emphasizing reading the label, knowing your 18 label, owning a meat thermometer, knowing how to use 19 the thermometer, knowing how to use your appliances, 20 like calibrating your oven.

21 They also recommended that the Agency 22 should continue to work with partners including 23 extension agencies and the partnerships made for 24 disseminating messages. The Agency should ensure 25 alignment with FDA for like-product labeling 25 Free State Reporting, Inc. 1378 Cape St. Claire Road 26 Annapolis, MD 21409 27 (410) 974-0947

1 requirements. Also, the Agency should continue 2 partnering with FDA and the retail industry on how 3 best to -- products -- possible confusion between 4 ready-to-eat and the raw, not-ready-to-eat products. 5 I will now turn the presentation to Sally

6 Jones to continue. Next slide.

7 MS. JONES: Thank you, Ros. Good morning. FSIS has contracted with research groups -- with a 8 9 research group to do a number of focus group studies 10 over the years. There has been a multi-year set of 11 studies going on -- safe handling instructions 12 should be modified and updated to better inform 13 consumers about how to use -- how to safety handle 14 meat and poultry products. A part of the study also 15 included research on not-ready-to-eat products and how consumers could best differentiate between not-16 17 ready-to-eat products and ready-to-eat products.

18 Part of this portion of the study included 19 collecting data through an eye tracking study to 20 identify where consumers were placing their major 21 focus regarding handling and cooking of products. 22 Did they focus on safe handling instructions or on 23 the manufacturer's cooking instructions? The study 24 is wrapping up and the findings of the research will 25 be forthcoming this fall. Next slide, please.

1 FSIS conducted a more specific study 2 looking specifically at the handling of frozen food 3 products in the home. Results from this study indicate how difficult it is for most consumers to 4 differentiate between the ready-to-eat and not-5 6 ready-to-eat frozen foods. In fact, nearly a 7 quarter of the participants attempting to prepare -were not sure if products were raw or fully cooked, 8 9 despite checking the existing labeling of the 10 product.

An additional problem identified was the lack of proper hand washing during the handling and preparation of these frozen foods which can lead to cross contamination and foodborne illness. These issues are important to address in future consumer education and potential rulemaking. Next slide.

17 From the initial research on safe handling 18 instructions, the Agency determined that additional 19 focus group studies were needed to study consumer 20 understanding and usage of the manufacturers' 21 cooking instructions. The study will assist the Agency in determining the most effective channels to 22 23 increase public awareness of foodborne illness and 24 how to safely handle meat and poultry products. 25 We want to understand how consumers use the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

manufacturers' cooking instructions for products that are ready-to-eat and those that are not-readyto-eat. The outcome of this study will assist in determining whether revisions or additions are needed for mandatory labeling features to ensure that consumers safely handle and prepare meat and poultry products. Next slide.

8 On October 6, FSIS is hosting a virtual 9 meeting on Food Safety: Consumer Outreach and 10 Education for Today and for the Future. A number of 11 government representatives and other organizations 12 will be speaking at the meeting, as well as 13 individuals that have signed up to be speakers.

14 FSIS plans to use the findings from the 15 focus group studies and consumer outreach meetings 16 to inform potential rulemaking to differentiate the 17 labeling of not-ready-to-eat versus ready-to-eat 18 meat and poultry products. Such information will 19 also be critical in the development of improved 20 consumer education information and for FSIS 21 coordinating with other agencies in the outreach 22 programs to approve the safe handling and cooking of 23 -- foodborne illness. Next slide. Questions? 24 MS. GREEN: Thank you, Rosalyn and Sally. 25 As a reminder, to ask a question please use the chat Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 function. Type your name, affiliation and your 2 question and I'll present your question to the 3 speakers.

Also, as a reminder to our panelists or
speakers, please mute your line until you're
speaking.

7 I don't see any questions coming up. So at 8 this time we'll take a 15-minute break --

9 MS. EDELSTEIN: Val. Val. We did just a 10 question.

MS. GREEN: Oh, I see it. Okay. This is from Thomas Gremillion. Did the focus groups consider packages with the word raw printed on them? Could you elaborate a bit on what they saw?

15 MS. JONES: Okay. This is Sally Jones. I 16 don't -- we're still conducting or I don't believe 17 we've actually started conducting the last group of 18 focus group studies that are going to be on the 19 ready-to-eat versus not-ready-to-eat foods and I'm 20 not exactly certain whether that is going to be one 21 of the things that will be studied. It's a question 22 that we should be able to answer in the future. Ι 23 certainly will bring it up with the folks in -- that 24 are running the focus group study.

25 MS. GREEN: Thank you, Sally. Are there Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

any other questions? We'll wait a few more seconds 1 2 because I realize that it may take a while to type 3 in your question. And if there are any questions 4 from Kristina Barlow's presentation you may type 5 that in, as well. All right. Seeing none but if 6 you do in the future, at least during the meeting, 7 if you have a question for any of the speakers from the Agency Updates, feel free to type that in and 8 9 we'll present it to the speakers. 10 So at this time I would like to take a 11 break and we will meet back up at 10:45. 12 (Off the record at 10.32 a.m.) 13 (On the record at 10:45 a.m.) 14 AT&T EVENT PRODUCER: Your line is now 15 unmuted. 16 MS. GREEN: This concludes the Agency 17 Updates and now we'll begin with the charges for the Committee. 18 19 This session is open to verbal and written 20 questions at the end of each presentation. To ask a 21 question, please press #2 or hash tag 2, state your 22 name and affiliation for the official record before 23 you ask a question. You may also type your question in the chat feature and I'll present your question 24 25 to the speaker. Next slide. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

Meryl Silverman will present the first charge regarding the validation of ready-to-eat shelf-stable products that rely on multiple hurdles for lethality. I'll go ahead and turn it over to Ms. Silverman.

6 MS. SILVERMAN: Thank you, Val. Next 7 slide, please.

So as Val indicated, today I'm going to be 8 9 presenting on the first charge related to validation 10 of ready-to-eat shelf-stable multi-hurdle lethality 11 products. Today I'm going to be giving you an 12 overview of the issue including the lethality 13 charges recommended safe for products, the 14 validation challenges that we see related to 15 research staff and then the questions for the NACMPI 16 Committee. Next slide, please.

17 There is an increasing interest in 18 producing artisanal/niche self-stable ready-to-eat 19 fermented, salt-cured and dried products that rely on multiple hurdles for lethality. 20 These are 21 products such as salami, prosciutto -- and --22 there's a lot of information on how to produce 23 products of high quality but not as much available 24 supportable science on how to produce safe products. 25 For example, FSIS is routinely asked about Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1 scientific support available for -- and has only 2 recently one single study available that supports 3 critical operational parameters that result in a 4 5.0-log reduction in Salmonella and --

5 Currently, very little scientific support 6 is available for establishments to use to support 7 the production of these multi-hurdle products. FSIS 8 is in the process of developing guidance for these 9 processes but the lack of scientific support may 10 raise enforcement questions that FSIS is going to 11 need to address. Next slide, please.

12 FSIS considers all ready-to-eat products to 13 be adulterated if they contain pathogens of public 14 health concern depending on the type and level or 15 their toxins that can cause illness in humans. 16 There are some pathogens where any level would make 17 the product adulterated such as Salmonella, Listeria 18 monocytogenes or Lm and Shiga toxin-producing 19 Escherichia coli or STEC or S. aureus enterotoxin 20 because the presence of these types of enterotoxins 21 would be injurious to health under the Acts. 22 In addition, 9 CFR 430.1, also known as the 23 Listeria Rule, defines ready-to-eat products as

24 those that are edible without further preparation to 25 achieve safety.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 So these ready-to-eat shelf-stable 2 fermented salt-cured and dried products are required 3 to be free from Salmonella, Lm, STEC and S. aureus 4 enterotoxin at the end of the lethality treatment 5 and also Lm should be addressed for fatality. Next 6 slide, please.

7 So in order to support products that are not adulterated under the Act, establishments are 8 9 required to design the HACCP system to meet all 10 applicable performance standards or charges. And so 11 products such as those that are dried, fermented or 12 salt-cured, FSIS recommends the process achieve at 13 least a 5.0-log reduction in Salmonella in order to 14 support the product is ready to eat.

15 Establishments may also validate for STEC such as E. coli 0157:H7 as well as Listeria 16 17 monocytogenes because these pathogens are more 18 tolerant to acid and drying than Salmonella. 19 However, we have accepted research with Salmonella 20 alone, provided there's no indication such as test 21 results that the process is insufficient in 22 addressing STEC or Lm. The research has supported 23 that a 5.0-log reduction in Salmonella is sufficient 24 for shelf-stable products. Indeed, the FSIS risk 25 assessment of the impact of lethality standards on Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 salmonellosis from ready-to-eat meat and poultry 2 products found that there was not a significant 3 increase in cases of salmonellosis if turkey and 4 other shelf-stable meats and poultry products achieve 5.0-log reduction instead of a 7.0-log. 5 6 Establishments also have the ability to 7 support alternative lethalities provided they provide an equivalent probability that no Salmonella 8 9 organisms present in the finished product. I'm 10 going to discuss this concept further in a few 11 slides. 12 FSIS also recommends ensuring S. aureus 13 outgrowth is limited to two logs or less during 14 processing to ensure no enterotoxin production. 15 For the purposes of the NACMPI charge, 16 though, where we see the research gaps are related 17 to supporting the 5.0-log reduction of Salmonella 18 and other pathogens. Next slide, please. 19 So I'm going to share some examples of 20 where industry has come together to develop 21 scientific support related to the lethality of 22 multi-hurdle lethality products and the limitations 23 of these documents that have resulted in continued 24 research gaps. 25 In 1994, an outbreak of E. coli 0157:H7 was Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

linked to commercially distributed, dry-cured 1 2 salami. In response, the Blue Ribbon Task Force on E. coli 0157:H7 at the National Cattlemen's Beef 3 4 Association was formed and it responded by putting out a request for research proposals and various 5 6 industry associations and companies came together to 7 fund the research proposal from the University of Wisconsin to validate various combinations of 8 9 fermentation processes.

10 At the same time, FSIS, and remember this 11 was prior to the implementation of FSIS's process 12 regulations, could have some options for addressing 13 E. coli 0157:H7 in dried and semi-dried fermented 14 These options included cooking to sausages. 15 lethality, achieving a 5.0-log reduction in E. coli 16 0157:H7 or testing and probing every lot, which the 17 report acknowledged was inconsistent with the theory of HACCP. 18

The Blue Ribbon Task Force document has been a great resource but to achieve a 5.0-log reduction in E. coli 0157:H7, as well as other pathogens, the document recommends a kind of cook step or holding step at 90 or 110 degrees Fahrenheit for several days which may impact quality and, therefore, has limited its use.

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 So we just have not seen widespread 2 adoption of the validated treatments in the 3 document, although for those establishments that use 4 the Blue Ribbon Task Force validated lethality 5 treatments, it is a great resource. Next slide, 6 please.

Because of the challenges of achieving a 5.0-log reduction the Task Force recommended another option to use a process validated to achieve at least a 2.0-log reduction in E. coli 0157:H7 and test each and every lot of raw batter versus that alternative lethality option.

FSIS did not object to this option and so in the findings report, processing validated to achieve either at least a 2.0-log reduction in E. coli 0157:H7 were included along with those validated to achieve at least a 5.0-log reduction.

18 This option does provide less assurance of 19 product safety but it's important that raw material 20 testing provides a high degree of confidence that 21 there's no Salmonella present.

The raw batter testing option does provide more flexibility but it becomes very expensive to test each and every lot of raw batter. This option can be translated to products other than beef, such Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 as poultry or pork, where the raw batter is tested 2 for Salmonella and a 2.0-log reduction in Salmonella 3 is validated.

It can also be translated for stripped -or other whole muscle products where each lot is a
whole muscle and other raw ingredients are tested.
Next slide, please.

As I mentioned earlier, FSIS also 8 9 recommends ensuring S. aureus outgrowth is limited 10 to 2.0-log or less during processing to ensure no 11 enterotoxin production. In the early 1970s, there 12 were several outbreaks in the U.S. due to S. aureus 13 growth and enterotoxin production in fermented 14 In response, industry adopted several meats. 15 measures including the widespread use of commercial 16 starter cultures.

Prior to the 1970s, many establishments 17 used natural inoculations of meats such as back 18 19 slopping where they would add meat reserved from a 20 previous successful fermentation to the batter. 21 This can cause a lot of failures where either the 22 wrong type of bacteria, including pathogens, 23 predominate and grow or harmful bacteria are added 24 from the back slops.

25 Today, most fermented meat processors Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

either add lactic acid starter cultures or harmless 1 2 staphylococci to the raw meat mix. These starter 3 cultures are known microorganisms with proven 4 metabolic activity added at a known concentration. Another effective change was the addition 5 6 of fermentable sugars, such as dextrose, which are 7 like a food for the bacteria and their addition ensures reliable and rapid lactic acid production 8 9 that drops the pH.

10 Ensuring the pH drops rapidly is important 11 to control the outgrowth of S. aureus and can also 12 help inhibit the growth of other pathogens and to 13 ensure the pH drops fast enough, the degree-hours 14 concept was also developed and is described in the 15 American Meat Institute or AMI, Food Manufacturing 16 Practices for Fermented, Dry and Semi-Dry Sausage 17 Products.

18 The degree-hours are the amount of time in 19 hours above 50 degrees Fahrenheit that's the 20 critical temperature at which staphylococcal growth 21 effectively begins, that an establishment's 22 fermentation process can take at a specific 23 temperature to reduce the pH to 5.3 or below in 24 order to control S. aureus growth. 25 This concept has been widely adopted and Free State Reporting, Inc.

Annapolis, MD 21409 (410) 974-0947

implemented effectively that, in fact, there've been 1 2 no reported cases of staphylococcal foodborne 3 illness from fermented meats in the U.S. for over 30 4 years. 5 I share this because this is really a 6 success story in terms of widespread adoption of 7 scientific support related to the fermentation 8 process that was developed by industry. 9 Unfortunately, following the degree-hours 10 process has not been validated to achieve any 11 particular reductions to Salmonella, Lm or STEC. 12 It's only been validated to limit S. aureus 13 outgrowth -- with research staff. Next slide, 14 please. 15 So how does an establishment support that 16 the design of its HACCP system results in adequate 17 pathogen reduction or prevention? This is where 18 validation comes in. An initial validation is the 19 process of demonstrating that the HACCP system, as 20 designed, can adequately control potential 21 outbreaks. 22 Under 9 CFR 417.4(a)(1), establishments are 23 required to assemble two types of supporting 24 documentation to demonstrate the HACCP system has 25 been validated. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

The first is the scientific or technical 1 support for the design of the system and the second 2 3 is the initial in-plant validation data that 4 supports the HACCP system can be executed as designed. And initial validation activities 5 6 encompass those activities designed to determine 7 whether the HACCP system is functioning as intended. Next slide, please. 8

9 Now, I'm going to focus on element one of 10 validation, the scientific or technical support, 11 because this is where we see the greatest challenges 12 during our verification activity. And to meet the 13 first element of initial validation, establishments 14 should gather scientific or technical support, which I'll talk about further. That's the published 15 16 processing guidelines, journal articles, challenge 17 studies, et cetera, for its HACCP systems that 18 closely match the actual process and that shows the 19 establishment's process will prevent, reduce or 20 eliminate the hazards identified in the hazard 21 analysis and it should identify the critical 22 operational parameters from the scientific support 23 relevant to the establishment's process. Next 24 slide, please.

> So examples of scientific or technical Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

25

support include the following. First is published 1 2 processing guidelines including FSIS guidelines. 3 FSIS does not have any guidelines currently that are 4 food critical operational parameters for ready-toeat shelf-stable meat and poultry products. We have 5 6 a guideline related to Lebanon bologna but it does 7 not include any of what we think of as safe harbors. 8 Some establishments will apply -- cooking 9 parameters but, again, like the Blue Ribbon Task 10 Force issue, cooking does not always result in the 11 desirable quality establishment's want. 12 Another example are best practice 13 quidelines. An example would be the Blue Ribbon 14 Task Force document I've been talking about or the 15 AMI Good Manufacturing Practices for Fermented, Dry 16 and Semi-Dry Sausage Products that I also mentioned 17 earlier that includes the degree-hours concept for 18 controlling S. aureus. 19 Another example are peer-reviewed 20 scientific data/information and this is what we 21 commonly see and in the form of journal articles. 22 Challenge or inoculated pack studies may also be 23 used so this is also a common option but it can be 24 costly.

> Another option is pathogen modeling Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

programs and, unfortunately, there's only one model 1 currently available that has been validated from 2 3 Denmark and it's only been validated to support up 4 to a 3.0-log reduction in Salmonella and STEC. There is also a validated model from the 5 6 University of Wisconsin that can support shelf 7 stability but it's limited to the supporting shelf's 8 ability. 9 And then last, are regulatory performance 10 standards. An example would be something like the 11 patty regulation for prescribed cooking parameters. 12 However, there aren't any for multi-hurdle lethality 13 products. 14 But during our verification activities we 15 do find establishments that have no scientific 16 support for their lethality treatment. 17 They may have the AMI's Good Manufacturing 18 Practices for Fermented, Dry and Semi-Dry Sausage 19 Products for fermented products on file to support 20 the degree-hours but as I talked about, that's only 21 validated to potential S. aureus outgrowth. 22 Otherwise, we may find that there is not scientific 23 support on file that demonstrates any particular 24 reduction in Salmonella and Lm is achieved. Our 25 next slide, please. Free State Reporting, Inc. 1378 Cape St. Claire Road

> Annapolis, MD 21409 (410) 974-0947

Considering these types of support there are just a lot of challenges for identifying and applying even the readily available scientific support which would be in the form of journal articles or the Blue Ribbon Task Force document I talked about.

7 So there is available literature that supports a 5.0-log reduction can be achieved for 8 9 fermented and dried meat and poultry products, but 10 these would make these either high fermentation 11 temperature and achieving a low pH, which are some 12 of the options from the Blue Ribbon Task Force, 13 applying a low temperature heat step following 14 fermentation, using a long drying time or applying 15 Appendix A time, temperature, humidity parameters 16 after fermentation and before drying. But again, 17 establishments don't always want to use these 18 processes because they can impact the quality of the 19 product.

20 Most establishments want to rely on 21 fermentation and drying alone and have varying 22 treatments that are used including low fermentation 23 temperatures. So it's difficult for establishments 24 to be able to find readily available support that 25 fermentation and drying alone achieve a 5.0-log Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 reduction. I'm aware of one main study used from 2 one starter culture company. Next slide, please. 3 It gets even more challenging when we 4 consider all of the parameters that impact the effectiveness of fermentation, culturing and drying. 5 6 As I indicated earlier, to meet the first element of 7 validation, once the establishment identifies 8 scientific support, it then needs to identify all of 9 the critical operational parameters and ensure 10 they're consistent with those used in the actual 11 process. 12 So even when an establishment can find a 13 process validated to achieve a 5.0-log reduction, it 14 then needs to make sure it can implement all the 15 critical operational parameters to justify any 16 differences which can be challenging. And as we saw 17 with the Lebanon bologna outbreak in 2011, 18 differences in critical operational parameters can 19 lead to illnesses. 20 I'm not going to read through all the 21 critical operational parameters on the slide, but

I'm sharing this to show how complicated these processes are and how so many variables can impact the effectiveness. Next slide, please.

25

So to summarize, there's an increasing Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

interest in producing artisanal/niche shelf-stable 1 ready-to-eat fermented, salt-cured or dried products 2 3 that rely on multiple hurdles for lethality. There 4 have been a few outbreaks associated with these types of products. I've talked about a few and 5 6 there have been approximately eight outbreaks in the 7 U.S. over the last 50 years from FSIS-regulated 8 products.

9 Little scientific support is available for 10 establishments to support lethality and when it is 11 available it can be difficult to match the critical 12 operational parameters to those used in the actual 13 process.

FSIS is in the process of developing a guideline but there's little scientific support we can share. So the lack of scientific support may raise enforcement questions that FSIS is going to need to address. So this is really where enacting -- would be of great value and why we brought this charge? Next slide, please.

21 So we have two NACMPI Committee questions 22 and we're seeking input on the lack of scientific 23 support and control of hazards for producing multi-24 hurdle lethality products that, again, may raise 25 enforcement questions.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 So first, what action should FSIS take when 2 it determines an establishment lacks scientific 3 support for the lethality treatment of a fermented 4 or cured or dried product? And we've given some 5 examples here for the Committee to consider when 6 answering this question.

So for example, should FSIS take
enforcement action and require scientific support
for 9 CFR 417.5(a)(1) and 9 CFR 417.4(a)(1) which
will most likely result in the need for a challenge
study by the establishment or should we allow
establishments to test and hold indefinitely?

13 This option is not currently considered 14 acceptable because it's inconsistent with HACCP to 15 not rely on controls for preventable measures. 16 Also, testing can't detect all possible pathogens. 17 This can be costly to test for several pathogens at 18 once. In addition, pathogens are often not evenly 19 distributed so it's hard to test enough pieces to 20 give confidence -- to treat a pathogen.

Another option to consider is if we could allow establishments to combine multiple scientific support documents, such as journal articles, even if none of them alone support the critical operational parameters used or allow scientific support that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

demonstrates less than a 5.0-log reduction. 1 This can be difficult for FSIS personnel to verify but 2 3 this option may be used in combination with 4 increased FSIS testing. Another option to consider is for FSIS to 5 6 use regulatory discretion and allow establishments 7 to produce without scientific support or the Committee may consider a combination of the above or 8 9 other options. Next slide, please. 10 And our second question is how can FSIS 11 assist industry in gathering scientific support in 12 these cases and facilitate filling research gaps 13 even though it's not a research-funding 14 organization? 15 On Tuesday, during the Salmonella public 16 meeting, Isobel Walsh from FSIS's Office of Public Health Science shared a research priority and study 17 18 from FSIS related to the need for research to estimate drying time for different diameter dry and 19 20 semi-dry fermented sausages to ensure a 5.0-log 21 reduction in Salmonella. 22 And FSIS has had several research 23 priorities posted on its website related to 24 fermented, raw-cured and dried products. However, 25 we just have not seen research completed to fill Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1 these gaps.

2 So is there some way FSIS or even other 3 organizations could facilitate the sharing of proprietary data so that more safe harbors are 4 available that better match the types of products 5 6 establishments want to produce? 7 And so with that I can take any questions. 8 Next slide, please. 9 MS. GREEN: Are there any Committee members 10 that have a question? 11 MR. GREMILLION: (Indiscernible?) 12 MS. GREEN: Yes. 13 MR. GREMILLION: Hi --14 MS. GREEN: -- Please state your name and 15 affiliation for the record. MR. GREMILLION: Hi. This is Tom 16 Gremillion, Consumer Federation of America. I had 17 18 two questions. 19 One, at the outset of the presentation you 20 said there's rising interest in these sausages and I 21 wondered if you just had the data or other 22 information that might illustrate the magnitude of 23 the increased interest and my second question is 24 what is the status quo now when FSIS determines that 25 at the facility, the establishment doesn't need to Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 have -- it sounded like it's number one of the 2 options presented but I wanted to clarify that. 3 Thanks.

4 MS. SILVERMAN: Yeah. So unfortunately I don't have data on the volume of the category. 5 Some 6 of that comes just anecdotally from ask FSIS 7 questions we've received and then, yes, in terms of FSIS actions, currently it would be to follow the 8 9 regulatory requirements and document non-compliance 10 and then corrective actions to come into compliance 11 would necessitate gathering scientific support.

12 MS. GREEN: Are there any other questions 13 before I move to the questions in the chat feature? 14 MS. CURTIS: This is Pat Curtis from NC 15 State University and I put my question in chat, as well. But does FSIS not contribute research 16 17 priority needs to NIFA when they're collecting their 18 research priorities for what they're going fund for 19 the coming year?

20 MS. STLVERMAN: Yes. I know we do share 21 our research priorities with NIFA and have shared 22 these in the past but I'm not aware of, you know, 23 how the decisions are made from their end to fund 24 research. But we do share our research priorities 25 with the Agriculture Research Service as well as Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 NIFA.

2	MS. GREEN: All right, this is Val Green,
3	again. I'll start with a question in the chat
4	feature from Greg Gunthorp, Gunthorp Farms.
5	Can you share these eight outbreaks of USDA
6	dried, salt or fermented products? He would like to
7	research whether these establishments are following
8	good manufacturing practices.
9	MS. SILVERMAN: Yes. I can see what
10	details we're able to provide. I can say three of
11	the outbreaks were related to the S. aureus
12	enterotoxin issues I mentioned in the 1970s before
13	the degree-hours concept was developed and before
14	NIFA starter cultures were implemented.
15	But then most recently we do have
16	information, in 2011, about the Lebanon bologna
17	outbreak that was associated with E. coli 0157:H7
18	and that information is in a guidance document
19	available online and they are the issues we found
20	where the establishment had scientific support but
21	it really didn't match the actual process that they
22	were using.
23	And there was another outbreak in 2010
24	associated with products where slicers were
25	contaminated with Salmonella and they were added
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 after the lethality treatment.

2	And then were some other outbreaks in the
3	'80s and '90s, again, that led to that Blue Ribbon
4	Task Force document where E. coli 0157:H7 was
5	identified in salami and that was associated with
6	other processing for insufficient lethality from the
7	fermentation and drying process.
8	MS. GREEN: Thank you. This next question
9	is from Dr. Lynn Knipe, Ohio State.
10	You mentioned one study from a culture
11	company that had validated high temperature
12	fermentation to achieve low pH. Can you tell us
13	which company had done this?
14	MS. SILVERMAN: Yeah, so the high
15	temperature fermentation and the low pH, that
16	actually comes from the Blue Ribbon Task Force, some
17	of the options involved those combinations, but the
18	starter culture company that has a study that's
19	available is from Chr. Hansen.
20	MS. GREEN: This is the last question that
21	I have in the chat feature and then we'll move on to
22	verbal questions if there are any additional ones.
23	This is from Greg Gunthorp, Gunthorp Farms.
24	Does USDA have an expected deadline on a
25	compliance guideline document on dried, cured,
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 salted or fermented yeast? His estimation is that 2 it was promised 19 years ago.

MS. SILVERMAN: Yes. So I do know that there was an interest in this issue since the beginning of HACCP and it has been a challenge of validation.

7 We are working on the guideline, as we 8 mentioned, and are really interested in the feedback 9 from NACMPI before we would put that out.

MS. GREEN: Thank you. As a reminder to the Committee members and the audience, you may press #2 to ask a question and please state your name and affiliation for the official record before you ask a question. Are there any additional questions?

17 here.

18

MS. GREEN: Okay.

AT&T EVENT PRODUCER: Dr. Byron go ahead.
Your line is unmuted. Dr. Byron, go ahead. Your
line has been unmuted.

DR. WILLIAMS: Thank you. Byron Williams, Mississippi State University Extension. My question is have there been any documented cases of foodborne outbreaks with these type products since 2010 and 11 Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 with the Lebanon bologna?

MS. SILVERMAN: No. That's the last -- the 2 2011 is the last documented outbreak associated with 3 4 one of these types of fermented, salted or dried products produced under FSIS inspection. But there 5 6 have been some outbreaks in Europe during that time 7 but there haven't been any in the United States. DR. WILLIAMS: Okay. Thank you. 8 9 MS. GREEN: Victor, do we have any more 10 questions? 11 AT&T EVENT PRODUCER: I don't see any other 12 questions at this time. 13 MS. GREEN: Okay. I have a question in the 14 chat from Dr. Eberly in Maine. 15 Is the draft guidance available for 16 Committee review? 17 MS. SILVERMAN: No, not at this time. MS. GREEN: I don't see any additional chat 18 19 questions so we'll go ahead and move to the next 20 presentation. Thank you, Meryl. Next slide, 21 please. 22 Next is Robert Witte who will discuss the 23 intended use of intact box beef primal and sub-24 primal products. I'll go ahead and turn it over to 25 Mr. Witte. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 AT&T EVENT PRODUCER: Mr. Witte, can I assure your phone is not on mute? Mr. Witte, if you 2 3 are on the line please press #2 so I can identify 4 your line. Please go ahead. 5 MR. WITTE: There we go. Can you hear me 6 now? 7 MS. GREEN: Yes. 8 MR. WITTE: Okay. Perfect. Thanks, Val. 9 Next slide. 10 I will first begin by reviewing the charge 11 we have placed in front of you today, then cover the 12 history, background and data in more detail to give 13 the charge context and then close the presentation 14 by reviewing the charge again. After the 15 presentation is complete we will open the floor for 16 questions. Next slide. 17 As a basic introduction, STEC is an acronym 18 for Shiga toxin-producing E. coli. Some strains of 19 STEC may cause severe illness due to the presence of 20 Shiga toxin and other virulent factors. STEC can 21 reside in the intestinal track, mouth, hide and 22 hooves of live cattle and can be transferred to the 23 carcass during the slaughter dressing process. 24 It is important to understand that STEC is 25 not inside the raw intact muscle itself. STEC Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 contamination occurs when it is transferred to the 2 meat surface during the slaughter dressing process. 3 Now that we have a general idea of what 4 STEC is and an understanding of where STEC comes 5 from, let's look at why the location of STEC 6 contamination in various raw beef products is 7 important.

As a note, any references to E. coli O157:H7 and STEC were changed to STEC in these slides for simplicity and consistency. E. coli O157:H7 and the six non-O157 groups which include O26, O45, O103, O111, O121 and O145 are adulterants in raw, non-intact beef and intact beef products intended for raw, non-intact use.

Although there are many other Shiga toxinproducing E. coli, this presentation refers to those 7-0 groups which are collectively referred to as STEC in this presentation. Next slide.

Unlike other species and pathogens, there is a unique relationship between STEC and certain raw beef products. STEC has a low infectious dose and has been linked to -- with serious, lifethreatening human illnesses.

Also, raw beef products are frequently consumed in a rare or medium rare state which Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 presents a public health risk as cooking to a rare or medium internal state does not destroy STEC but may be below the product's surface. For these reasons, STEC adulterates certain raw beef products as I will discuss. Next slide.

6 In determining which products are eligible 7 for FSIS sampling for STEC, FSIS distinguishes intact cuts of muscle that are distributed for 8 9 consumption as intact cuts separately from non-10 intact products. FSIS also distinguishes intact 11 cuts of muscle that are further processed into non-12 intact products prior to distribution for 13 consumption from intact cuts that stay intact.

Comminuted or non-intact cuts are eligible for FSIS sampling. Intact cuts intended to be used in non-intact products are eligible for FSIS sampling. The photos here show two different types of beef products consumers prepare and eat and illustrate the distinction.

20 On the left are intact steaks. I say 21 intact to mean the meat interior remains protected 22 from pathogens migrating below the exterior surface. 23 The surface is intact and any STEC that's present 24 would be restricted to the exterior only, not inside 25 the steak itself.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

In this example it's easy to see how heating to even a rare or medium internal state will kill any STEC that is restricted to the outside surface of the steak.

On the right you'll see a rare hamburger. 5 6 FSIS recommends heating ground beef to an internal 7 temperature of 160 degrees Fahrenheit. This photo is used to illustrate the risk posed by eating a 8 9 rare or medium hamburger. Now, if STEC is present 10 it is no longer restricted to only the outside 11 surface like it would be in the intact steak. Tt. 12 now may be pushed or spread anywhere throughout the 13 ground beef, including to the middle where it would 14 not be killed by the heat applied to the exterior 15 when cooking to a rare or medium internal state.

For this reason, FSIS samples and tests intact cuts of beef that are to be further processed into non-intact products prior to distribution for consumption in the same manner as non-intact products, since STEC may be introduced below the surface of these products. Next slide.

22 Currently, FSIS does not sample or test 23 boxed beef primal and sub-primal products for STEC 24 if they are intended for intact cuts. At the heart 25 of the charge today is the concern that these boxed 26 Free State Reporting, Inc. 1378 Cape St. Claire Road 27 Annapolis, MD 21409 28 (410) 974-0947 beef primals intended solely for intact use and which are not subject to FSIS's STEC testing are being used to make raw ground beef resulting in STEC-positive ground beef in commerce, illnesses and death.

6 Here are some visuals of boxed beef showing 7 the packaged primals in the box and relative sizes 8 and weights of a primal compared to a consumer-ready 9 packaged steak and ground beef. There is some 10 evidence that retailers buy the boxed beef and use 11 the primals either in whole or trimmings left over 12 after making steaks to create raw ground beef.

13 The charge before you today is if an
14 establishment identifies boxed beef primal or sub15 primal products as intended for intact cuts, should
16 FSIS continue not to sample or test these products?

If yes, how can the current system be strengthened? If no, what criteria should FSIS use to determine which products should be eligible -should be subject to sampling and testing for STEC?

For the purposes of this discussion you'll hear terms like vacuum packaged and boxed beef. Vacuum packaging equipment removes the air and seals the product inside the bag. The sealed primals are then packed -- placed into cardboard boxes and Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

shipped as boxed beef, as shown in the photos here.
 Those are simply packaging methods, boxed beef in a
 box. Beef in a box is not required to be vacuum
 packaged and may not be vacuum packaged in every
 case.

As you will see in future slides, industry associates vacuum packed -- vacuum bagged primals with products intended solely for intact use, hence why I use the term.

10 With that in mind, let's dive deeper into 11 the sampling history. Next slide.

In 1994, Mike Taylor, who was the administrator of FSIS at the time, announced that E. coli 0157:H7 adulterates raw ground beef and quotes from that speech are on this slide. FSIS began testing for E. coli 0157:H7 in ground beef in 1994. Next slide.

In 1999, FSIS announced in the Federal Register that in addition to ground beef, raw intact cuts of beef to be processed into non-intact cuts found to be contaminated with E. coli 0157:H7 would also be considered adulterated.

If the latter two types of the products are found to be contaminated with E. coli 0157:H7 they must be made ready to eat, that is to receive a full Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 lethality treatment to produce a product that can be 2 safely consumed without any further cooking or 3 preparation or the product will be deemed 4 adulterated.

In 2000, FSIS made it clear that 5 6 establishments needed to identify the intended use 7 for consumers of the finished product under HACCP. 8 In 2002, in response to data suggesting E. coli 9 O157:H7 was more prevalent than originally thought, 10 FSIS has issued a Federal Register Notice for 11 establishments producing non-intact beef, as well as 12 intact beef, to reassess their HACCP plans for E. 13 coli 0157:H7 in light of this new information. Next 14 slide.

15 In 2004, FSIS issued a directive that said 16 FSIS may sample trimmed and other raw ground beef 17 components in response to ground beef positives as 18 they were the source materials used to make the 19 positive ground beef.

20 In 2007, FSIS began testing trim and other 21 raw ground beef components on a routine basis.

In 2011, FSIS announced that certain non-0157 STECs are adulterants in raw ground beef, other non-intact beef products and raw intact products intended for use in non-intact products.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

In 2012, FSIS began analyzing beef
 manufactured trimmings for those non-0157 STECs.
 Next slide.

In the current version of FSIS's Sampling 4 Directive, that is Directive 10010.1, Revision 4 5 6 issued in 2015, the list of eligible products is 7 shown here and includes beef of any size that the establishment intends for use in raw, non-intact 8 9 products or when the intended use is unclear. The 10 directive identifies the bolded items here as 11 products eligible for sampling.

Note that the focus is not exclusively on trimmings. Though there are some specific product groups listed, like trimmings and two-piece chucks, it's important to remember that parts of any size and in any packaging can be eligible for sampling if intended for non-intact use or the intended use is unclear.

19 The intended use is very important. As 20 stated in the directive, the product's intended use is a key factor in determining whether FSIS collects 21 22 samples. FSIS samples products intended for use in 23 raw non-intact products such as ground beef, 24 mechanically tenderized, needled, vacuum-marinated 25 or when the intended use is unclear. Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

Inspection program personnel are not to sample products that the establishment intends for use in intact or ready-to-eat products or product that will receive full lethality treatment at another federally inspected establishment.

6 If the product is to receive a full 7 lethality treatment at another federally inspected establishment, IPP are to verify the establishment's 8 9 hazard analysis and flow chart show that the product 10 is intended for one of these controlled uses and that the establishment has controls that ensure the 11 12 product is used as intended. If not, IPP are to 13 collect the sample. Next slide.

14 This where we move to the intended use 15 portion of the HACCP regulations. The HACCP 16 regulations require establishments to identify how 17 the product will be used and consumed to inform 18 their hazard analysis decision making. FSIS 19 primarily relies on the establishment to identify 20 each product's intended use and then FSIS determines 21 which products are eligible for FSIS sampling and 22 testing. Here is that regulation.

When an establishment identifies boxed beef primals to be intended for intact use, that intended use is most commonly communicated through posting a Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

statement on the company webpage and/or adding a
 statement on a bill of lading or invoice when sold
 to distributors or other customers.

As an example, a webpage statement may read, [Establishment Name] produces primal products packaged in vacuum bags intended solely for intact use. [Establishment Name] expects any customer who purchases vacuum packaged primals for other than intact product address that specific usage in their HACCP plan.

FSIS currently views this as adequate support for their intended use determination. Currently, when products -- when product is intended for intact use and there is a webpage statement and/or invoice statement, FSIS does not sample and test for STEC. Evaluating this is associated with your charge today. Next slide.

18 Whether it be an issue with the sending of the message or the receiving of the message, the 19 20 intended use is not being carried out at the retail 21 level. These products continue to be used to make 22 ground beef. If the Committee recommends that FSIS 23 continue to rely on the establishment's intended use and not sample intact beef products for STEC, 24 25 investigating ways to strengthen this communication is Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 one part of the charge in front of you today.

2 During meetings with groups such as at the 3 Conference for Food Production in a response to 4 recalls and illness investigations, FSIS find 5 retailers to be unaware of the intended use of boxed 6 beef primals or the risk -- or the risks of grinding 7 boxed beef primals.

8 First, the intended use statement does not 9 describe the risks associated with grinding the boxed 10 beef. Second, the intended use statements instruct 11 customers that grind the boxed beef to address that 12 usage in their HACCP plan.

13 It's important to note that retailers do not 14 have Hazard Analysis and Critical Control Points, or 15 HACCP plans, and may not know what HACCP means when 16 reading that statement. Third, retailers are found to 17 be unaware if boxed beef has an intended use or the 18 need to contact the producing establishment to ask 19 about the intended use. The concept is foreign to 20 them.

And finally, retailers don't always buy directly from the establishment. They may buy from multiple brokers and distributors based on best prices, delivery dates and demand. These vendors may or may not have -- the intended use statements on Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 their invoices to each retail customer or clarify what 2 the intended use means.

To quantify this, in 2019 FSIS began collecting specific intended use data associated with each of the roughly 500 retail ground beef samples FSIS collects across the nation at retail firms. The data is entered by FSIS personnel on each sample form questionnaire for each retail ground beef sample collected.

10 The data shows 82 percent used vacuum packed 11 -- vacuumed primals in whole or trimmings thereof to 12 make the ground beef, 83 percent of the retailers were 13 not aware of the source material's intended use, 93 14 percent of the retailers did not apply any STEC 15 controls to eliminate STEC on the boxed beef primals 16 prior to grinding the beef. Next slide.

17 Webpage and/or invoice statements identify 18 vacuum packaged boxed beef to be intended -- to be 19 solely for intact use and FSIS does not sample and 20 test these products for STEC. Evidence shows 21 retailers use vacuum packaged boxed beef to make 22 ground beef and do not apply additional STEC controls 23 to eliminate STEC on the boxed beef primals prior to 24 grinding. The data shows the producer's intended use 25 is not being carried out.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

FSIS takes regulatory action, including 1 trace-back activities, initiates recalls, retains or 2 3 detains affected products, verifies disposition of 4 affected products, conducts public health risk evaluation and food safety assessments and conducts 5 6 follow-up testing at producers and suppliers in 7 response to illnesses or STEC-positive retail ground beef samples. 8

9 Currently, FSIS does not take action against 10 the producing establishment or retailer strictly because the intended use is not followed. 11 Too --12 this, too, is part of the charge in front of you 13 today, to advise FSIS how to report. Currently, there 14 are over 98,000 retail firms and FSIS collects 15 approximately 500 retail ground beef samples each year from retail firms. Next slide. 16

17 As we close, here's a diagram for those of 18 us that like visuals. To be clear, I am not saying 19 every primal intended for intact use is contaminated 20 with STEC nor am I saying illness results every time a 21 primal intended for intact use is ground at retail. Ι 22 am not saying either of those. I provide this diagram 23 to illustrate that not all beef products and retailer 24 handles are the same in terms of the STEC controls 25 applied by the producer.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

Think about if you were that butcher there working in a retail market. Put yourself in their shoes. Would you realize the difference or risks between the two sources?

5 On the bottom, the trimmings in a combo are 6 intact pieces of beef intended for non-intact use. 7 Those products are eligible for FSIS sampling for STEC 8 whereas on the top, the primal is intact beef intended 9 solely for intact use and is not eligible for FSIS 10 sampling for STEC.

If you were that butcher, would you know the primal is intended solely for intact use? Would you know what that intended use means, recognize the risks or understand the need to apply a STEC control measure before grinding it or do you just grind the beef you have on hand to keep the retail case full, unaware of any intended use or risks?

As discussed previously, evidence shows retailers remain unaware of any intended use of these products. The illustration here shows the gap between the supplier's intended use that may be posted on a webpage which currently helps inform whether a product is eligible for FSIS sampling and how the products are used in commerce.

25 Whether that be grinding the whole primal or Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 trimmings generated after making steaks, retailers make ground beef from primals and producers -- from primals the producer intends to be fully for intact use which has, in certain cases, resulted in recalls and outbreaks. Next slide.

6 FSIS's issuance of the grinding records rule 7 which require establishments and retailers to keep 8 records of the source materials used to create each 9 lot of ground beef has certainly enhanced FSIS's 10 trace-back abilities in response to positives and 11 illnesses.

12 In 2014, FSIS identified three separate 13 ground beef positives through retail ground beef 14 sampling generating three separate recalls. In each 15 of these three positives, the trace-back revealed the 16 retailer made ground beef from source materials 17 intended for intact use. There were two ground beef 18 positives identified through FSIS in-plant testing. 19 Trace-back showed both establishments were separately grinding the same lot of product intended for intact 20 21 use from the same producing establishment resulting in one recall. 22

There have been three separate illness outbreak investigations and a death associated with retailers grinding primals intended for intact use Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 also resulting in three recalls. The details for the 2 most recent outbreak and recall were posted on the 3 FSIS webpage in July 2020 in an after-action review 4 report.

5 In each of the seven recalls on this page 6 the source materials used to make the ground beef were 7 intended for intact use and not sampled by FSIS at the 8 producer. However, these products did not remain 9 intact as the producer intended.

10 Now, let's summarize the charge placed11 before you today. Next slide.

12 When considering consumer-ready intact steaks and roasts, FSIS is confident that many of 13 14 these products will remain intact when sold at retail, 15 for example, individually packaged -- individually 16 vacuum packaged steaks. However, larger primals that 17 are intended solely for intact use, that is vacuum 18 packaged primals, are being used to make ground beef 19 for sale to consumers.

20 FSIS is seeking input on how FSIS can reduce 21 STEC positives, outbreaks, recalls, and deaths that 22 occur when downstream processors are commonly unaware 23 of the product's intended use or the risks of grinding 24 such products. FSIS is requesting the Committee's 25 comments and recommendations in response to the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 following questions.

If an establishment identifies boxed beef 2 3 primal/sub-primal products as intended for intact 4 cuts, should FSIS continue not to sample or test these products? The follow-up questions are on the next 5 6 slide. Next slide. 7 If yes, how can the current system be strengthened? Please consider what are all of the 8 9 options producing establishments should have to 10 communicate their intended use to customers? 11 What steps should producing establishments 12 take to verify the intended use was both understood 13 and followed by the further processor or grinder? 14 What -- how should this be documented or 15 tracked so that the establishment and FSIS know that 16 the product was used as intended? What steps should further processors or 17 18 grinders take to seek out that intended use 19 information from the producing establishment? 20 In addition to verifying HACCP plan 21 reassessment, what actions should FSIS take at the 22 producing establishment when products intended for 23 intact use are used to make raw non-intact beef? 24 If no, what criteria should FSIS use to 25 determine what products -- which products should be Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

subject to sampling and testing for STEC? Please consider what are the size or dimension thresholds, cuts or product characteristics such as grade, individual versus bulk packaged, et cetera, FSIS should use to be confident the product intended for intact use will remain intact through consumer cooking?

8 And then for both, what changes to FSIS 9 sampling and testing, HACCP verification instructions 10 or regulations does the Committee believe would help 11 effect the Committee's recommendations? And what 12 outreach methods and messages would be most effective 13 to federal establishments and retail firms?

14And with that we can open it up for15questions.

MS. GREEN: Thank you, Robert. Do we have any questions from the Committee members? You may unmute yourself and ask a question.

19 MS. WILLIAMS: This is Sherri Williams with 20 JBS and two things, actually. First was a point of clarification for one of your statements on slide 15. 21 22 It almost sounded like you were saying that the 23 slaughterhouse or the manufacturers of the primals 24 treat the intact use products intended and the non-25 intact use products differently with different Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 interventions or different processes at the 2 manufacturer and so I just wanted to clarify and see 3 if that's what you were saying or if there was 4 something else that you had meant by that comment.

And secondly, on 16 -- slide -- page 16, if you could go into a little bit more detail when you talked about the recalls where it's revealing that retailers make ground beef from the source materials intended for intact use. Was that the actual whole item, like the whole sub-primal or was it trimmings derived from intact sub-primals? Thank you.

MR. WITTE: Thanks for that. Yeah. Sorry, in slide 15 I just mostly wanted to indicate the products that FSIS does or, you know, that are or are not eligible for sampling so I apologize if that -- if I didn't communicate that well.

17 In terms of 16 for the outbreaks and 18 retailers there, we don't -- I'm not aware of whether 19 they just -- they ground the whole primal or just the 20 trimmings from the primal. Some of those are, you 21 know, each has an individual situation and some have 22 multiple retailers or different things happen at 23 different retails but I don't have the evidence on 24 each one of whether they ground the whole thing or 25 just parts of the primal or, you know, a bigger piece Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 or whatever, the steak or --

2	MS. SORSCHER: Hi. This is Sarah Sorscher
3	from Center for Science in the Public Interest. I had
4	a question I submitted in writing but I'm curious if
5	you assess what percent of retail samples, you know,
6	for which the retailer doesn't know the intended use
7	but I'm just curious if you've assessed, you know,
8	looking overall at boxed beef produced in this
9	country, what percentage is currently eligible for
10	testing as intended for non-intact use and then, you
11	know, if you were to test it all, what
12	how greatly would that expand your the sampling
13	that you needed to do?
14	MR. WITTE: This one might be a good one, I
15	guess, we could correlate with industry on it in terms
16	of the percentage, I mean whether we do volume, you
17	know, exiting a slaughter facility, how much turns
18	into trim, how much turns into primals, how much turns
19	into certain products that are or aren't eligible. I
20	don't have that in front of me here today. I don't
21	know if anybody else can speak to that in terms of
22	volume or ratios.
23	MS. EDELSTEIN: This is Rachel. I don't
24	think that we have assessed that. We recently put
25	out, you know, some updates, some of our testing
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

updates for our -- when we were -- in our cost updates 1 2 for when we were assessing the effects of sampling all 3 of the beef products for non-O157 STEC so we can go 4 and check in there and see if we have any estimate in there and get back to you. 5 6 Also, well, since I'm on. Did we address 7 the first question about -- from Sherri about, you know, if they're applying different interventions at 8 9 the establishment depending on whether the product's 10 intended for intact or non-intact? 11 MS. GREEN: Hello, Rachel. This is Val 12 Green again. Is that question in the chat feature? 13 MS. EDELSTEIN: Well, she asked it verbally. 14 MS. GREEN: Oh, I'm sorry. Okay. 15 MS. WILLIAMS: Hi, Rachel. This is Sherri 16 Williams. I believe it was just a point of 17 clarification and I believe Mr. Witte clarified that 18 it was an example of just the processes and not 19 insinuating that different processes were -- so I feel 20 sufficient with that. Thank you. 21 MS. EDELSTEIN: Okay. Thanks. 22 MS. GREEN: All right, Victor. I believe I 23 believe there are some hands raised to ask a question. 24 AT&T EVENT PRODUCER: If they were on the 25 speaker line, oh, here we go. Dr. Byron, your line is Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 unmuted. You can go ahead.

2 DR. WILLIAMS: Thank you. Byron Williams, 3 Mississippi State. Just curious Mr. Witte, what 4 percentage of the intact carcasses are being sampled at the slaughter facilities prior to then undergoing 5 6 breakdown? 7 MR. WITTE: So we try to avoid any carcass sampling at all costs. We sometimes have procedures, 8 a trace-back or some of that but we try to get it as 9 10 far downstream as we can within the establishment. 11 So once that carcass is broken down and we 12 know what, you know, each product, each direction each 13 product's going its own way, we can differentiate 14 those from, you know, being intended for intact use 15 from those being, you know, whether it's made non-16 intact on site or those, you know, sent out that are 17 intended for non-intact use. 18 So in terms of actual carcass sampling 19 that's essentially zero. Does that answer your 20 question? 21 DR. WILLIAMS: Yes, sir. 22 MS. GREEN: Are there any other questions 23 before I move to the chat -- the questions from the 24 chat? 25 AT&T EVENT PRODUCER: I don't see any other Free State Reporting, Inc. 1378 Cape St. Claire Road

8 Cape St. Claire Roa Annapolis, MD 21409 (410) 974-0947 1 questions at this time.

MS. GREEN: Okay. This next question is for
Rachel Edelstein. This is from Ray Gunthorp from
Gunthorp Farms.

Have we ever considered that the Meat and 5 6 Poultry Act gives some of the largest corporations and 7 the food supply extensions from USDA meat and poultry inspections and prestige retailers yet the same 8 9 implementation of the Meat and Poultry Act and FDA 10 Model Food Code makes it very difficult for very small 11 farmers to access inspection options? Are we 12 addressing this in the Committee, how the current MPA 13 and FDA Model Food Codes are not necessarily equitable 14 to small farmers' access to the marketplace?

15 MS. EDELSTEIN: Hi. To actually require 16 that the retailers be under the same requirements as 17 the federal inspected establishments would take a 18 legislative change. So that's outside the scope of 19 the Committee but if the Committee has -- I mean we're 20 definitely interested in if there's suggestions from 21 the Committee on how to better -- I mean, some of the 22 things that Bob Witte raised, if there's better ways 23 to communicate and ensure that the intended use is 24 understood throughout the process, that's the sort of 25 thing that the Committee, you know, that we're Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1 interested in input on. Or, you know, if there's 2 different -- there's different, you know, any 3 recommended changes for, you know, in our verification 4 activities, too.

5 MS. GREEN: Thank you. The next question is 6 from Casey Gallimore, Meat Institute. Has there been 7 an attempt to educate retailers on intended use in the 8 past? If so, what was the program so we might 9 identify potential ways to improve communication? If 10 not, are there plans to do so in the future?

11 MR. WITTE: I can maybe touch on some of 12 this. We have proposed the topic a couple times for 13 the Conference of Food Protection so, you know, they 14 can reach their customers and make the concept more 15 visible, I quess you could say. I believe industry 16 has presented to different, I guess, retail 17 organizations or, you know, the concept of intended 18 use.

19 We also have discussed how to best 20 communicate that message publicly. We don't have a, I 21 guess, pamphlet or a brochure or anything right now 22 but that may be part of the recommendations here of 23 how do we, you know -- like I said earlier, I don't 24 know if it's part of the sending or the receiving of 25 the message and then also provided that note that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

there's, you know, just under 100,000 retailers out there, you know, how best do we reach all of them? How do we get that message out? So there has been some in the past but I think, you know, this group can really give us some information on how to move forward with that if that's part of the recommendation.

7 MS. BARLOW: This is Kristina Barlow. I'll just add to what Robert stated. We did submit an 8 9 issue to the Conference for Food Protection biannual 10 meeting that's available publicly on the CFP website. 11 We can provide that. And that recommends updating the 12 current guidance that the CFP provides for grinding recordkeeping to include -- and the feedback that 13 14 we've received from the conference, as Robert 15 mentioned previously, is that they don't understand 16 that there's different regulatory requirements for the 17 safety of ground beef. They think that all beef is treated the same as far as the feedback we've received 18 19 from that conference --

20 MS. GREEN: Thank you, Kristi. Victor, are 21 there any other questions?

AT&T EVENT PRODUCER: I don't see any --DR. HARRIS: This is Joe Harris from the Southwest Meat Association. Just a question for Mr. Witte. I'm just trying to get a better feel for the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 scope of what we're talk -- the problem. I believe you told us on one of your slides that there are about 500 retail samples per year being collected so since 2014 there's been three positives identified through that program and also since 2014 there's -- you said two ground beef positives through FSIS in-plant testing.

8 Relatively speaking, how many samples per 9 year are done to the FSIS in-plant testing? Two 10 positives over a six-year period doesn't sound like 11 that many.

12 MR. WITTE: Yeah. So this presentation is 13 about the intended use part, so just things that fall 14 under that umbrella. So we collect roughly 500 ground 15 beef samples at retail every year. So, you know, 16 obviously plus or minus, but that's the target, around 17 500 a year. And then in terms of federal 18 establishments we collect about 10,000, again, plus or 19 minus. And then trimmings, you know, they're all kind 20 of different. They all have their own numbers there. 21 So the three positives from ground beef are 22 the ones that have an intended use impact as part of 23 this discussion and are coming out of that 500 a year. 24 The two positive ground beefs are not the only ground 25 beef positives we've had. It's just those are the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

ones that fit under this presentation, this topic and then the three, you know, the three outbreaks are, you know, not positive sample related. Does that answer your question? That makes sense?

5 DR. HARRIS: Yes, so I was just trying to 6 get a little bit of a feel for the denominator that 7 we're dealing with.

MR. WITTE: Yeah, I mean, it's hard to say 8 9 in terms of, you know, when we collect a sample we 10 don't say the intended use in those. I think we can 11 go back to some of the, you know, the 500 that we 12 collect from retail and we can work through that 13 intended use information that we got on those 14 questionnaires so if we go back to slide 13 where it 15 talks about vacuum-packaged primals, it talks about, 16 you know, did they or didn't they apply additional 17 controls.

18 And so, you know, I don't want to make the 19 blanket statement that every vacuum packaged primal in 20 every case is intended for intact use. It's just, you 21 know, without having our investigators go through a 22 lot of paperwork to track back every, you know, 23 individual source for a sample, whether it comes back positive or not, we collect this kind of high level 24 25 information and so that only started in 2019 so about Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 a year, year-and-a-half old.

2	But in terms of, you know, data prior to
3	that we didn't collect the intended use information
4	for every ground beef sample so I just I can't
5	speak to which ones were came from product intended
6	for non-intact use versus those that came from
7	products intended for intact use.
8	DR. HARRIS: Thank you.
9	MS. GREEN: Thank you. And just for the
10	audience, as a reminder please press #2 if you have a
11	question. State your name and affiliation for the
12	official record before you ask a question. I have a
13	question from Dr. Eberly, State of Maine in the chat
14	section.
15	If both FSIS and large slaughterhouses are
16	aware that many primals labeled intact are likely to
17	be used for non-intact use, does this represent a
18	known hazard they should address in their own HACCP
19	system?
20	MR. WITTE: So I think this is part of the
21	discussion, right. I mean, in terms of labeling I
22	you know, just to point there, there can't be intended
23	use labeling so we don't allow a label to say the
24	statement "Intended for Intact Use." So but in
25	terms of the your, you know, your general premise
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

there, yes, that's part of the discussion here of if an establishment, you know, considers that intended use as part of the decision making and then later evidence shows that it's not being followed, that's part of the charge here is how should FSIS do that? How should that be evaluated?

So yeah, it sounds like you're on the right track. I agree with you and, kind of, the answer to that will come as part of our discussions, I think, today.

MS. SORSCHER: Hi. This is Sarah Sorscher from CSPI, again. Can you clarify the statement you just made saying that you can't have a label -- can't be intended use? What is preventing you from requiring that of establishments? MS. EDELSTEIN: We wouldn't -- I'm sorry.

We wouldn't -- this is Rachel Edelstein. We wouldn't approve that kind of label.

MS. SORSCHER: Can you explain a little more the reasoning there?

21 MS. EDELSTEIN: We have -- because we don't 22 -- our position has been we don't want labeling to be 23 used as a control.

24 MS. GREEN: Victor, are there any other 25 questions? Free State Reporting, Inc. 1378 Cape St. Claire Boad

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1AT&T EVENT PRODUCER: No, I don't see any2other questions. There's a speaker with a hand reach.3Your line is currently unmuted so you can go ahead.

MS. CONKLIN: This is Tina Conklin with Michigan State University. Do you not label -- so if it has tested positive, combos that would be tested as tested positive for cooking only so you are, in fact, defining an intended use on that?

9 MS. EDELSTEIN: We do allow "For Cooking 10 Only" and we have -- and we've put out guidance and 11 instructions for how to review, I mean, you know, how 12 to approve and how inspectors would review the use of 13 that label. If the product is also positive it 14 couldn't just say -- it would have to go under a seal 15 or other kind of control to a cooking establishment.

MR. WITTE: Yeah, and what we're really trying to get as is everything is controlled through HACCP so that "For Cooking Only" label we do allow that but it's completely voluntary. That product still must meet the same standards whether it has that label or not under its HACCP system.

22 So if they're making a decision, it's -- you 23 know, it's for cooking only, it's intended to be 24 cooked at a federal establishment, they must show that 25 it was sent to a federal establishment for cooking 26 Free State Reporting, Inc. 1378 Cape St. Claire Road 27 Annapolis, MD 21409 28 (410) 974-0947

through HACCP independent of whether they put the label on it or not. And then, like Rachel said, if it's positive that's part of their corrective actions to show how that product was cooked, again, whether it had that label on it or not. The control still comes through HACCP so use of that label is voluntary.

MS. CONKLIN: And then just to clarify one other point so right now you don't have the -- you don't let -- sort of use labeling as a control but you do let them put these statements on their websites that say this is intended for intact use and if you decide to grind it you have to take account for that in your HACCP plan.

14 What is the -- what are retailers supposed 15 to do in their HACCP plan when they're getting beef 16 that, you know, wasn't tested for STEC and they don't 17 know if it contains STEC and how can you grind that 18 and in a way that accounts for the safety risk?

19 MR. WITTE: And I think these are part of 20 the discussions we're going to have today. I don't want to dodge your question or make it seem like I'm 21 22 intentionally not answering it but this is the 23 question posed of, you know, the retailers don't have HACCP plans and so -- but to the same point what do 24 25 they do? How are they informed? You know, what Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

actions are expected of them? Do they know that? 1 You know, it's that two-way communication 2 3 of, you know, here's sending and receiving of the 4 message and so I think that's going to be part of our discussions today of how does that message get to them 5 6 and what is expected of them in terms of, you know, do 7 they buy that or not? Do they apply additional controls or not? You know, how do they work with 8 9 their producer to get the products that they want 10 based on what they're going to produce? 11 Yeah, I'm sorry I can't give you a good 12 answer. I think that's part of our discussion today. 13 MS. GREEN: Are there any other questions 14 for Robert Witte? 15 AT&T EVENT PRODUCER: I don't see any at 16 this time. 17 MS. GREEN: Okay. 18 MS. EDELSTEIN: Val, I thought there was one 19 about -- above about equivalence and I thought I saw 20 one about bench trim, too, in the chat. 21 MS. GREEN: All right. I'd like to circle 22 back to Meryl Silverman, a question on equivalence I 23 believe it's for her. This is from Greg --24 MS. EDELSTEIN: Actually, I can probably 25 answer that, Val. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. GREEN: Okay. From Greg Gunthorp,
 Gunthorp Farms.

3 Is your determination on equivalency of 4 foreign inspection systems for dried products being 5 imported into the U.S. consistent with U.S. inspection 6 activities?

7 MS. EDELSTEIN: Yes. Again, this is Rachel. If the country has been -- if we've determined that 8 9 it's equivalent to ship these types of products to the 10 United States we are -- we have verified and we verify 11 on an ongoing basis that the country maintains 12 inspection procedures for these products that are 13 comparable to the ones -- at least equivalent to the 14 ones that FSIS is using.

MS. GREEN: Thank you, Rachel. Are there any other questions for either Meryl Silverman or Robert Witte? All right. I see one from Ray Gunthorp, Gunthorp Farms.

Does STEC testing volumes in FSIS establishments mirror Salmonella testing, 17K in large plants, 173K in small plants and 105K tests in very small plants from 1998 to 2013? Does the testing frequency represent the industry? Would it do intact testing coincide? MR. WITTE: So I can touch on that, I quess,

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

briefly. So yeah, they mirror each other in the fact that right now ground beef samples are co-analyzed so one sample is collected and it's analyzed for STEC and Salmonella at the same time so when we collect a -sample it gets both analyses. In terms of the number, I'd have to double check on, you know, the timeframe and then breakdown by HACCP size.

8 But right now it's volume based, based on 9 what, you know, the volume that is output from that 10 establishment under each eligible sampling project.

So we sample before the non-intact process, so trimming and other raw ground beef components, and then we sample the product that comes out of the grinder, so ground beef. And so, you know, based on what that establishment produces on a volume scale is what that, you know, establishment is eligible for.

17 Not every establishment reaches the max 18 every month but, you know, our numbers are based on a 19 volume measurement. I'd have to double check in terms 20 of exact numbers if that's, you know, before that date 21 range for the last whatever, 15 years and something like that. So if that's needed I can -- we can circle 22 23 back on that and provide that to you later. 24 MS. EDELSTEIN: And just to follow up so 25 last part of that question, the new intact testing we Free State Reporting, Inc. 1378 Cape St. Claire Road

> Annapolis, MD 21409 (410) 974-0947

haven't made a decision yet so I don't think we can 1 2 answer that question yet. 3 MS. GREEN: Thank you, Rachel. We have a 4 few minutes left before we break for lunch. Are there any other questions or any additional questions? 5 6 MS. EDELSTEIN: There was a question above 7 about bench trim. Did we answer that one? MS. GREEN: Would that be explain the MT 8 9 testing process for bench trim? 10 MS. EDELSTEIN: Yeah, that one. MS. GREEN: Okay. Well, Sherri Williams was 11 12 asking can you explain the MT testing process for 13 bench trim? What does it mean? Why is it done, et 14 cetera? 15 MR. WITTE: I can touch on that, Rachel, 16 unless you want to. So bench trim, it's a phrase we 17 use to describe that sampling project. So the idea 18 here is this bench trim sampling occurs at a federal 19 establishment. So a federal establishment is say a say a slaughter -- let's just start from the 20 21 beginning. 22 A slaughter establishment produces products 23 intended for intact use and products intended for non-24 intact use. Those products that are intended for non-25 intact use or when the intended use is not clear are Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 sampled at that slaughter establishment.

2	As we've described here there are certain
3	situations where these primals are or any other
4	product intended for intact use goes out into
5	commerce, those products aren't eligible for sampling.
6	So what happens if another establishment buys that
7	product and wants to make ground beef?
8	That's where the bench trim sampling project
9	comes in. That only applies to federal establishments,
10	you know, that have HACPP plans and have, you know
11	that obviously go through the HACCP process to
12	implement their controls as they see fit, you know,
13	based on the situation. And then those products are
14	then eligible at the downstream processor processing
15	establishment that makes, you know, non-intact products
16	out of those products the supplier originally intended
17	for intact use. So it's kind of a relationship between
18	establishment one and establishment two.
19	There's no bench trim sampling in retailers.
20	That's the ground beef sampling, the 500 a year that
21	we do, the sampling we do at retail there is no bench
22	trim. Did that help, Sherri?
23	MS. WILLIAMS: Yes, Thank you.
24	MS. GREEN: Thank you, all. Seemed like we
25	had a lot of interesting questions for both Meryl and
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 Robert.

2	Right now, we'll go ahead and break for
3	lunch and I'm going to ask the event host to post the
4	link for not only the panelists but also the attendees
5	and the respective chat sessions so they can log back
6	in after lunch. We will resume at 1:15 p.m.
7	(Off the record at 12:08 p.m.)
8	(On the record at 1:15 p.m.)
9	AUTOMATED RECORDING: Your line is now
10	unmuted.
11	AT&T EVENT PRODUCER: Welcome, and thank
12	you for joining today's conference, National
13	Advisory Committee on Meat and Poultry Inspection
14	Public Meeting.
15	My name is Victor Almeida, and I'll be your
16	event producer for this conference. Before we
17	begin, please ensure you have opened the chat panel
18	by using the associated icons located at the bottom
19	of your screen.
20	If you require technical assistance, please
21	reach out to the event producer. All audio lines
22	have been muted until the Q&A portion of the call.
23	We'll give instructions on how to ask a question at
24	this time.
25	To submit a written question, select all
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 panelists from the dropdown menu in the chat panel, 2 enter your question in the message box provided and 3 then send.

With that, I'll turn the call over to the moderator, Val Green.

6 MS. GREEN: Thank you, Victor. Good 7 afternoon, everyone. We'll go ahead and resume the 8 meeting. And for the record, I will go through the 9 two charges in their respective subcommittee 10 members.

11 But before I do, I'd like to remind you 12 there's a slight modification to the agenda. We did 13 not receive any requests for public comment, so 14 we'll extend the deliberation period to 4:45 p.m. 15 At that time, we'll reconvene for the day's wrap-up. I would also like to note that the 16 17 deliberations are open to the public. Members of 18 the public may jury either subcommittee. Next slide. 19 Subcommittee 1: this committee will focus 20 on the validation of ready-to-eat, shelf-stable, 21 multi-hurdle lethality treatments. 22 On this subcommittee, we'll have Jennifer 23 Eberly, Tina Rendon, Patricia Curtis, William 24 Battle, Kimberly Rice, Curtis Knipe, Amilton De 25 Mello, Thomas Gremillion, and Greg Gunthorp. Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 Subcommittee 1 will stay on the main line, 2 so there's no need to log off and dial into another 3 web conference. Again, Subcommittee 1 will stay on the main event line. Next slide. 4 Subcommittee 2 will focus on FSIS testing 5 6 of boxed-beef primal and sub-primal products for 7 Shiga toxin-producing E. coli. On this committee, we'll have Jimara Avery 8 9 -- sorry, Jimmy Avery, Tina Conklin, Casey 10 Gallimore, Sherri Williams, James Jenkins, Joseph 11 Harris, Byron Williams, Sarah Sorscher, Denise 12 Perry, and Alice Johnson. 13 Subcommittee 2 will log off the main event 14 line and join using the instructions provided in the 15 email message that I sent earlier. Members of the 16 public may join Subcommittee 2 by following the 17 breakout instructions in the chat message. 18 Are there any questions or comments before 19 you break into the groups? Please press #2 if 20 you're a member of the audience and you have a 21 question. Committee members may unmute your phone 22 if you have a question. 23 MS. EDELSTEIN: Sorry, Val. This is If the public joins, are they -- they're 24 Rachel. 25 just -- they're in listen-only mode, right? Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. GREEN: That's correct. The public will be in listen-only mode. Anyone have any comments? AT&T EVENT PRODUCER: I don't see any

questions coming in through the phone.

5

6 MS. GREEN: Thank you, Victor. So, at this 7 time, Subcommittee 1, please remain on the line so 8 you can begin your deliberations. And, Subcommittee 9 2, you can log off this main event line and follow 10 the instructions to log into the Subcommittee 11 Deliberations line.

12 So, Subcommittee 1, while folks are dialing 13 off, before getting started, what I'd like to do is 14 introduce the subcommittee designated federal 15 official, and that's April Regonlinski. And I'll go 16 ahead and turn it over to April.

MS. REGONLINSKI: Hi, I'm April Regonlinski with the Office of Policy and Program Development in FSIS, and I'm the designated federal officer for this subcommittee today.

I think we're going to start with can each of the subcommittee members please reintroduce themselves for the record today?

24 MR. GREMILLION: This is Thomas Gremillion 25 with Consumer Federation of America.

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 MS. RENDON: Tina Rendon with Pilgrim's 2 Pride Corporation. DR. CURTIS: This is Pat Curtis. I'm with 3 4 North Carolina State University. MS. RICE: Kim Rice, Rose Acre Farms. 5 6 DR. KNIPE: Lynn Knipe, Ohio State 7 University. DR. DE MELLO: This is Amilton De Mello, 8 9 University of Nevada, Reno. 10 DR. EBERLY: Jennifer Eberly, Maine 11 Department of Agriculture, Conservation, and 12 Forestry. 13 MR. GUNTHORP: Greg Gunthorp, Gunthorp 14 I don't see anything on my screen though, Farms. 15 don't know whether I'm supposed to. MS. REGONLINSKI: That's fine. I think 16 17 we're just waiting for Tina. 18 MS. RENDON: Tina Rendon is here. Can you 19 hear me okay? 20 MS. REGONLINSKI: Yes, I can. Thank you. 21 I think that is all the members of the subcommittee. 22 Is there anyone else? 23 (No response.) 24 MS. REGONLINSKI: So, I'm now going to turn 25 it over to the subcommittee to select a chairperson Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

before you start discussing the charge. Please 1 2 remember to identify yourselves for the record 3 whenever you speak. DR. EBERLY: This is Dr. Eberly in Maine. 4 I'd like to nominate Dr. Curtis as I saw from her 5 6 profile that she did serve on this committee before. 7 MS. RICE: This is Kim Rice. I'll second 8 that. Thanks, Kim. 9 DR. CURTIS: 10 MS. RICE: I knew you'd love that. 11 DR. CURTIS: Believe me, I'd -- I'm more 12 than willing for someone else to do it, if they 13 would like. No, I would be happy to try to lead the 14 group. 15 So, April, are we going to be voting or are 16 we -- hopefully --17 MS. REGONLINSKI: Sure. That is probably 18 the best thing to do. So, can everyone please vote? 19 Just say yes with your name, if you vote that Pat 20 Curtis should be the chairperson. Thanks. 21 MS. RENDON: Tina Rendon, yes. 22 MS. RICE: Kim Rice, yes. 23 DR. EBERLY: Jennifer Eberly votes yes. 24 DR. KNIPE: Lynn Knipe, yes. 25 MR. GUNTHORP: Greg Gunthorp, yes. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

(Audio distortion.) 1 2 MS. REGONLINSKI: Hello? 3 DR. DE MELLO: It's very hard to hear you. 4 Your voice is breaking up a little. MR. GREMILLION: Thomas Gremillion -- I 5 6 vote yes. 7 MS. REGONLINSKI: Okay, Pat, so I'm going to turn it over to you. 8 9 DR. CURTIS: Okay, this is --10 MS. SILVERMAN: We're on the subcommittee 11 deliberations. 12 DR. CURTIS: Okay, for clarification, I'm 13 leading the discussion. Somebody else is taking the 14 notes. Is this correct? 15 MS. REGONLINSKI: Yes. That's correct. 16 DR. CURTIS: Okay. And then Carrie Clark 17 should be taking the notes. It should be starting 18 to show up on your screen. 19 MS. SILVERMAN: Okay. Yes. And this is 20 Meryl Silverman. I am here to -- if you have any --21 if the committee has any questions. And also, I 22 know there was a question earlier about the 23 quideline, and although we did prepare that to share 24 today, I am available to answer any questions about 25 what the agency plans to include in it. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 DR. CURTIS: Okay, and we should get 2 through both of these questions today? Or what is 3 the plan for today and tomorrow? Can you clarify 4 that for us? MS. SILVERMAN: Yes. So, you have until 5 6 4:45 for the deliberations today. But if you need 7 more time and need to continue into tomorrow, please let me know at 4:15, and I will let Val Green know, 8 9 and she can schedule time for tomorrow morning to 10 wrap up. 11 DR. CURTIS: Okay, thank you. So, I'm 12 going to just walk --13 MS. SILVERMAN: And then Carrie -- and 14 then, I'm going to say, Carrie Clark will be taking 15 notes and will help you write up the report from the subcommittee which is -- it will be shown on the 16 17 screen. So, you can direct things to her if you 18 want her to make changes or anything else like that. 19 DR. CURTIS: Okay, and that's what we're 20 presenting on this afternoon? 21 MS. SILVERMAN: You would be presenting it 22 tomorrow, but you could finish this afternoon. 23 DR. CURTIS: Okay. Just wanted to clarify. 24 Okay, so let's open the floor for discussion. We 25 can start with our first question about the actions Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 that FSIS should take when it's determined that an 2 establishment lacks scientific support for that 3 lethality treatment of a fermented, salt-cured or 4 dried product.

As we can see on the screen, that they had several options, but there may be other options. I'll just put that to the floor for discussion of the thoughts of committee.

9 MR. GREMILLION: Hi, this is Thomas 10 Gremillion, Consumer Federation of America. I quess 11 I didn't really understand the presentation. Ι 12 mean, I understand that, when this happens now is 13 when FSIS determines that an establishment lacks 14 scientific support, they take enforcement action 15 pursuant to the regulations that are there, I guess, 16 stagewise, from A to Z.

17 And what I didn't really gather was what's 18 wrong with the status quo. You know, if this is -there's an outbreak in 2011. I didn't hear, really, 19 20 that small processors or some producers are having a 21 tough time responding to the enforcement actions. 22 So, I guess I just wanted to know kind of 23 what are we -- what problem are we trying to fix 24 here? 25 MS. SILVERMAN: Yes, this is Meryl Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 Silverman. So, I can tell you from FSIS's
 perspective and then hopefully turn it to the
 committee.

So, as I mentioned, you know, in order for 4 an establishment to come into compliance with those 5 6 regulations, they would need to be able to provide 7 scientific support. And so what I was trying to address is that it's very hard for them to readily 8 9 turn to what's free and available, like a journal 10 article or guidelines, and come up with that, because it is either not -- it doesn't exist or it 11 12 doesn't match what they're actually trying to do. 13 And so, then that really leaves them with

14 one option, which is conducting a proprietary 15 challenge study where they go to a private lab or a 16 university and they get a study conducted to match 17 their exact process.

I think one key point I say that -- share is that the problem with that is that it's very costly. So, at a minimum, I've seen much less than \$10,000 and it can range to \$30,000 or more. So that is a challenge for small and very small establishments to afford. So that's really the main issue we see from SSI.

25

DR. CURTIS: And is the issue that these --Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 oh, I'm sorry.

2 DR. DE MELLO: Yes, this is Amilton De 3 Mello. So, in my understanding, so -- 1994 outbreak 4 of E. coli, I'm assuming that all of these establishments are federally inspected. Is that 5 6 correct? 7 DR. CURTIS: This can be done under a retail exemption, you know, if they meet the 8 9 requirements, but we're focused today on FSIS 10 establishments. 11 DR. DE MELLO: Okay. In order to obtain, 12 you know, your asset is there every day -- or 13 inspectors are there every day you do need to have 14 your HACCP validated. You need to have your 15 validations in place when you do any type of his 16 product. 17 So, I am in the same position of a former 18 fellow asked, you know, I'm quite -- I'm trying to 19 quite understand, regarding the scientific board, in 20 order to have your support documentation or HACCP, 21 you do need to have scientific support. So, that's 22 what I struggle to understand, what is the target 23 here? 24 MS. RICE: So, my question is -- this is 25 Kim Rice with Rose Acre Farm. So is the issue that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

these different or smaller niche artisanal sausages 1 are not referenced in current scientific data that 2 3 exist and/or they may have a different, slightly different formulation or fat content or there's some 4 attribute that does not make them an apples to 5 6 apples to the current research that's out there that 7 supports the semi-dried fermented sausage products, and that's the rub? 8

9 And so most of them are small processors 10 who, as you said, don't have the financial 11 wherewithal to pay for these validation studies to 12 validate their formula or their specific process 13 because it doesn't match up exactly to current data 14 that's available and free?

DR. CURTIS: Yes. So, it's both. So, in some cases, for some products, there is not a single study available that would be sufficient for validation. In other cases, there are a few there.

19 They are, but the processor just does
20 something different, like you indicated. They have
21 a different formulation, a different diameter,
22 different temperature, and so the scientific support
23 would not match from a validation standpoint.
24 And then to the earlier questions, I mean,

25 definitely we see with new establishments it can be Free State Reporting, Inc.

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

a challenge like a barrier to entry to start 1 producing these products under inspection. 2 3 If the scientific support doesn't like 4 this, again, that means leading to commission a challenge study. And then, you know, it's only 5 6 several years ago that we put out our validation 7 quidelines. And so we do still find, when an EIO does a 8 9 food safety assessment of the establishment, just 10 doesn't have scientific support on file. Or it may 11 be on file, but it's really not a match to the 12 process. 13 MS. RICE: So there are probably some 14 smarter, very smarter people than me on the phone, 15 but ultimately the finished product has certain 16 attributes: pH, water activity, fat content. Does 17 it really matter whether the formulation or the 18 species is the same? 19 Does it matter, necessarily, how it got 20 there? And I know that the answer for some bacteria 21 is, yes, it does matter -- toxin formation and 22 whatnot. 23 But ultimately, if we keep it simple, does 24 it matter that it's not apples to apples if the 25 ultimate finished product doesn't support the growth Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

or won't support the growth over time? 1 2 DR. DE MELLO: Yeah, this is Amilton. On 3 the top of this comment, right, so even the amount 4 of variability that we have in these broad-based 5 ones, what you are thinking about and having 6 specific research that validates that is specific 7 broad, the only way to obtain that is to have 8 internal validation by using a third party. 9 MS. RICE: Which then gets to the financial 10 perspective. You know, these --11 DR. DE MELLO: That's right. 12 MS. RICE: -- small processors don't have 13 30 to 50 grand, depending on who you're talking to, 14 to validate a process. 15 DR. DE MELLO: Yep, I agree with that. 16 MS. SILVERMAN: So, has --17 MS. RICE: And --18 MS. SILVERMAN: I'm sorry. I was just --19 MS. RICE: I'm sorry, I just --20 MS. SILVERMAN: Go ahead. 21 MS. RICE: Go ahead. 22 MS. SILVERMAN: Well, I was going to say 23 that they also generally are not part of a larger 24 trade association that does do this kind of 25 research. So that's all I was going to say, so go Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

112

1 ahead.

2 MS. RICE: So, there hasn't been that many 3 outbreaks from this product. Correct, from what the presentation said? 4 So, the people that are producing this 5 6 product now, are they using one of these, are 7 they -- do they typically collect articles that have portions of, you know, like Option C where they have 8 9 documents that support part of what they're doing? 10 Or do you know what the producers that are 11 doing that currently actually have? Do they fall 12 and did any of these areas that they're trying --13 that we're looking at as options? 14 DR. CURTIS: I don't --Well, actually, it's a lot 15 MR. GUNTHORP: 16 of --17 DR. CURTIS: Go ahead. MR. GUNTHORP: I deal with a lot of very 18 19 small processors here in Ohio, and several of them 20 are the artisanal processors. And so, I dealt with 21 this and we tried to get validation studies from the 22 starter culture companies. 23 Some are willing to provide information. 24 Jim Backus, who some of you might know, has told me 25 he works very closely, in Florida, with the Diabel Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

(ph.) company. And he says all of these starter
 cultures have been validated.

He said that data is out there. The problem is the data that they have is usually tied to when they've done a challenge study for a large company. So, they won't give everything that the small processor needs.

8 So, that has been a challenge. So now the 9 other thing that -- that's why I raised the question 10 earlier with Meryl, was who was this starter culture 11 company that has done a more complete study or 12 presented more of the data.

13 And so, we were visiting about it. But 14 that's -- so I think that's what these companies 15 have been using just to kind of get by. And I'll be 16 honest with you, I've had several in Ohio. I did 17 everything I could to help them find -- and there 18 were some of these companies said, yeah, we'll send 19 it to you, we'll send it to you, and they never did. 20 And I was actually telling the small 21 companies, if your starter culture company won't 22 provide you with the validation, find another 23 company. 24 And they -- it may actually be working 25 because I just got word back yesterday from a Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 company here in Ohio, in Columbus that, he said he 2 thought most of the people were actually using --3 most of these small companies who are using the Chr. 4 Hansen cultures.

5 And that's the companies that Meryl had 6 mentioned, was -- had done the more complete study. 7 But I just -- I think that's the challenge, is they 8 they are -- and the other challenge we get into, 9 too, I will put this out and maybe you already know 10 this.

11 A lot of these people have a culinary 12 background and food safety is not necessarily their 13 highest priority. It's the flavors and the 14 experience and that sort of thing, and so that's 15 another challenge that I'm sure inspection has, that 16 they just haven't been brought up with quite as much 17 of the microbiology and the food safety. So, I'll 18 stop.

DR. KNIPE: Yes, I have a question for you. So, I'm assuming that this small processors are federally inspected too, right? Are these federally inspected is --

23 MR. GUNTHORP: Can you repeat that? 24 DR. DE MELLO: Yeah, are these -- are your 25 small processors in Ohio federally inspected? I Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 mean, do you have USDA inspections?

2 MR. GUNTHORP: That was before, and I was 3 going to mention it earlier. We also have state 4 inspections that one of these companies --

DR. DE MELLO: Yes.

5

6 MR. GUNTHORP: One of the companies that 7 has probably the most successful here, it switched 8 to federal. And that due was a totally different 9 problem. But they are now operating under federal 10 inspection.

DR. DE MELLO: Because one of the main one requirements in order to put together a HACCP plan is you have to -- part -- in addition, you do need to have letters of a guarantee of the product.

So, if somebody is using a culture, right, that culture should have letters of guarantee. And, like you said, I mean, they should have a validation document that they run with somebody else.

19 So, these guys, they do have money. These 20 small processors, they don't, right. But the 21 sellers usually do have it. That's one of the 22 concerns that I have, because it seems that the 23 major gap, right. It's understanding what is 24 documentation's we need. Because this --25 MS. SILVERMAN: But if you look --Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 DR. DE MELLO: Go ahead, sorry. MS. SILVERMAN: Well, no, go ahead, 2 3 Amilton. I apologize. DR. DE MELLO: No, no. And it's because we 4 do a lot of things here. You know, I'm director of 5 6 the only HACCP plan in Nevada who does these things 7 because we're more a cow-calf state. And we went through all these over the last 8 9 four or five years. And we did our current 10 We did everything. And we have the validations. 11 small producers working exactly the same thing with 12 you guys and crew. 13 What needs to be their HACCP plan, so there 14 is significant amount of ways that we can see if 15 this works or not. When you submit your label 16 application, right, you have all the details right 17 there. You know, these can be -- usually it's 18 tracked by USDA. 19 And they say, hey, what do you need here in 20 order to approve your label? So, if this happens 21 here, it happens with all of us. My major concern 22 is that I don't think that they really -- there's 23 like this gap is actually on the consumer -- on the 24 small producers. 25 It's just -- it is how we can reorient it Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

117

to, you know, have everything in place to make sure 1 2 that these producers of safe products are safe 3 products. I'm not sure if I was clear on that. 4 DR. CURTIS: Yeah, so if you look at what they've put together on Slide 16, from my 5 6 experience, both with non-intact beef and then 7 poultry slaughter and parts, and using antimicrobials, one of the things that we would run 8 9 up against is if we were using -- let's say, on 10 poultry slaughter antimicrobials, we were using a 11 certain microbial we were using the supplier's data, 12 right, their research that we were using a different 13 novel configuration or a different a different 14 concept -- something was different from the original 15 research, we were told multiple times that we had to 16 go back and redo the work. 17 Because the --18 DR. DE MELLO: Sorry, Slide 14. 19 DR. CURTIS: Yes. I apologize. Slide 14. 20 Sorry. Because we were you know, we were Yes. 21 diverting or going -- moving away from the way the 22 work was done originally. So, my sense from this 23 conversation, from the agency's perspective, is there are every single step in the process. 24 25 And if you look at this list, that's what Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

it looks like. They are looking for you to have 1 2 data or research or back for why you do literally 3 everything you do. So --4 DR. DE MELLO: It requires -- this requires individual validation then. 5 MS. SILVERMAN: Yes, so this is Meryl. 6 We 7 -- hold on. So, what I -- yeah. 8 COURT REPORTER: Can -- I'm sorry. Can the 9 participants hear me? 10 MS. SILVERMAN: -- to finish the thought, 11 process is we didn't necessarily go back and do 12 that. What we did was we were able to show that 13 what was really important was coverage and contact, 14 time and concentration, right. 15 And so that even though we weren't using 16 the same number of novels or the same configuration 17 of novels, we were still getting the contact and the 18 contact time. 19 And so, there -- you have to be able to 20 take the research, apply it to your facility and 21 make it -- make the argument that what you're doing 22 is in line with the original research. And my sense 23 is that the small guys aren't going to know how to do that. 24 25 As someone just made the point, both of Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 these folks are from a culinary background. They're 2 not from a science background at all.

3 DR. CURTIS: And that's, I think, that when 4 they change something from a culinary standpoint, it 5 could impact the -- something. It may not impact 6 the starter culture, but it may affect something 7 else that would impact food safety.

MS. SILVERMAN: Correct. And then --8 9 COURT REPORTERS: Can the speakers hear me? 10 MS. SILVERMAN: -- they may not. But they 11 have to be able to defend that it doesn't, right, 12 which goes back to the ultimate, the end-product and 13 the characteristics of that product that either 14 don't support the growth or you've got that five log 15 kill through another method or five log or two log. 16 I was getting so confused when we going 17 through it. I'm not sure what log you're supposed 18 to get. But yeah. DR. DE MELLO: Well, if you have a product, 19 20 contact leader is five log of someone else, you are really in trouble because five log is a lot, right? 21 22 And that requires five log reduction, so -- for RD. 23 So, there's a lot of things that need to be 24 discussed here.

25 DR. EBERLY: So, this is -- sorry, this is Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 -- is it okay or --

2	DR. DE MELLO: Go ahead.
3	DR. EBERLY: So, this is Dr. Eberly in
4	Maine. So, I am basically a regulator, right? I'm
5	just FSIS, but on the state level.
6	So, I guess I just wanted to make a couple
7	of comments briefly. I see the quandary here for
8	FSIS because I have I fact the same thing. You
9	know, I get this just a pile of journal articles
10	that kind of support it, but not quite.
11	But there's nothing else out there. And I
12	feel for my processors, all of which are small
13	processors, because it's very difficult for them.
14	They don't have the financial resources to do their
15	own studies.
16	And, you know, their companies are very
17	proprietary and not willing to release data that
18	they have somebody else has done and paid for in
19	order to help them.
20	I guess my feeling is that, you know, I'm
21	not looking at these choices here, I'm not super
22	keen on, you know, B, just letting them do whatever.
23	But I'm also not particularly keen on A, which is
24	basically shutting down anybody who doesn't have
25	\$50,000 to do a channel study because for two
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 reasons.

2	First of all, it seems a little unfair,
3	right. It seems like we're getting I mean, one,
4	this large industry largest slaughterhouses who
5	have more money, right, will be able to advance in
6	the marketplace as opposed to a smaller facility.
7	And not that their not, you know, the thing
8	that's ruining all our lives at the moment, but
9	COVID has kind of just demonstrated that small
10	processors are a really important part of the makeup
11	of the meat industry.
12	When they were this year with a larger
13	facility, there was some smaller facilities that
14	were the ones who have got planned and still are
15	booked until next year. Oh, well passed next
16	year.
17	So, I do you think there is some the
18	agency perhaps needs to be a little more flexible
19	when it comes to accepting journal articles that
20	maybe they aren't, as someone else said previously,
21	maybe it wasn't the exact novel, right?
22	I'm not saying no to completely disregard
23	changes. I mean, there's some changes are
24	significant. But I do think there needs to be some
25	flexibility in what USDA is going to exercise and
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 it's actually going to fund studies to help these, 2 you know, publicly funded studies, right, that 3 anybody can access.

I think in the meantime, they should consider at least doing case by case, you know, looking at what somebody said, does the novel matter? Does the temperature matter? Does the whatever matter? So, I'm done -- sorry.

9 COURT REPORTERS: I'm sorry to interrupt, 10 but if all the speakers on the line could please 11 state your name each time you speak, for the record, 12 please? Thank you.

13 MR. GUNTHORP: This is Greq Gunthorp. 14 MS. SILVERMAN: Hi, this is -- go ahead. 15 MR. GUNTHORP: Oh, thank you. I'm a small 16 farmer in a very small processor in Indiana, 17 Gunthorp Farms. We actually produce the dried 18 product. We do a -- prosciutto ham. Don't have our 19 first ones coming out of our cave yet, but it should 20 be around Christmas time.

We are fortunate in that in our product we found a scientific support paper that as long as we age for more than 206 days and use one of the prior trichina methods in 9 CFR 318.10 that our process will be a validated process. So, we're fortunate in Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 that regard.

2	I would say to talk about what the problem
3	is for me as a processer's perspective and knowing
4	many of the other federally-inspected
5	establishments, because I would guess that it's less
6	than 25 in the whole country that are USDA inspected
7	establishments that produce dry, cured charcuterie
8	products.
9	And, I mean, I think I know most of them.
10	I would say that the problem, in my opinion, from a
11	processor's standpoint, is first and foremost
12	enforcement actions are largely, over the years,
13	have been on beef and not being able to substantiate
14	E. coli 0157 log reductions.
15	And then the second thing that I would say
16	is that there's a lack of consistency or continuity
17	across districts and how these enforcement actions
18	have taken place in the past. And I know, for a
19	fact, that some support in some districts has been
20	adequate while it's gotten other plants on
21	suspended.
22	And I know from my personal experience on
23	dealing with other issues that I know that the
24	higher up that we get in USDA, we've got a couple of
25	EIOs in our district that are hurt with. But in
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 general, as I get to the high levels of risk 2 management, they are very, very knowledgeable and 3 very, very good at making determinations at that 4 level.

5 And I would recommend that as fewer 6 establishments actually produce these products, that 7 perhaps these kind of decisions should be made above 8 the EIO level and perhaps even made above the 9 district level so that there's continuity and so 10 that there's some real solid decision making in 11 these processes.

MS. RENDON: So, this is Tina Rendon. And I would agree with that statement in the sense that, you know, continuity as far as the guidance on how to enforce it. And I think that's gone into that purpose behind doing a guidance document.

17 That way that the industry has that to 18 fallback gone to use as their justification and 19 their systems help them support it. Going off what 20 Eberly was talking about, the Option C, doing Dr. 21 more mixing, matching of, you know, journal 22 articles, scientific studies such as that, I feel 23 would be the best way in order to make this happen. 24 And then going off of what Kim said, 25 allowing that flexibility -- or both of them said Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 that -- as far as allowing the flexibility on 2 applying even those journal articles.

But that thing, the challenge I think most people are going to run into is finding those -that support. So, making that available through the guidance document would definitely be a tremendous help.

8 One other thought is kind of like the 9 process. And I know this has been backed by like 10 the Meat Institute, NAMI and the Agency for Appendix 11 A. I know that the lethality, Appendix A has been a 12 big, long process as far as trying to get that 13 published and forced and a call for support on 14 scientific help.

You know, I don't know if that's feasible in the sense of an agency putting it out there, scientific help, you know, a call for that, for the universities. I know we've got a couple that are represented here.

20 I know you in Ohio have had some work. Т 21 don't know what kind of studies that you have that 22 would be available to the public or if it's all 23 proprietary or what assistance can be provided 24 there. But that's one way I would suggest that we 25 couldn't (ph.) go about getting more scientific Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

126

1 studies that are publicly available.

2	DR. CURTIS: Pat Curtis. Would you, in
3	looking at those scientific studies, do you think
4	that the agency should provide the key criteria that
5	you're looking I'm thinking if they're small
6	companies, as I don't have the expertise of all
7	culinary, will they know what are the key components
8	that they're looking for scientific support for?
9	Is it the pH? Is it temperature or is it
10	time? You know, providing them some guidance in
11	that area.
12	DR. KNIPE: Yeah, this is Lynn from Ohio
13	State. I think these small culinary types are
14	learning, and I just think it's not been in their
15	nature to focus as much on the safety as the quality
16	and whatnot.
17	But another thought I had, I remember when
18	we had the issue of jerky and destroying salmonella
19	before we dried the product. And Wisconsin came out
20	with it was a pretty extensive study, but my
21	first thought was we're going to tell these small
22	processors that this is the major research we have
23	for them to follow.
24	And we didn't tell them they had to do it
25	this way, but before I knew it, almost all of our
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 and we've got a couple hundred very small

2 processors. They were all following the Wisconsin 3 study. They were adapting their jerky to make it to 4 meet that requirement.

5 So, I'm very much against requiring try and 6 expect these very small companies to do the 7 challenge studies themselves. But I am wondering if 8 it would be possible -- I know they wouldn't like 9 it, but if we could set up -- and I think that's 10 what Pat was getting at, was maybe setting up some 11 requirements.

And as we heard earlier that there's more safety with the higher temperature fermentation, that right there a lot of these culinary people are going to say, no, I want to do it the European way and I want to ferment at lower temperatures.

But if the data's not there, I don't know what you would think about setting up some parameters and then saying this is what we have and adapt your process to that.

21 MR. GREMILLION: Hi, this is Thomas 22 Gremillion, Consumer Federation of America. That 23 makes a lot of sense to me. And, yeah, I was going 24 to ask, are there templates available to these 25 processors to kind of, you know, some pretty get-Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 away that they can meet the requirements.

I wanted to -- I'm confused now by what Dr. 2 3 Knipe has said. It sounds like there's a lot of 4 these small processors. And Greq had mentioned, you know, there's just a handful. 5 6 I definitely agree too that it doesn't seem 7 like there should be variation from district to district on those. But I wanted to -- maybe the 8 9 FSIS staff can clarify, how many regulated entities 10 are we talking about here? I mean, how many federal 11 inspected producers are we talking about? 12 MS. SILVERMAN: Yes, so this is Meryl 13 Silverman. I can give you a rough idea from the 14 data within the public health information system. 15 So, we do know, so at least now, it was 16 about a year ago there were about 150 establishments 17 that had at least one ready-to-at fermented meat or 18 poultry product. There were about a hundred that 19 had at least one salt-cured meat or poultry product. 20 And then the challenge of our data is that 21 there there's over 500 that have dried meat. But 22 that would include something like biltong, which is 23 a South African air-dried beef strips. But it could 24 also include jerky. So that data is not as clear 25 which jerky's typically cooked and doesn't fit into Free State Reporting, Inc. 1378 Cape St. Claire Road

> Annapolis, MD 21409 (410) 974-0947

129

1 what we're looking at.

2	But again, about 150 establishments with
3	fermented products in their profile, a hundred with
4	salt-cured, several hundred with dried.
5	DR. KNIPE: This is Lynn Knipe again, just
6	to follow up. When I was talking about having a
7	couple hundred very small processors, most of them
8	are only making jerky. Whatas far as companies
9	that are making fermented dried shelf, stable
10	products without heat, we've only got two or three.
11	And so that's the difference.
12	MS. SILVERMAN: Yeah, this is Meryl. Just
13	one other thing, if it would give context, so
14	there's a little over 2,000 establishments that make
15	ready-to-eat products in general. And then, you
16	know, there's a few hundred that have these products
17	in their profile.
18	DR. EBERLY: This is Jennifer Eberly. I
19	have a question for Meryl. If we considered I
20	guess I don't know what options it is now, Option T,
21	where this really sounds like what we want is a
22	guidance, clearly, is what we we all want a
23	guidance.
24	And I understand that the problem on you
25	all's end is that you don't have enough information
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 to issue a guidance. But, as a stop gap, if we 2 considered, as Lynn suggested perhaps one entity. I 3 don't know if WIMS (ph.) or whomever.

If one entity was established to evaluate, you know, does this journal article meet, even though it's not perfect, does it meet whatever -- is that something that the agency would be able to do? Is that even an option?

9 MS. SILVERMAN: Maybe April could also 10 I don't think we -- you should rule it weigh in. 11 out as a recommendation. But, yeah, any -- I think 12 it would be really important that the committee does 13 lean toward this option, like the guidance you can 14 give advice FSIS as to how we would do this or be 15 helpful, to be -- to make consistent decisions from 16 establishment to establishment.

I don't know, April, if you have any thoughts also about that recommendation.

MS. REGONLINSKI: This is April. I think. If you will -- the most information you can provide, FSIS with your recommendations, I think, would be the best thing.

And then we would eventually decide what we would do with those recommendations at the end. We don't want to cut off any deliberations or try to Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 point you in any directions here.

2	MS. SILVERMAN: So, does the committee have
3	any other suggestions on more information
4	surrounding the idea of that suggestion, of getting
5	someone to evaluate, you know, to provide for one
6	entity to evaluate establishment support?
7	MS. RENDON: So, this is Tina Rendon. Is
8	it possible or feasible or whatever to submit
9	articles, scientific support such as that to ask
10	FSIS for review or is that are we talking about a
11	different type of entity?
12	DR. EBERLY: This is Dr. Eberly. I really
13	just want to comment that, I hate to say this, but
14	sometimes I send the questions to ask FSIS, and if I
15	don't like the answer, I just send the question
16	again until I get the answer that I want. So, I
17	just wanted to throw it out there that this is
18	sometimes a little problematic.
19	MS. REGONLINSKI: So, I guess the bet with
20	that in mind, then what are the criteria that we
21	would want to add as a portion of this
22	recommendation?
23	MR. GREMILLION: Hi, this is Thomas
24	Gremillion. All right, I'd like to understand the
25	allowed establishments the test and hold
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 indefinitely option. Could you elaborate on that, 2 what that would mean and like why that would be 3 attractive to some of these producers?

4 MS. SILVERMAN: So, this is Meryl Silverman. At least I can say for FSIS, so we did 5 6 discuss in some of our documents how establishments 7 may, while they're gathering their scientific support test, and hold the finished product. And we 8 9 typically recommend 10 to 15 samples per lot to be 10 tested for at least one pathogen, for just 11 Salmonella.

And so that would be in lieu of having scientific support. So instead of putting the upfront cost to a challenge, establishments can pay the cost per lot to have it tested while they can gather support. So, this option here was -- it was originally discussed in the 90s before HACCP was implemented.

And so that blue ribbon task force was, in lieu of gathering scientific support, establishments could support each lot as safe by collecting samples of it and having the finished product tested.

23 MR. GUNTHORP: Would that -- did this step 24 require any log or reduction -- sorry, this is Greg, 25 Gunthorp Farms. Did that step will require any log Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 reduction support in the process at all?

2 MS. SILVERMAN: No, not from the original 3 blue ribbon task force. We have taken the position 4 that the -- that's not consistent with HACCP that 5 establishments do need to show some amount of 6 reduction and come up with some targets.

7 It could be the five logs are an 8 alternative. But that's why we wanted to put it to 9 the committee, to see if that's an option should be 10 considered.

MR. GUNTHORP: Because, I mean, that's a relatively inexpensive compared to what you were talking about before, but it's just, like you said, doesn't -- seems extremely contrary to the whole HACCP principle.

MR. GREMILLION: Yeah, this is Thomas Gremillion again. I mean, I see a couple problems with that. Of course, in one you could kill the pathogen that you're -- if you're only testing for salmonella, then E. coli 157 could slip by.

And, two, if you just -- there could be a change in -- or something and you could make your product because -- I mean, yeah, just, it's -- I mean, I wish could just say that, but just kind of that, the last comment, it's really not consistent Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 with HACCP.

2 DR. DE MELLO: Another question. This is 3 Amilton De Mello again. So is the requirement, is 4 it a 5.0-log reduction in salmonella and apparently, you're trying to discuss if this can happen in situ, 5 6 right. 7 So how does the agency expect to see or an internal validation of whatever it wants to do, a 8 9 5.0-log reduction? You know, how often do you have 10 5.0-log of salmonella in these products? 11 MS. SILVERMAN: Yeah, so the 5.0-log 12 reduction comes from a risk assessment that we have 13 performed and typically our recommendations take 14 into account baseline level pathogens in the 15 product, but also allows for a safety margin. 16 And so NACMPI recommends for a target, 17 lethality targets to have at least a two-log safety 18 margin. MS. RICE: 19 So once --20 DR. DE MELLO: Yeah, this is Amilton again. 21 MS. RICE: Sorry, this is Kim Rice. I just 22 wanted to add on to that, Amilton. So once a 23 process has been validated, then it will give a 5.0-24 log reduction. You don't have to do that, that 25 study again and again and again. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 You just have to show that you're meeting 2 the requirements or the parameters of that study. 3 That's all you have to do. You don't have to do the 4 testing over and over and over again. DR. DE MELLO: No, no, I understand that 5 6 point. What I question, myself, is what is the --7 suppose that they have salmonella contamination in these products, right. That's thinking about worst-8 9 case scenario. 10 How often that a concentration reaches 5.0-11 log? That's the first thing that I want to know. 12 Yeah, I got it. Once you proved once, I understand 13 that. But I mean, you're requiring a 5.0-log 14 reduction basis risk assessment. 15 What is the common log contamination that 16 we have when a product is contaminated salmonella? 17 Can somebody answer that question for me? 18 MS. SILVERMAN: It's going to depend on the 19 raw material, right? 20 Yeah. But how much? DR. DE MELLO: That's 21 the parameter -- so to reach 5.0-log of salmonella 22 is a lot. So, you know, I would like to know, do we 23 come up with this parameter as a 5.0-log reduction 24 based on the risk assessed. 25 If you go back and evaluate all the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

products that were contaminated salmonella, what is 1 2 the average of the contamination load? 3 MR. GUNTHORP: Without temperature abuse --4 this is Greg -- without temperature abuse, I wouldn't think that USDA-inspected products should 5 6 see more than a one or two-log reduction. Or one or 7 two logs of salmonella ever, except for without 8 temperature, so. 9 DR. DE MELLO: That's my point. Thank you. 10 MS. RICE: Pat, this is Kim Rice. Back to 11 your original question, I think the hesitancy that I 12 have is that we're being asked Question 1 and then Question 2. I think we should be Question 2 and 13 14 then answer Question 1 because, clearly, there's a 15 hole, right, in the information available to anyone 16 to use. And so, what are the needs, right, and how 17 18 difficult would it be to fill those holes and then, 19 in the meantime, how should FSIS handle it? 20 Because, you know, the regulatory person in me is, 21 everybody should be playing by the same rules. 22 Period. 23 So, the validation requirements are the validation requirements. However, there's a reality 24 25 that there's this group of products and this Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

consumer demand for these products that smaller, 1 more culinary type folks are trying to fill that 2 3 need. And that hole needs to be filled up in the 4 meantime. So, I'm reluctant or are at a loss as to 5 6 what to -- how to answer Question 1 at this point. 7 DR. CURTIS: Well, if you like, we can move to Question 2 and come back to Question 1 after 8 9 we've addressed Ouestion 2. 10 So, Question 2 is, how can FSIS assist 11 industry gather gathering scientific support and 12 facilitate filling research gaps, even though it is 13 not a research funding organization? So, let's 14 address that and then we can go back if there's 15 additional things they want to have going 16 afterwards. 17 DR. EBERLY: This is Dr. Eberly. Ι 18 understand the quidance is not done yet. Does FSIS 19 have available a list of all of the journal articles 20 that are presently accepted by the agency available 21 for people to look at? 22 DR. CURTIS: Yes, at least for the 23 guideline, we did do a comprehensive literature 24 review. We don't have that list available, but it 25 would include a list of journal articles by product Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 type, is the intention.

2	DR. EBERLY: Who would sorry, the is Dr.
3	Eberly again. So, based on the list that you have
4	now, would you be able to come up with a list of
5	gaps of journal articles that we need?
6	MS. SILVERMAN: This is Meryl Silverman.
7	Yes, I think so. I think we can show through that
8	where there lacks scientific research.
9	MS. RICE: This is Kim Rice. And does it
10	make sense, those gaps? Are they simply because the
11	formulas don't match up or the exact process doesn't
12	match up? And is there a way to look at or have
13	someone that's an expert in that particular area or
14	that particular organism look at it and say, yeah,
15	but the end-product is fine or that doesn't affect
16	the outcome, and we would still have a safe product,
17	even though this isn't an apples to apples
18	comparison? Is there a way to do that?
19	MS. SILVERMAN: For FSIS, the goal is or
20	intention in the guideline is to give some rules of
21	thumb of when parameters can differ.
22	And that would be acceptable, but I think
23	the way we're currently approaching it, which has
24	been discussed as to leave a lot of potential
25	differences that establishments would need to
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 support. So that's really where I think the 2 committee's feedback on that Option C could be 3 helpful or also here.

And then again, it's also both, so for some there's not a single article available.

DR. KNIPE: This is Lynn Knipe again and what I question is a lot of the gaps may be more -a lot of that concern may be more on the drying process because it seems like we've got a lot of data that show how much -- potential we have in fermentation. May not be perfect, but where we may be really lacking is the drying data.

And what I've noticed with the starter culture companies, they may only go out a couple of weeks. And there's also some data to support, once you package the products and you store it and you continue to have lethality.

But Meryl and I had a little offline conversation this morning. And she reminded me of something I had really forgotten, is the diameter of the sausage and how much difference that makes in the dry, the lethality.

And all of the, particularly in artisan companies all have very specific interests in the size of their product. But I think that's where one Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 of the challenges is. Every time you see a
2 publication, they're not using the right diameter
3 product or whatever for the drying.

And that's one of the challenges, for me sometimes, is kind of overwhelming, where -- how can we develop a study that really fits all these different options?

8 MR. GUNTHORP: This is Greg again. You 9 know, if we look at the old trichina regulations 10 which are gone now, but USDA did that way back in 11 the day on trichinosis with percentages of salt and 12 also trying times. If you just had that data, you 13 could solve most of it for differences in the salt 14 differences in drying and parameters on pH, water 15 activity, that kind of stuff.

16 MS. RICE: This is Kim Rice. I don't think 17 that data's is gone. The writers are gone. But the 18 data should -- we should still have. Correct? 19 MR. GUNTHORP: Correct, but the USDA --20 MS. RICE: The FSIS? 21 MR. GUNTHORP: -- doesn't consider those 22 all those validated process, right? Definitely 23 don't consider them validated against salmonella or

25 control than salmonella or listeria. Just cause you Free State Reporting, Inc.

24

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

listeria because trichinosis is generally easier to

1 control trichonisis doesn't necessarily mean you control salmonella. 2 MS. SILVERMAN: That's correct. 3 4 MS. RICE: Yeah. MR. GUNTHORP: And they're a really good 5 6 starting point. 7 DR. CURTIS: We have had a research priority on that idea but, because of the holiday 8 9 district kind of regulations which are now in 10 quidance for other pathogens. 11 DR. EBERLY: This is Dr. Eberly. I just 12 had a general question. How difficult is it to 13 determine what is going to determine what is going 14 to be the research priorities? MS. SILVERMAN: We have an internal review 15 16 panel that -- from multiple offices that reviews 17 them and change -- and then we typically post them 18 on the website a few times a year. 19 DR. CURTIS: This is Pat. What else do you 20 do with them? Did they go to ARS? I was asked 21 earlier if they go to MIFA (ph.). Are there -- how 22 do you get them out or what do you anticipate in 23 getting them picked up whereby -- from the agency? 24 MS. SILVERMAN: Yeah, so as I mentioned 25 earlier, this is Meryl. We should make sure we Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

142

always comes in to ARD, so it's a challenge. 2 3 DR. CURTIS: Other ideas on how we might be 4 able to help fill some of these gaps? MS. RICE: So, this is Kim Rice. 5 So, I 6 think universities like Ohio State and Wisconsin and 7 I think Cornell and it sounds like Nevada, the folks out in Nevada, they're all doing good work with 8 9 small processors. 10 My recommendation would be the agency, you 11 know, visit with them and see, you know, basically 12 compare what they've got and if there's any way to 13 utilize what they have to then build out the 14 quidance even more. And I think then getting the 15 guidance is important to the research priorities or 16 the research monies. 17 I think ARS and MIFA an any of the other 18 sources of funding, I don't know if there's money 19 in, let's say, the rural development group. I can't 20 think of their acronym off the top of my head, but 21 are there monies there that can be moved to do some 22 research to help support these small and very small 23 businesses to develop out those markets some more? 24 I'm making this up as I go, literally, so those 25 would be my recommendations. But the guidance Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

share them with MIFA and ARS. I think this just

1

143

1 itself with what you have, getting that out so that 2 we at least know where there are holes, I don't 3 think we're ever going to be able to do a study or a 4 series of studies that gets literally every gyration 5 of every different type of product out there that 6 somebody could come up with because everybody's 7 always going to want to do the next great thing.

And so, I think if we can get the basics 8 9 into that guidance document, of here are the four, 10 five, six, however many they are product attributes 11 that are absolutely critical to food safety and here 12 are the things that affect each one of those that 13 you have to take into consideration, and here are 14 the articles that support or don't, I think that's 15 the best way to get to that data and information 16 gap.

17 DR. CURTIS: This is Pat. One of the 18 things that you might do is get those scientists 19 together that have done research in this area and 20 let them brainstorm as to what they've done among 21 the groups of them and what they what they may know 22 or what they might be able to do to fill some of 23 these gaps, because they may be able to create a 24 multi-state, you know, grant proposal or something 25 that will go after this.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

Since they don't ever get together to talk,
 they would probably never get together to actually
 do this project. But they may have information from
 other research was done in some of these areas to
 answer some of these questions for us.

And for the guidance that you've already researched and know what those articles are, you probably know who those researchers were that you would want to get together. Other ideas to fill the gaps?

11 MS. RENDON: This is Tina Rendon again. 12 Piggybacking off what the two ladies just said as 13 far as getting together the people that have been 14 involved in research, is it a possibility of this 15 committee or subcommittee to have a working group? 16 Could it organize that charge, you know, to get 17 those people together, to bring forward discussion? 18 MR. GUNTHORP: Greg Gunthorp here. I think 19 one thing that ought to consider, too, you know, is 20 multiple hurdle approach and the pre and post 21 interventions are acceptable to add to the cumulous 22 log reduction. 23

So, if somebody's got a study that gets them close to five logs, say a simple vinegar-water rinse the product before they start that, does that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

add enough, a page at the end, what packaging and 1 2 temperature, what other multiple hurdles can be 3 added to existing validated studies? 4 DR. CURTIS: Got very quiet. Any other ideas? 5 6 MS. RENDON: This is Tina Rendon again. Ι 7 have a question, I would say, for Greq. I believe 8 you said that you actually make one of these 9 products and know other people in the industry that 10 make these products.

Are under any kind of trade organizations for this type of artisanal meat? Maybe you can tap into as far as, you know, bringing forward the scientific studies and, you know, different things that they've done, you know, that maybe if we were to develop a working group or something like that, they can partner with and help lead the charge?

MR. GUNTHORP: You know, I think there's a couple suggestions. The first one, through the Oregon State extension, would be the Niche Meat Processors Assistance Network, which is right down their alley on working along this line.

So then the trade association, I can never remember the exact wording for it. They're based out of Pennsylvania, the small meat processors and Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 American Meat --

MS. RENDON: AAMP, Association of American
Meat Processors.

Yeah, AAMP. AAMP does a 4 MR. GUNTHORP: 5 really good job in this space. Awesome. Yeah, the 6 other thing that I was thinking about the other day 7 that, you know, it goes along with my thought 8 process, that perhaps these decisions should be made at a higher level, is that, in my experience, and I 9 10 know that of several others, perhaps these decisions 11 should be started by USDA earlier in the process and 12 perhaps they need to reevaluate the role of food 13 safety assessments on these products.

Because virtually all of these products are a very long time in what they take to produce them. And, you know, several of my friends have been involved in enforcement actions, like I said, mostly on beef products that they were trying to produce.

But it almost seems, and maybe it's counter-intuitive to FSIS, but it almost seems like that they should be involved at a higher level, even if it's just the EIOs at the beginning of these processes rather than after the processes are already done.

25 Like us, you know, we're two-thirds or Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 three-quarters of the way and producing a ham and we 2 get three inspectors a day at our plant. And I know 3 for a fact that two of them haven't even really 4 looked over our HACCP plan.

And we've had no, you know, guidance or 5 6 enforcement or, you know, I don't want to say 7 enforcement, but no looking at it by anybody beyond those levels. And, you know, it's seems like it 8 9 would be simpler before the product was out into 10 commerce to have these arguments and discussions 11 rather than after the product's done and people are 12 eating it.

DR. EBERLY: Hi, Greg. This is Dr. Eberly. I guess I'm a little confused because I wouldn't allow facility to produce a product until they have given me a hazard plan for it that I had approved. So --

18 MR. GUNTHORP: you know, USDA doesn't -19 DR. EBERLY: I guess I'm just --

20 MR. GUNTHORP: USDA, though, doesn't really 21 approve HACCP plans. Maybe state inspection 22 programs do, but USDA doesn't. You know, we have to 23 have a HACCP plan. But it's -- the process is kind 24 of a little bit convoluted on a ham that takes a 25 year or two on the validation.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

You know, the validation on the design of the HACCP plan is relatively simple. But the validation on the actual process going through it, you know, we've already defined our frequency in that it's going to be 12 lots and we're testing five hands for brine concentration.

And we've added an additional hurdle to start with. We actually put two anti-microbial them beforehand. So, you know, we are validating all that, but. You know, I don't want to throw USDA under the bus, but I mean, it's -- they're -they've not put a lot of effort into it.

And I think, in USDA's defense, these are really and, you know, also in the processor's defense, these are really complex food safety questions on these products, on understanding, you know, interaction between these pathogens and salt levels and moisture levels, water activity levels and pH.

And, you know, and I -- they're typical. You'll understand, but I don't know that their typical line inspection staff understand these. I'm not sure that a lot of the EIOs would even have experience in these areas.

25 DR. EBERLY: Well, Greg, you give me too Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 much credit because I'm not sure what I'm just 2 saying it all perfectly either. I do -- I think 3 maybe -- let me clarify what I said. 4 I don't actually -- I don't necessarily

5 approve -- hello? I don't approve the HACCP plans, 6 but I guess, because it is a small program, that 7 they're saving themselves and getting in trouble by 8 having a look at it before they start producing. So 9 let me clarify that.

10 MR. GUNTHORP: Yeah, that -- you know, that 11 just doesn't happen with USDA, though. You know, 12 they just come out right and tell you this. They're 13 not your consultants. They're not this. They're 14 not that.

You know, they don't really look it over or -- I mean, the process is just completely different all over the country in that regards too, depending on how you're staffed with the -- you know, in our plant, we're unique in that we're producing these products in a slaughter plant.

So, we have a line inspector, a public health veterinarian, and we run a second shift. So, we have a second shift processing inspectors. So we'd have the opportunity for three inspectors a day to be looking over these HACCP plans.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 But, you know, like I said, I don't know 2 that lots of them have had lots of training in 3 drying and cured products and that kind of thing. DR. EBERLY: Well, I think that's what 4 causes a problem, though, with asking FSIS to be the 5 6 consultant because you're going to get -- you're 7 only going to get as much knowledge as that person has. 8 9 And, you know, I struggle with that myself, 10 because the -- what do you want, right? But that's 11 not that's not my job, because what has happened and 12 with everybody happen is you'll come back later and 13 say what you said it was okay, but now it's not 14 okay. So that's -- I do understand FSIS's --15 MR. GUNTHORP: Okay, it's a Catch -- yes. 16 DR. EBERLY: -- position on this, I guess. MR. GUNTHORP: Right. I understand it 17 18 completely, too. It's a Catch-22 because, you know, 19 the little plants lots of times don't have the time 20 and the resources and, you know, the inspector's 21 there and they're asking them questions with the 22 inspectors in a situation that, no matter how they 23 answer, it's not good. So, I mean, I completely understand the 24 25 USDA, you know. They're in a different role than Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

providing the food safety answers. But that's a 1 2 different thing, in my opinion, than them evaluating 3 a HACCP plan to see whether compliance with 9 CFR 470 requirements, you know, that once you have it 4 designed, rather than, you know, not having somebody 5 6 at a high enough level to actually be able to sit 7 down and make those decisions before the plant is in an enforcement action, you know, and before people 8 9 are served product.

DR. EBERLY: So, you're actually able to get your -- move into production without a validated HACCP plan?

MR. GUNTHORP: Well, I mean, I keep coming back to the, you know, these -- and these products and, you know, I've got answers from this Ask FSIS. And these products, you can't validate a plan, you know, and we haven't shipped anything because we haven't produced any product that's ready to go.

But you can't produce a validated product in 90 days when the product has to dry, when you're intending for it to dry for a year.

22 DR. DE MELLO: This is Amilton De Mello from 23 Nevada. Yeah, I got a little bit confused on an 24 issue about HACCP plans and -- well, first, I think 25 I see all sides, the producer side and the agency 26 Free State Reporting, Inc. 1378 Cape St. Claire Road 27 Annapolis, MD 21409 28 (410) 974-0947 1 side.

2 One of the things that we always need to 3 remember, this type of conversation, is that USDA is 4 a regulatory agent. It's not a consultant. So, on of the things that I usually recommend to our 5 6 producers here is that, you know, we used to be one 7 step ahead of everything. So, you know, you need to understand that 8 9 you need to know what you're doing first because 10 there are some regulatory person out there, they're 11 going to check what you are doing. 12 Now, if you are federally inspected, if you 13 had a USDA in your product, your HACCP must be 14 validated. So, and I -- it comes back to the idea 15 of a small producers like small processors, 16 sometimes they need just to dry or, you know, age a 17 product for a year before having a -- they give us 18 90 days of validation to validate their HACCP plan. 19 You know, this is something that the agency 20 needs to understand too. So, how we're going to 21 find out that the closest point for both sides of 22 depends a lot of these, the producer who needs to 23 have the proper technical support to achieve what 24 the regulation is. 25 And I think that that's what the base of Free State Reporting, Inc.

> 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 the discussion, right, how we're going to get that 2 producer knowing that he needs to be one step ahead 3 and he needs to make sure that the product meets the 4 requirement. So, is it viewed, is, I think, we need 5 to move forward.

6 DR. EBERLY: This is Dr. Eberly --7 DR. DE MELLO: Come back to the state, the 8 state inspection, so if you say, well, we do not 9 have a HACCP validation, the state does the HACCP 10 plans.

I don't understand that because if you do have a state inspection, yes. That's your state responsibility. But if you're federally inspected, your HACCP should be actually approved by USDA.

15 And I understand, most of times the 16 inspector that is there or your supervisor that is 17 there might not understand everything that you're 18 trying to do. You get, like I said, they are 19 regulatory, right. They're going to have to get 20 your HACCP. They're going to look at you and give 21 you an idea at the end of the day, which is their 22 job.

So, I think if that technical information and that the producer needs to have, it's producer responsibility. Now, the question is how expansive Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 it is and how hard it is. So, I think that 2 that's -- the answer that needs to be -- that's the 3 question that needs to be answered. Sorry, go 4 ahead.

5 DR. KNIPE: This is Lynn Knipe again. And 6 I like this idea of a working group, and I would be 7 willing to help that if you come to that point.

8 But I wanted to -- I had another thought a 9 little bit ago, but I accidentally hung up my phone 10 when I was trying to mute it. And I'm wondering if 11 somebody else might have brought it up.

But my question is, maybe more for the people who represent large companies, there's at least one, and I know there's more than one, but I know of at least one company, and I won't mention their name, that's making this product and they had historically gone for a long time.

18 The president of their company spoke at a a 19 meat conference several years ago. And I went and 20 approached them, and they had a long line of people 21 wanting to talk to them and they gave me their card. 22 I got a hold of them afterwards to see if 23 they would be willing to share because they've done 24 -- they've paid for these studies. And I was just 25 inquiring if they would be willing to share any of Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

this with smaller companies as far as validated 1 2 data, and they said, no.

3 And I was just curious if anybody -- I 4 remember a time when HACCP first came out that the -- some of the larger companies were taking the 5 6 stand that safety was not a competitive issue. And 7 they wanted everybody to be helping each other. But I just was curious if anybody has any ideas of how 8 9 we might encourage some of these large companies to 10 share some of that. 11 DR. EBERLY: Dr. Eberly. Just to kind of 12 qo off of what he said, my question is for Meryl, I quess. 13 Is there a process for making, I don't know, 14 dried, cured salami, pick a product -- are there 15 some processes that have been validated that are 16 public knowledge? 17 Because I know that, yes, those people who 18 are artisans are not going to want to be the next 19 best thing. But I also know there's plants that would just like to put a salami out and increase 20 21 their -- they're not so concerned with having the 22 perfect formula. 23 Are those -- and this is for anybody, 24 actually, because it's not my area of expertise. 25 Are there any methods of making, say, a dry-cured Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

salami or some other product that USDA has said, 1 2 this process is validated? I'm just curious, 3 because that's something we could potentially -- I 4 don't. That's my question. 5 MS. SILVERMAN: Yeah. So, this is Meryl. 6 I can start because it was directed to me. So yes, 7 for some products, there are, at least what you are describing in the form of journal articles. 8 9 There isn't like a generic cast up model 10 available right now. But there are journal articles 11 for some products that would support a 5.0-log 12 reduction in salmonella when those parameters are 13 followed. Does that answer your question? 14 DR. EBERLY: Right. So, I guess what I was 15 just -- what I was thinking of is, in the meantime, 16 while we're waiting for this guidance that people 17 can use to potentially support whatever their 18 specific process is, whether FSIS could publish some 19 of, you know, a compilation of some of these 20 validated practices just for the people. 21 I don't know if that would be appropriate 22 or not. It's just a thought. But, for the people 23 who just want to be able to produce salami and not 24 have to do a challenge study or, you know, they just 25 want to make a product. And they don't -- they're Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 willing to follow that recipe?

2 DR. CURTIS: Other ideas? Not hearing any 3 other ideas for this, is there anything else you 4 want to go back and add to Question 1? Based on our discussion we've had about 5 6 Ouestion 2? 7 MS. REGONLINSKI: I have a question. How much does it cost to do test and hold? I mean, how 8 9 much, just a ballpark, to do our final lot? If you 10 were doing 10 to 15 samples? 11 MR. GUNTHORP: This is Greq. We spend \$35 12 a sample for a salmonella test. 13 DR. EBERLY: This is Dr. Eberly again. So, 14 when you said, I think it was -- someone said 10 to 15 15 samples. Is it done by how many -- you know, is a lot -- it's a lot of a thousand versus a lot of a 16 17 hundred? 18 Is it proportional to the number of 19 salamis, for example, in the lot? 20 MR. GUNTHORP: I mean, doesn't that come 21 down to a HACCP question and whether or not we can 22 support our frequency? In my HACCP plan, I use, for 23 our number of hams that we're going to test, we use 24 the old trichina regulations, and it requires five 25 hams out of each lot for 12 weeks in a row. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 And we only produce 10 hams in a week, so, 2 we're going to tests five of them, half of them. 3 But I didn't want to get into an argument with USDA 4 over whether we could support our testing 5 treatments. 6 In general, they lower the volume, you're 7 not going to be able to lower the test much because you still have to test a certain number. 8 9 MS. RICE: And Greq, is that destructive --10 I'm sorry, this is Kim Rice. Is that destructive 11 sampling? 12 MR. GUNTHORP: Yes, ours will be 13 destructive sampling because we're going to do a 14 brine concentration of the center muscle to show 15 that we have uniform salt concentration and uniform 16 So, yeah, those hams will be destroyed. drying. 17 MS. RICE: So -- Kim Rice again. So 18 basically, you're losing 50 percent of your 19 production to validate your process? 20 MR. GUNTHORP: Yeah, for four weeks, we're going to lose -- or for 12 weeks, we're going to 21 22 lose half of them, so we're going to lose 60 hams. 23 And then after that, what I was starting to 24 say was, we have to do that four times a year again 25 to be able to show that our process is under Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

control. So, for the remainder of my life, we'll 1 2 have 20 hams that we'll destroy. 3 DR. EBERLY: Hi, Meryl? 4 MR. GUNTHORP: And that's actually -- oh. 5 DR. EBERLY: I was just going to say, 6 Meryl, do you have a -- so he's -- it sounds like 7 he's using the trichina regulations to determine his sample size. 8 9 Has there been anything published by USDA 10 that would give him a -- you know, do you have any 11 resources to just how many samples of -- or say it 12 was dry-cured salami, how many in the lot would need 13 to be tested? 14 Yes, so typically when we MS. SILVERMAN: 15 received that question, for example, in Ask FSIS, we 16 recommend using the ICMSF. I'm trying to think of 17 the acronym. But ICMSF sampling plans and, 18 typically. we recommend the cases. 19 Those are different cases based on the 20 level of work. And we typically recommend either 10 21 to 15 samples. So that's where that came from. 22 ICMSF. And those do allow for some compositing so 23 that the actual number of samples analyzed by the 24 lab can be fewer, but they're not relative to the 25 lab size, so that would be 10 to 15 samples, Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 regardless of the lot size.

MR. GUNTHORP: Yeah, that's where they said 2 3 that, you know, in the -- to do the batter testing 4 and then use a process that only got a two-log reduction. That's where it's really, really 5 6 prohibitive for somebody that was only going to 7 ferment and dry really, really small lots of salamis. It just wouldn't be economically feasible 8 9 under U.S. inspection.

We, in the future, are going to make some salamis. We want to get our hams down first. And I personally believe that there's some support as long as you are willing to dry long enough to even a low temperature fermentations and low temperature aging. But you just have to have a really, really long, dry periods.

DR. CURTIS: We have no other ideas for 1 17 18 or 2. we might go back to the top and look up with 19 the information that we have and see if we have any 20 -- let everybody take a look at the notes that we've 21 taken from this and see if you have any corrections 22 or any other comments to add to each one. That'll 23 get you all the way back up to the top. 24 Looking at what we see here, does anyone

25 have any other -- I'll give you a few minutes to Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 take a look at it and read it and see if you have 2 any other suggestions or questions.

MS. RICE: This is Kim Rice. The bullet, the main bullet that says small -- some starter culture companies have been willing to provide support with validated studies.

7 In the next bullet, I think there is a It says, "But may not be able to provide 8 mistake. 9 everything the smaller studies need since the 10 studies were done." I think that should say 11 companies. Yeah, there we -- or processors, yeah. 12 DR. CURTIS: Thank you, Kim. Anything else 13 from this section? If not, let's move down a little 14 further.

MR. GUNTHORP: This is Greg. Back to that, where it says the 5.0-log reduction is based on the risk assessment study, would USDA entertain the idea of an establishment coming up with the supply chain that they could document and had lower than a 5.0log risk for salmonella?

MS. SILVERMAN: Yes, I mean, so far, the main alternative, lethality, we call it, is a raw batter testing option where each lot of raw batter is combined with the two-log reduction. But establishments have the ability to support --Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 alternative lethalities.

And definitely, we want feedback from the committee on Number C or Letter C. That was one of the questions for the committee to consider -should we, should FSIS accept other alternative lethalities.

7 MR. GUNTHORP: Because I mean, what was going through my head was I was just thinking, you 8 9 know, if you had, in pork, if you had a validated 10 intervention and then you had data, such as data 11 loggers to demonstrate temperature control through 12 the whole process, could an establishment support 13 that 5.0-log wasn't necessarily required? 14 Because in my mind, that 5.0-log is either 15 -- requires out-of-process control slaughter or 16 temperature abuse in the supply chain. 17 MS. RENDON: Meryl, this is Tina. MR. GUNTHORP: And then the other --18 19 MS. RENDON: Sorry, just a quick follow-up 20 question. You've mentioned the alternative of the 21 batter testing. Would that be -- is the intent to 22 describe that more, explaining that process in the 23 guideline, or is there a reference to that 24 information as far as exactly what that entails? 25 MS. SILVERMAN: Yes. So, there is a Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 document that's available and the link was in one of 2 my slides from this blue ribbon task force where 3 they do have very detailed description about that 4 raw batter testing option.

5 What we do intend to do in this guideline 6 would be to describe variations on that, like for 7 whole muscle products, how that kind of concept 8 could be applied, and then also how the concept 9 could be applied to pork and poultry products since 10 it's focused on beef and E. coli 15787.

DR. CURTIS: And Mr. Gunthorp, would you mind, so we could capture for the notes, just restating your previous comment?

14 Sure, I made the comment MR. GUNTHORP: 15 about what I think about the different log reduction 16 for lethality, that if the -- in the HACCP plan and 17 through their process that they could support the 18 slaughter process not being out of control and then 19 exceptional temperature control, such as data 20 loggers or something for the supply chain as a means 21 to -- as another hurdle to demonstrate that they, 22 you know, could control salmonella, for example, to 23 levels that wouldn't require 5.0-log reductions. 24 MR. GREMILLION: Hi, this is Thomas 25 Gremillion, CFA. And I'm assuming that would entail Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

something more than the current requirements for hog
 slaughter where there's not really a salmonella
 performance standard being verified against it.

And I'm not sure, you know, what that might
look like. But maybe you have something in mind,
Greg.

7 MR. GUNTHORP: You know, I more like the 8 validated intervention requirement in beef 9 slaughter, you know, because there's not -- while 10 most plants do, there's not really a validated 11 intervention requirement in pork slaughter.

You know, and then if you validated the slaughter and the chilling and then the temperature control after words -- and I'm not advocating for a lower than 5.0-log reduction process.

16 I'm just saying that it's would be another 17 step in a food safety program to, you know, if 18 the -- if you were close on a 5.0-log reduction and 19 then you could also support the your slaughter in 20 your supply chain, was keeping salmonella at the 21 very minimum, the product is less risky than somebody that has the same log reduction and can't 22 23 support that their slaughter on their pork has 24 validated intervention and that their supply chain 25 wasn't going above 44.7.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

I mean, we all know they're not supposed 1 2 to. But there's not really any HACCP controls in 3 that. It's just temperature receiving. USDA doesn't really police, the shipment of product 4 5 around the country. 6 MR. GREMILLION: Okay, that sounds -- I 7 mean, maybe the transport would be the focus of salmonella. 8 MR. GUNTHORP: And the correct -- correct 9 10 me if I'm wrong. I'm assuming that that's partially 11 how -- and Meryl probably can speak to that -- I'm 12 assuming that that's how USDA comes up with that 13 risk assessment of why there's a need for 5.0-log 14 reduction in these kind of products. 15 DR. CURTIS: Any other suggestions for this 16 section or shall we go down further? Move down? 17 MS. RENDON: This is Tina Rendon. 18 MR. GUNTHORP: Could I suggest --19 MS. RENDON: I just wanted to bring up on 20 that part about the recommendation over to evaluate 21 establishment support for these establishments 22 before making enforcement decisions, that bullet 23 point. 24 I think it would be important to point out 25 that USDA, the district office, the EIOs, do Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 outreach with functions. It may be beyond their 2 scope of knowledge, but that is an option that's 3 available to establishments. And so, it'd probably 4 be go to make sure to remind them that that is 5 available.

6 MR. GUNTHORP: This is Greg Gunthorp again. 7 On that bottom of that page, is it possible that we 8 had something in there that USDA considers in a very 9 low volume production, what they would allow for 10 commingling of samples so that very small producers 11 could still be testing the same amount of product 12 but do it with less tests?

13 And the reason I asked for them to consider 14 putting it in the guidance document is that that 15 would kind of give the very small processors a safe 16 harbor and that would provide their support to their 17 frequency frequencies are really difficult, at 18 times, for little processors to always support for something that USDA will go along with. 19 20 MS. SILVERMAN: Does that capture what 21 you're looking for there? 22 MR. GUNTHORP: Yes. Thank you. 23 DR. CURTIS: Any other changes or 24 additional comments for this section? 25 MS. RICE: So, this is Kim Rice. The first Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

bullet on A, did we say that, taking this option 1 2 provides an advantage for larger establishments? 3 DR. EBERLY: Yeah, I said that. MS. RICE: Okay. 4 DR. EBERLY: I don't know if everybody 5 6 agrees, but, yeah, that is definitely what I said. 7 MS. RICE: Because data gaps are data gaps. And they affect everybody. This is Kim Rice again. 8 9 And I just -- I'm not sure that A is the current 10 standard for validation. 11 And so, I'm not sure that there's an actual 12 advantage for larger establishments. They may be 13 able to make a better argument, may being the key 14 there, is not necessarily so. 15 DR. EBERLY: Well, my opinion was just based 16 on the fact that large organizations would have more 17 money potentially to just pay \$50,000 for a 18 challenge study because the lots that they're going 19 to be making would potentially offset the cost of 20 that challenge study. 21 Whereas a smaller establishment that maybe 22 is only going to produce, you know, a thousand 23 salamis a year, they're not going to be able to 24 recoup the cost of that challenge study as readily 25 as a larger scale establishment. That's what I Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 meant.

2 MR. GUNTHORP: Yeah, I agree entirely with 3 the statement in there, because if you're a large 4 enough establishment, you have the money to do 5 enough testing. You can do an in-plant validation 6 study.

7 DR. CURTIS: I actually looked because 8 you're not going to be able to do in-plant if they 9 have to do a challenge study because it'll have to 10 be done outside of the plant.

MR. GUNTHORP: Oh, yeah. But I mean, you'd have the money to do some kind of validation of your own process, rather than being able to use a peer reviewed study that's available.

MS. REGONLINSKI: So, this is April. I just wanted to let you know, Carrie so far has been capturing, trying to capture your thoughts and kind of notes to remind you over the course of these discussions what you've talked about.

But at some point, you're going to have to try to turn them into recommendations. So just let Carrie know when you want to do that. And she can make edits to the documents to reflect your recommendations rather than just notes. DR. CURTIS: How much more do we have at

DR. CURTIS: How much more do we have at Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 the bottom of this? Any other -- I just want to 2 make sure that everybody agrees on these notes so we 3 can go back.

Everybody -- okay, let's finish up 1. So, is there anything else, any other changes you want to make on Question 1?

7 Okay, let's go ahead and move down to8 Question 2.

9 DR. KNIPE: This is Lynn Knipe again. And 10 unless somebody brought this up while I -- when I 11 hung up by accident, Kathy Glass has mentioned in 12 the chat box that the Foundation for Meat and 13 Poultry Research has a database of articles that 14 could be used for validation.

And so, I'm embarrassed to say I don't know, but I'm assuming the Foundation for Meat and Poultry Research is at the University of Wisconsin. But I made a note for myself and I got to thinking, I don't believe anybody has brought that up or has discussed it. So, we should probably add that to our list of resources.

MS. RICE: So, Lynn, this is Kim Rice. I didn't say that database in particular, but that was the basis for -- it's in here somewhere, I thought -- of getting together the people who do the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

research in these areas to help put together the 1 2 guidance document or review the guidance document. 3 DR. KNIPE: Sure. Okav. 4 MS. RICE: So, Ohio State, Wisconsin, et I was -- I didn't -- couldn't remember what 5 cetera. 6 they called it either, so that's why I just said 7 Wisconsin and Cornell and et cetera. MR. GUNTHORP: You know, the -- Greg, 8 9 again. One problem that little processors have that 10 I don't think most academics would ever consider is that there's an awful lot of studies out there 11 12 without us paying for them. We don't even have 13 access to them. 14 And I've been fortunate in that I've got a 15 university person and a USDA person that was a 16 former EIO that both of them will at least look at 17 studies and send them over to me, too, so that we 18 can evaluate. But we'd spend a fortune just looking 19 at studies that most likely wouldn't even be 20 relevant to what we wanted. 21 DR. KNIPE: Yeah, this is Lynn Knipe. But 22 you make connections too with somebody at Purdue or 23 whatever. And I tried to make this available to our 24 processors that because -- to our library. We have 25 access to most of that at no cost. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

So, I don't really I want to open this up,
 but I would provide it to everybody, but I'm usually
 pretty helpful if people are looking for
 publication.

5 DR. CURTIS: I would say most of the 6 extensions or connection in each state would be that 7 work in that area.

DR. DE MELLO: Yeah, I agree, though, most 8 9 of the time I'm going to go after -- this is Amilton 10 De Mello, Nevada. You go after your extension 11 personnel and the rest of your state, they might be 12 able to provide you whatever you want. So that's 13 part of extension work, right? So, creating network 14 connections with university personnel who work on 15 the extension will be very useful for any type of 16 producer.

MS. RICE: So, this is Kim Rice. Along 17 18 those lines, back in the late 90s, when we were 19 implementing HACCP, there was a network of state 20 HACCP coordinators, most of which were your 21 extension folks. Is that still in place? 22 DR. CURTIS: That's still listed on that 23 FSIS website for the HACCP, all, very small producers. But, yes, there's still a HACCP 24 25 coordinator in each state. it better each day. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 MS. RICE: So, it would be good to engage them as well in some of this and utilize them. 2 3 DR. KNIPE: One thing I would comment on 4 that, I'm not sure how up to date the list is. We used to have a conference call once a month and all 5 6 of a sudden they just stopped. And I never really 7 knew for sure what would happen, but --DR. CURTIS: Henry -- retired. 8 9 DR. KNIPE: Oh. Well, I know there's 10 somebody that, within our State Department of 11 Agriculture, that was on that list along with me, 12 and this quy's been gone for at least two years, and 13 I think his name is still in there. So that might 14 be the thing you might find with extension people in 15 other states. The list may be a little bit out of 16 date. 17 DR. CURTIS: Maybe the recommendation is 18 that we update that list then. 19 DR. KNIPE: But yeah, I think -- yeah, 20 that'd be good. 21 DR. DE MELLO: This is Amilton. I agree 22 with that very much. 23 DR. CURTIS: Any other suggestion? Is 24 there more get or more notes to log in? Okay. Any 25 changes to in this portion? Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

Hearing none, let's move down to the very
 last part of this.

3 MS. REGONLINSKI: All right, just for the 4 note takers, where it says potentially AAMP Oregon extension niche group, I think it's Niche Meat 5 6 Processors -- I'm trying to give you the exact one. 7 It's not Oregon. They're out of Oregon. But it's Niche Meat Processors such as -- Greq, do 8 9 you remember what the last two letters are of this 10 It's Meat --AAMP? 11 MR. GUNTHORP: It's Niche Meat Processors 12 Assistance Network. And they are actually based out 13 of Oregon State, but yeah, they're -- but they help 14 processors all around the country. I think AAMP is 15 -- in Pennsylvania, is a Trade Association. 16 MS. REGONLINSKI: I would also suggest you 17 add the universities to that because Wisconsin's 18 group. Dr. Knipe's group's pretty extensive. 19 Cornell has a series of workshops and classes they 20 That may be more for state inspection, but it do. 21 looks like it's open to everybody. DR. CURTIS: Okay, any other changes to the 22 23 notice there? If not, let's start with Question 2 24 and come up with actual recommendations based on 25 these notes that we have for the -- to back to the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 committee.

2	What are our recommendations? So, the
3	question is, how can FSIS's industry in gathering
4	scientific support and facilitate filling research
5	gaps even though it's not a research funding
6	organization? So, we had a lot of ideas. Taking
7	these ideas, what are the specific recommendations
8	you want to put forward?
9	
	DR. KNIPE: I might just throw out of the
10	place to start, maybe establish a working group to
11	look at the data that's already available and to
12	identify gaps in the research.
13	DR. EBERLY: Well, but hasn't FSIS already
14	identified the gaps? What would the working group
15	be working to figure out how to address the gaps?
16	Or am I wrong?
17	DR. KNIPE: I guess Meryl did say that she
18	could send us a list of the gaps.
19	DR. CURTIS: So, let's define a little bit
20	about the working group. Is the working group like
21	the scientists that do research on this area, like
22	we talked about in the notes? Or is this different
23	makeup of people for the working group, just so we
24	have a little bit of a definition of who the working
25	work would be.
	Free State Reporting, Inc. 1378 Cape St. Claire Road

1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 MS. RICE: Is there a way to put my intent, 2 whenever I proposed that, was essentially the 3 scientists working on that. Yes, may have to have a 4 coordinator to kind of run that, knowing what the gaps are and then working the scientists and 5 6 universities and such as that in order to organize 7 it and be able to fill in those gaps and possibly reach out to those extension groups and trade 8 9 organizations or whatever, that could possibly fund 10 any research that is needed. That was kind of the 11 intent whenever I mentioned that. 12 DR. KNIPE: And maybe instead of saying 13 identify gaps, I think the other comment -- I can't 14 see it on the screen, but was to establish the 15 critical parameters or that you need to establish 16 for companies to follow. Does that sound right? 17 MS. RICE: How about if we say gaps and 18 establish critical parameters? 19 DR. KNIPE: That's good. 20 MS. REGONLINSKI: That sounds good. MS. RICE: And the critical parameters --21 22 this, sorry, this is Kim Rice. Critical parameters 23 are those related to the product, not necessarily 24 the process. Because --25 DR. KNIPE: I was thinking of both. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

1

2 DR. CURTIS: Okay. So those researchers that did the research on all of those things to 3 4 begin with, are going to work with were the clinical parameters that they had to meet. 5 6 Okay, any objections to this 7 recommendation? Other recommendations? We have looked --8 9 MS. REGONLINSKI: I was just going to say 10 what about free publication of these FSIS-approved 11 journal articles? I know we're, first of all, 12 waiting for the guidance to come out. But in the 13 meantime, knowing what journal articles are 14 considered okay would be helpful, I think. 15 I guess I would finish that sentence with -16 - oh, yes, I'm sorry. I'll give it some time. 17 Sorry. Sorry. I guess I would want it to say 18 acceptable instead of available, just because 19 there's lots of journal articles that are available, 20 but it isn't until FSIS is the one decides the ones 21 that are and are not acceptable. Thank you. 22 MS. RICE: But I -- this is Kim Rice. 23 Again, acceptable is going to be dependent on your 24 specific process, so what may be acceptable for you 25 may not be acceptable for me. That's been my Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

experience. Yeah, so --1 2 MS. REGONLINSKI: So, how about peer 3 reviewed journals that may be accepted for support? 4 I don't know. I know what you're trying to say. 5 It's just --6 MS. RICE: Yeah. 7 MS. REGONLINSKI: I just know that those articles that, you know, at the end of guidance, 8 9 were like, no, not this one. Not this one. So I 10 was trying to, you know, while we're waiting for 11 this guidance, have a little --12 MS. RICE: Right. 13 DR. CURTIS: So, many potential journal 14 articles that could provide support for these 15 products could potentially provide support and it's 16 qoing to -- I agree with Kim. They're going to vary 17 from location to location and the product to 18 product. But you're going to have some that are 19 going to be dismissed because they didn't like science of it or something else that they did. 20 21 DR. KNIPE: Well, another other option that 22 Jeff Moore used a few years ago was he made a list 23 in one of the -- I forget which one of the guidance 24 documents it was. Maybe Appendix A. But he made a 25 list of the unacceptable publications, the need for Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

a shorter list. But that's just to -- I'd just 1 2 throw this out, another item on the --3 MS. RICE: That's the one where Wikipedia 4 was listed. MS. RENDON: This is Tina Rendon. 5 Μv 6 understanding is that Meryl and them already have 7 this list of documents, so not sure what they called it, but I don't think we need to waste our time on 8 9 deciding on what to call it, but just a thought. 10 DR. CURTIS: Maybe we could call it the 11 articles that will come out in the guidance 12 document. I mean, if that's what they're using them 13 for, if we were using the same articles they were 14 using for the guidance document. 15 MS. RENDON: Good point. 16 DR. DE MELLO: Yeah, this is Amilton. 17 Isn't that what this -- there is a list of articles 18 that is listed in Appendix A already there. The 19 best of my knowledge, I don't think you have any 20 other data bank that actually provides it to anybody 21 else. But there is some articles there, actually, 22 mentioned in the Appendix. 23 MS. RICE: This is for the guidance 24 document that hasn't come out on these products 25 specifically. This is Kim Rice, by the way. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

DR. CURTIS: Right, she says they already
have -- yeah.

3 MS. RENDON: This is Tina Rendon again. 4 I think Kim said it earlier, as far as getting as much of that information out preliminarily would be 5 6 beneficial. I know I -- thinking from when they 7 released to revise Appendix A, it kind of threw everything into a tizzy because it was recognized 8 9 that there were scientific gaps and such as that. 10 But the benefit of getting that information or 11 at least some of the information released, gives 12 people, smaller processors, more of a, I would say, 13 a head start on them being able to meet those 14 quidance and kind of thinking about the science 15 behind it and what they need to gather and such as 16 that. 17 So, maybe it's not like a full blown 18 release of the quidance documents, but just some 19 resources maybe that are pulled up in there and 20 helpful information. 21 DR. CURTIS: All right, does this wording 22 meet with everybody's idea behind the concept of 23 this recommendation? 24 MS. RICE: One other recommendation --25 DR. CURTIS: I didn't --Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. RICE: Oh, sorry. This is Kim. 1 Do we 2 want to say instead of in advance, do you want to 3 say now? And I don't mean that like now. I mean, 4 like in the very near future. But not a week before the guidance document comes out. Thank you. 5 6 DR. CURTIS: Okay, any other changes? And 7 the other recommendation that we came out with in the notes, and I don't know if you want to include 8 9 it, was the updating of that HACCP list, but we need 10 the official name of whatever that's called. And I've looked at -- for that list for 11 12 that list for years, but I don't remember. What --13 is it has HACCP coordinators list or somebody from 14 FSIS might be able to give us the official name. 15 MS. SILVERMAN: Yes, this is Meryl. I'm 16 not sure if what you're describing is this, but we 17 have a list of the safe concept contacts and 18 coordinators. 19 DR. CURTIS: And it has the regulator's 20 name and the state and the contact, and it makes --21 a lot of university HACCP people. So, now when your 22 name's on that list, you get called by a lot of the 23 FSIS inspectors to go help small plants in that 24 area. 25 This is Kim. I'm looking at it, MS. RICE: Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

so state HACCP contacts and coordinators. 1 DR. CURTIS: Okay, thank you. 2 3 MS. RICE: You're welcome. 4 DR. CURTIS: Okay, any other recommendations for Question Number 2 there? 5 6 DR. EBERLY: Making this a resource --7 making these gaps a resource priority when they make recommendations to --8 9 DR. CURTIS: Could you repeat that, please? 10 Sure, and I don't know if DR. EBERLY: 11 everybody agrees with it or not, but I said that 12 recommending that research money or what's the term 13 for the research that they want to do? 14 Somebody else has to wordsmith better than 15 me, I think. But I'm trying to say recommend that 16 research into these, whatever these gaps are, the --17 but on the priority list -- somebody else can say 18 this better. I'm sorry. I'm very tired. 19 DR. CURTIS: So, you're wanting to share 20 the research priorities, FSIS research priorities. 21 Is that why you're -- with funding agencies such as 22 MEPA, trade organizations, things like that? 23 DR. EBERLY: Well, we talked about -- I asked, I think, earlier like who decides what the --24 25 so some internal group decides what these research Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

priorities are going to be for the agency. We
 talked about earlier.

And so I was going to say recommend that filling in these gap be made one of these priorities, or at least recommended to that internal committee that it be made one of those what -- a research priority.

8 MR. GUNTHORP: This is Greg. I would like 9 to see USDA list in their compliance guidance 10 document the Niche Meat Processors Assistance 11 Network as, in addition to the USDA small plant Help 12 Desk as one of the resources for small and very 13 small processors.

I think that's appropriate, considering that it's an extension program. And lots of times, you know, they have great contacts with these state coordinators or whatever, even if the list is updated so that they can put them in touch with somebody in their area as well as provide resources from all around the country.

21 DR. CURTIS: Any other recommendations? 22 DR. EBERLY: On the last bullet point, 23 recommend research in trying fill in the gaps, I'd 24 put priority, I would say, of the agency.

25 DR. CURTIS: Okay. Anything else? Anybody Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 1 have any objections to any of these recommendations?
2 Moving on --

3 DR. EBERLY: I don't have an objection. Ι 4 have a question, though. I know that the guidance is held up by the lack of information. But at some 5 6 point, it would -- should the agency come out with 7 something, even if it's not perfect, we just set an end date for guidance to come out at some time? 8 9 MS. SILVERMAN: Make a draft? 10 DR. EBERLY: Or a draft, you know, in the 11 next couple years someday, maybe? 12 DR. CURTIS: I quess the question to prove 13 that -- is working with -- maybe Meryl could answer 14 this. What is that we need to get the guidance out? 15 Is it just the gap information, so after the working 16 group met and determined that, then could we move forward with the guidance? Or is there other things 17 18 that's missing from the guidance to be able to move forward? 19 20 MS. SILVERMAN: I think you could make the 21 recommendation related to that. 22 DR. CURTIS: Making a recommendation that 23 once the working group has -- then the guidance? 24 MS. SILVERMAN: Yeah, I think you can make 25 a recommendation. You know, whatever you would Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 recommend in terms of meeting or not.

2 MR. GREMILLION: All right, I had a 3 comment.

MS. SILVERMAN: They're in development, 5 that's what I can say.

MR. GREMILLION: All right, this is Tom.
Excuse me. Somebody had a similar question. What
is keeping -- again, this is maybe this is the same.
But, yeah, I'm a little unclear on what -10 why the guidance hasn't gone out yet or if that's
11 kind of defined.

12 DR. CURTIS: If it's only waiting for the 13 gap information because we included the 14 recommendation for making the guidance publication a 15 high priority at the conclusion of the working group 16 effort or whatever we want to call it. I think 17 inclusion of working group -- what would we call 18 that? 19 DR. EBERLY: Activities? 20 DR. CURTIS: Activities, yeah. So, it's 21 getting late in the day. 22 DR. KNIPE: That makes sense. I mean, it 23 seems like having the guidance would be a big help.

DR. CURTIS: And we're at the

24

25 recommendation, we're making it a high priority,

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

which hopefully that means that it would go out as 1 2 soon as possible if it's a high priority. 3 Okay, do we have to put things in any 4 order, these recommendations? Otherwise, prepublication would go before the establishing of 5 6 the working group or before the guidance publication 7 because that, one, it would have to go out as soon as possible. I don't if these have to be in any 8 9 order or not. 10 MS. RICE: I mean, it makes sense to put it 11 in order that it's going to happen if you're just 12 going to -- just for the people reading it, I 13 suppose. 14 MS. REGONLINSKI: So I assume with the 15 updating of the list could happen along with the 16 working group. And what was the last one? 17 Oh, okay, and then we can include the last 18 one with a Niche Meat Processor Assistance Network 19 and I'll put that publication of the guidance as a 20 part of that. 21 DR. EBERLY: I would think the pre-22 publishing of these journal articles could happen 23 tomorrow. Maybe put that at the top? We already 24 know what those are. 25 DR. CURTIS: Any other changes? Or do Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 these look okay to everybody?

2	DR. EBERLY: Did we decide who's in the
3	working groups for the sake of FSIS?
4	DR. CURTIS: Probably couldn't since these
5	two were kind of the ideas, scientists working in
6	the area or other people you may have other
7	people you want to include. But there's different
8	kinds of people that have a lot of experience in
9	this area.
10	Other thoughts on working or people?
11	Hearing none, I guess we can close the parentheses
12	on that. Any other changes before we move to
13	Question 1 recommendations?
14	Hearing none, let's go back up to Question
15	1 and open the floor for recommendations to address
16	what actions should FSIS take when it determines
17	that establishment lacks the support for the
18	lethality treatment of a fermented salt-cured or
19	dried product? Or what are our recommendations for
20	that?
21	We had the choice of the ones that were
22	provided of the challenge. And or we could come
23	up our own. Could you show up again, what was
24	provided in the challenge, what the ABC
25	recommendations were?
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

A was to take a course of an action and require adequate scientific support for 9 CFR 417.5(a)(1) and 9 CFR 417.4 (a)(1)(4) to allow -- B was to allow establishments to test and hold acceptably.

6 And C -- go down a little bit -- allow 7 establishments to combine multiple scientific support documents, e.g., journal, articles or use 8 9 scientific support that demonstrates 5.0-log 10 reduction may be, in combination with increased FSIS 11 testing; D, use regulatory discretion and allow 12 establishments pretty scientific support or, E, a 13 combination of the above.

14 What are your choices? Do you want to take 15 one of those, or do you want to come up with 16 different recommendations?

17 DR. EBERLY: This is Dr. Eberly. What 18 about taking options test and hold and the option 19 of, kind of cobble together multiple scientific 20 documents with approval of, say, when an extra FSIS 21 testing until issuance of the guidance? Would that 22 be an option? Does anybody like that, hate that? 23 DR. KNIPE: Yeah, I mean, having this comment to -- I mean, having seen how long some of 24 25 these regulatory documents take to come out, I would Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 -- my concern there would be just that this would be 2 -- that would turn into kind of a permanent 3 solution, you know with the guidance document kind 4 of put off forever.

5 I do think the document, for increased FSIS 6 testing kind of offsets a different -- I think that 7 is worth exploring. But, yeah, I think making it 8 contingent on the FSIS getting a guidance doc out 9 could open up a can of worms.

DR. EBERLY: I guess my thought process was, and maybe I'm wrong, but if -- weren't they tasked to do this for everything that gets submitted to them, that the guidance might be faster because they're tired of doing it. I don't know. Putting it on that may push the guidance to come out, but I see what you're trying to say as well.

DR. CURTIS: But in some ways, we could interpret that regardless what recommendation we come out with, because it is, in fact, going to be until the guidance document comes out.

21 DR. KNIPE: Sure.

22 DR. CURTIS: So, they're asking us for some 23 kind of recommendation. So, we can take, and this 24 is a combination of -- what was that -- B and --25 DR. EBERLY: C, I think.

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

DR. CURTIS: B and C? So, it's a 1 combination of B and C until -- and then was the --2 3 didn't you add an and, additional FSIS testing? DR. EBERLY: Oh, that's the second part of 4 C. C says, letting them combine multiple scientific 5 6 support. And then it says maybe in combination with 7 increased FSIS testing, which I feel is appropriate since you kind of Gerry-rigging this thing. 8 9 DR. KNIPE: Yeah, that was my point. 10 MS. RICE: This is Kim. And this question is for the FSIS folk. Is the allowing 11 12 establishments to combine multiple scientific 13 support documents, is that not currently allowed? 14 MS. SILVERMAN: Yes, this is Meryl. I 15 guess it could be -- it could have been explained 16 better. And it was more the idea that I think has 17 been discussed before where it may be multiple 18 documents and then of them set the premises. So, 19 it's really using them together. 20 MS. RICE: Okay, so it's really using --21 so, it's using documents that aren't apples to 22 apples, but there's enough there as long as they're 23 doing other things to ensure the safety of the product? 24 25 DR. CURTIS: Or do you want to tie the Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 document to our recommendation of the prepublication
2 of articles?

3 MS. RICE: This is Kim again. I'm just --4 if a facility is doing C already and the have put 5 together the arguments that validate their program, 6 but you're saying they haven't -- it really was then 7 that they haven't made the argument for their Is that correct? 8 program. 9 MS. SILVERMAN: That's how we are thinking. 10 We were just trying to provide examples for the 11 committee to consider, but, yeah, what we were 12 thinking is something that's multiple article, but 13 then meet the validation requirements. 14 DR. CURTIS: Oh, well, great, there's a lot 15 of articles out there that does what it needs, 16 that's the best possible combination. But it 17 doesn't actually do it, hence the reason for 18 combining it, I guess, it would be my 19 interpretation. 20 DR. EBERLY: I think, as Greg pointed out, 21 it is important that we go with this, that there'll be one authority that decides this so you don't 22 23 have, you know, A, you don't have consistency and, 24 B, so you don't have somebody like me who kind of 25 understands this trying to decide if this is okay or Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 not.

2 So, somebody high up, you know, I keep 3 saying WIMS (ph.). I don't if WIMS is the right 4 group, but one particular authority that would be responsible for evaluating these kind of 5 6 Frankenstein journal plans. 7 MS. RICE: So, is that -- this is Kim again, this is -- it's always been my experience of 8 9 whenever there's a question about the validation and 10 the way the validation's been put together, 11 regardless of where it starts, it always ends up 12 with Bill Shaw's group. 13 So, it's been my experience that it does 14 eventually end up in what I would consider the right 15 place for the final decision. It may take a while 16 to get there, but it does eventually get there. 17 So, I think ultimately for me -- again, 18 this is Kim, is that everybody's got to be 19 compliant. But there are lots of different ways to 20 get there, including the use of multi-hurdle, multi-21 journal articles with and without testing. 22 And it's the afternoon and I am not -- with 23 the caveat that it's the afternoon and I am not at 24 my desk in the afternoon either. 25 MR. GUNTHORP: This is Greq. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 DR. CURTIS: So, Kim, are you saying 2 that -- I was going to say, were you saying that the 3 tests -- that you didn't want to insist that you had 4 to do testing, that testing may be required, but it may not be required? Is that what -- or am I 5 6 missing what -- your point you were making. 7 MS. RICE: I think that that is the point I was making. It depends on the situation and whether 8

10 It gets back to this issue if I've got 11 multiple hurdles in my process and I can utilize or 12 I've been able to utilize multiple journal articles 13 with multiple hurdles and string together the 5.0-14 log reduction and I'm validating that I'm meeting 15 the parameters that are necessary to get me there, 16 so I've got science pieces that may not be clean, 17 right?

casting would or would not be required.

9

18 It's not the perfect line, might look a 19 little bit like a spider chart, but it gets me to 20 that point. And then I've got the in-plant data 21 that shows that I can meet those parameters 22 regularly. I may not need testing.

Or I got a spider chart, but it's not a complete. And I need to do some testing. So I'm doing that taxing just to back it up, to backfill Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 it. 2 DR. EBERLY: I read that as to -- not that 3 the establishment would be doing extra testing but 4 that FSIS would do extra testing because it was -so that wouldn't be an expense to the processor. 5 Ιt 6 would be an expense to FSIS. That's what I was 7 interpreting the extra testing. MS. RICE: Yeah, and I could see it going 8 9 either way. 10 DR. EBERLY: And I agree. 11 MR. GUNTHORP: I read this one as --12 DR. EBERLY: That's what I was going to 13 say. 14 MR. GUNTHORP: I read this one as an 15 alternative for establishments that never got to the 16 5.0-log reduction. I guess I was under the 17 impression that if you got to a 5.0-log reduction 18 and you could support it, validate it, that wasn't 19 the establishment's or the processor's problems? 20 MS. REGONLINSKI: According to this question, it's when FSIS determines that the 21 22 scientific support is missing. So that leaves it 23 up --24 MR. GUNTHORP: But that this -- this, right 25 here, says, less than 5.0-log reduction, right? And Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

if we can string together a group of validated 1 2 hurdles that get us the 5.0-log reduction, then 3 we're not talking about whether or not we have support because we have support, right. 4 This is saying less than 5.0-log reduction, 5 6 but USDA's expectation is for the reduction of 7 salmonella in a dry-cured product. DR. EBERLY: Any consideration of reducing it from 5.0-8 9 log or two-log or whatever by using a multi-hurdle 10 approach? Maybe that should go under Question 2 as 11 how they -- how can they assist industry. And the 12 suggestion, B, that the guidance an alternative of a 13 multi-hurdle approach. 14 MS. RICE: This is Kim. For the FSIS folks, 15 is that letter C less than five total or less than five individual? 16 17 MS. SILVERMAN: Yes, this is Meryl. The 18 intention was five total, so the 5.0-log includes 19 the concept that that comes from multiple steps that 20 are added together. 21 MS. REGONLINSKI: Hello? So this -- is 22 this how we agree on this? Or is there changes to 23 the wording? Or do we have another recommendation? 24 Or a different recommendation? 25 DR. EBERLY: I think it could use some Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

wordsmithing, but I'm too tired to do it. 1 MS. RENDON: This is Tina Rendon. You had 2 moved the rest of the bullets to another document. 3 4 Is it possible to see them side-by-side? MS. REGONLINSKI: Yes, certainly. 5 6 MS. RENDON: Thank you. 7 MS. REGONLINSKI: Anything else that's 8 suggested for rewording or changing? Or is 9 everybody just maxed out on recommendations for 10 this? 11 MS. RICE: This is Kim. Was that at the 12 top of the document? That's the whole bullet or 13 whole answer to -- now there's something else. 14 Okay. Do we need -- again, Kim. Do we need to --15 16 state upfront that we agree that every facility 17 should have a validated HACCP plan 417.5(a)(1) and 18 417.4(a)(1)? 19 MS. REGONLINSKI: Okay, so that'd be 20 separate recommendations. 21 DR. DE MELLO: This is Amilton. This is a 22 requirement already, right? 23 MS. RICE: Yeah, but I think we should --24 MS. REGONLINSKI: Make our assumption 25 clear. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. RICE: Yeah.

1

2 DR. DE MELLO: You're going to suggest that 3 something is required? Because you're --MS. RICE: Well, I think we're going -- I 4 5 quess my --6 MS. REGONLINSKI: The way we understand, 7 it's required that every establishment -- okay. MS. RICE: Right. Yeah, we reaffirm that 8 9 that the recommendation is based on everybody's got 10 to have a plan so that we're not viewed or people 11 don't think we're suggesting that we just run amuck. And that's a technical term. 12 13 DR. EBERLY: I guess I like, but we agree 14 that every establishment should have validated HACCP 15 plan as to a -- and then I guess I thought it would 16 be nice, but, comma, but understand --17 MS. RICE: Right. 18 DR. EBERLY: -- that the agency validated 19 HACCP plan requires validated journal, scientific 20 support, something like that, but which is not a 21 available at this time. Something like that. 22 MS. RICE: Right. 23 MS. REGONLINSKI: I'm sorry, could you say 24 that again? 25 DR. EBERLY: Oh, goodness, I don't know. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 Let's see, we agree that our --

2	DR. DE MELLO: Yeah, go ahead. I agree
3	with you. I agree that justification needs to exist
4	there because it's just a requirement. It should
5	not be there, so the requirement that it's our
6	recommendation. But if you want to add that, you
7	should have a justification as to why.
8	MS. RICE: So because
9	MS. RENDON: This is Tina Rendon. Maybe
10	time to, you know, properly validate the program.
11	Everyone should have a validated HACCP program but
12	may need additional time and resources to complete
13	this.
14	DR. EBERLY: Which is not currently
15	available at. Again, this is what my point is.
16	MS. REGONLINSKI: So, that imply that if
17	resources aren't available, then you don't have to
18	validate your HACCP plan, which would pre-validate
19	our next recommendation?
20	DR. EBERLY: I think we could do what if
21	we said we agree that each establishment should have
22	a validated HACCP plan for whatever. But
23	establishments cannot have a validated HACCP plan if
24	they do not have validated documents to build their
25	HACCP plan period?
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

And then that leads us to the next 1 statement which is basically the stop gap, right, 2 3 until there are validated documents, guidance, 4 right, that they can use? 5 MS. RENDON: This is Tina again. I'm a 6 little concerned that that statement that some may 7 think, oh, well, this is documentation doesn't exist. I don't have to validate my HACCP plan. 8 9 I think that you need to understand that if 10 they don't have scientific support, they may need to 11 actively generate it or fund it or something. So, I 12 want to make sure we're not sending mixed signals 13 there. 14 Maybe we just add this MS. REGONLINSKI: 15 and don't make it a separate recommendation, 16 therefore, in the meantime, we'll allow 17 establishments to continue by combining blah, blah, 18 blah, blah into the rest of our recommendations. 19 That's all one recommendation, not just sort of a 20 lead-in for it. 21 MS. RENDON: But if they're not available, 22 but you have to take the second-best option that --23 you have to something. Otherwise, it's like you 24 never have to validate it. 25 DR. DE MELLO: But do you all agree that Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 that that statement of HACCP should be there? 2 MS. REGONLINSKI: I'm sorry, what was your 3 comment? 4 DR. DE MELLO: Do you all agree that this

statement on the HACCP should be there? I'm 5 6 concerned it comes back to the requirement thing. 7 I'm not sure if this is going to create more confusion or it's just an additional recommendation, 8 9 if -- needs to write a requirement. That's my point. MS. RICE: Well, it was it was option A in 10 11 the question they posed to us, so it's --12 MS. RENDON: This is Tina. Maybe we don't 13 say that we agree that they should have it, just say 14 that these, in these recommendations, this is how 15 we're recommending that you achieve this if you 16 don't currently have it.

MS. REGONLINSKI: But it is -- you are 17 18 required to have it. So, we're just we're not 19 disagreeing that that needs to be a part of the 20 HACCP plan. We're just support this. There is a 21 requirement for that currently. But it is difficult 22 to meet, and since you can't really meet it 23 currently this is your option. Is that not what 24 we're saying? 25 MS. RICE: That's the -- what I -- this is

> Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 Kim. That's what I think we're saying.

MR. GUNTHORP: Yeah, because, I mean, if we 2 3 look at it right, this is Greg, if we look at it 4 right now, you know, there are some products being produced in the United States that don't have 5 6 validated 5.0-log reductions and instead are being 7 done with batter testing with two-log reductions. 8 They're being done under multiple hurdles. 9 And USDA is allowing that, easier in some districts 10 than others. So, I think they're really looking for 11 us to say, should they allow those? Should they not 12 allow those? You know, so maybe this statement is 13 confusing. 14 Because, I mean, we for sure need validated 15 HACCP plans, but I think the -- what they're asking 16 for is, what are they going to allow for validated 17 HACCP plans? 18 DR. KNIPE: This is Lynn. Would it help 19 any at all to -- must instead of should? Or does 20 that --MS. RENDON: I would agree. This is Tina. 21 22 MS. RICE: This is Kim. One, two, three, 23 four -- fifth line: available multiple, it should 24 just be available scientific support documents. 25 Multiple is redundant. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409

(410) 974-0947

DR. EBERLY: I wrote something in the chart because I just couldn't -- I don't know. Would this work better? I didn't type the numbers. Last year, whatever and whatever the -- is

HACCP plan. The prior HACCP plans cannot be created 5 6 without validated scientific support documents. 7 Therefore, we recommend whatever recommendations. Would that be something -- acknowledge the 8 9 fact that they knew about it, HACCP plans, but also 10 acknowledged that it's impossible to do so if 11 there's no scientific support for a HACCP plan for 12 these particular products? 13 MS. RICE: Are we meeting again in the

14 morning as a subcommittee or are we going directly
15 in?

MS. REGONLINSKI: So, this is April. Subcommittee 2 needed more time for tomorrow. So, you can also have more time for tomorrow, if you would like to review that. I think it's another hour, hour and 45 minutes before you would have presented to the committee.

MS. RICE: I think another 15 minutes wouldbe great at this point.

24 MS. REGONLINSKI: Well, I think 25 Subcommittee 2 is going to take more time. So --Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947 DR. EBERLY: Or even just 15 minutes
 tomorrow after we have dinner. Not as physicians,
 not in other work.

DR. CURTIS: Okay, we plan -- this is it for today, and we plan to meet tomorrow to review our recommendations, give everybody a chance to think about it overnight. And if there's any changes they want to make, we'll make them in the morning?

MS. RICE: Yeah. Is there any way we could get this so that we can at least kind of look at it maybe with our first cup of coffee before we get on the call?

DR. SNIPE: Is it possible to get the comments that were in red? Because I was trying to read those and as the afternoon went on, the red was just kind of blurring together. Is it possible to get that and look at that tonight?

So, I actually think there was another
point I was interested in in the first one, but -because I didn't have control of where -- what I was
looking at, I had trouble finding it. Can we get a
copy of that tonight?
DR. CURTIS: Is that possible Carrie or

25 April? Can you tell us?

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

MS. RICE: They may be conferring. 1 2 MS. REGONLINSKI: This is April. I think 3 that's fine. Carrie has them saved and can email 4 them, but we just don't -- we ask that you do not share them with anyone outside the committee. And 5 6 do not deliberate outside of this forum, please. 7 DR. CURTIS: Okay, is that satisfactory 8 with everybody? 9 DR. KNIPE: That's be great? 10 DR. CURTIS: Yes. Okay, we'll get them 11 emailed to us and then we'll look at them tonight 12 and make any changes first thing in the morning. 13 April were you taking requests or do I need 14 to email Valerie and let her know? 15 MS. REGONLINSKI: I can request Valerie --16 from that, from Valerie. This is April. 17 DR. CURTIS: Okay. 18 MS. REGONLINSKI: Also, there is going to 19 be a wrap up at the end of the day. So, we ask that 20 you stay on the line. DR. CURTIS: So, we just take a break 21 22 between now and 4:45? 23 MS. REGONLINSKI: Yes. I think it's --24 I've seen 4:30 and I've also seen 4:45. DR. CURTIS: Well, she told us it was 25 Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 changed to 4:45 because we didn't have any public, 2 but if --

3 MS. GREEN: This is Val again. Sorry about 4 that. It looks like Subcommittee 2 is wrapping up and they will be joining us shortly. So please take 5 6 a break and we will reconvene at -- I would just 7 give them some time and give you all a break. We can reconvene at 4:45. Is that okay? Or would you 8 9 like to reconvene sooner? I think they'll be 10 dialing in shortly. Is that fine? 11 DR. KNIPE: 4:30 would be good. MS. GREEN: Take a two-minute break? 12 13 That's fine. We'll see. How about 4:35, and 14 hopefully we'll have everyone back on the line at 15 4:35. 16 DR. CURTIS: Okay, thank you, Valerie. 17 Sounds good. 18 (Off the record.) 19 (On the record.) 20 AT&T EVENT PRODUCER: Welcome, and thank 21 you for joining today's conference, National 22 Advisory Committee on Meat and Poultry Inspection 23 Public Meeting. 24 My name is Will Dubois (ph.), and I am your 25 event producer for this conference. Just as a Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 reminder, please ensure you have opened the chat 2 panel by using the associated icons located at the 3 bottom of the screen.

And if you require technical assistance, 4 please reach out to the event producer. All audio 5 6 lines have been muted at this time. To submit a 7 written question, you can select all panelists from 8 the dropdown menu in the chat panel, enter your 9 question in the message box provided and then send. 10 And with that, I'll turn the call over to 11 the moderator, Val Green.

MS. GREEN: Thank you, Will. It seems like there was a very productive dialogue in both of the subcommittee sessions. And I want to thank our respective subcommittee chairs. For Subcommittee 1, Patricia Curtis and Subcommittee 2, Ms. Casey Gallimore.

And I would like to ask the subcommittee chairs at this time if they need additional time in the morning to reconvene your committee.

21 DR. CURTIS: Subcommittee 1, we will. 22 MS. GALLIMORE: Subcommittee 2 as well. 23 MS. GREEN: Okay, we will modify the 24 scheduled to allow more time and we'll also ensure 25 that each of you or to the committee members have a 54 Free State Reporting, Inc. 55 1378 Cape St. Claire Road 56 Annapolis, MD 21409 57 (410) 974-0947 copy of the draft recommendation. Do not deliberate
 or share your draft recommendations outside this
 board.

Also, I'd like to take the time to thank
the subcommittee designated federal officials Rachel
Edelstein and April Regonlinski. I'd like to
acknowledge and thank Carrie Clark, Jonathan Huang,
Scott Updike, and Shercoda Smaw for taking vigorous
notes during the deliberations.

10 And last, but certainly not least a special 11 thanks to Patrice Palmer, Shekelle Bazemore and 12 Susan Ikbakli (ph.) who helped with the appointments 13 of the new committee members and planning this 14 meeting.

So, without further ado, next slide, please, we'll go ahead and review the agenda for tomorrow. This was the original agenda. Next slide.

So, what I'd like to do is move the committee deliberations to 9:15 in the morning. We'll start at 9:00 a.m. This committee deliberations will start at 9:15, and we will have the committee chairs report out at 11:00 a.m. Is that enough time to complete the recommendations for Subcommittee 1 and 2? Erec. State Perperting Inc.

Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 DR. CURTIS: Yes. MS. GALLIMORE: Yes, for Subcommittee 2 --2 3 I don't know about Subcommittee 1, but I don't I don't know about anyone, but I don't think we'll 4 need that much time, so we could potentially do -- I 5 6 think we'll get through it 30 to 45 minutes. But 7 that depends also on how much time Subcommittee 1 8 needs. 9 DR. CURTIS: I don't think we need that 10 much time either. And I was just saying is what 11 Subcommittee 2 was saying. 12 MS. GREEN: Would you like to start at the 13 report at 10:00 a.m.? 14 MS. GALLIMORE: That works for Subcommittee 15 2. 16 DR. CURTIS: It works for Subcommittee 1. 17 MS. GREEN: All right. Okay, so we'll start tomorrow at 9:00 a.m.. We'll move to the 18 19 subcommittee deliberations at 9:15 and then we'll 20 report out -- we'll start to report out for the 21 subcommittees at 10:00 a.m. And each subcommittee 22 will have 30 minutes to provide their report. 23 After that, we'll convene -- well, actually 24 will still be on the same line, but -- we'll be on 25 the same line for the subcommittee reports. And Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

then we will move to full committee discussions for 1 2 the committee as a whole to review the 3 recommendations and vote on a final report. 4 Are there any final questions or comments from the subcommittees? Or any comments from the 5 6 audience? That's --7 MR. HARRIS: This is Joe Harris with Southwest Meat Association. Just a quick request. 8 9 If you guys could send out the information to 10 reconnect in the morning, because we've been 11 connected and we connected so many times, I'm not 12 sure which link to use and which number to use. Ιf 13 you can send it, send that out to us again this 14 evening, that would be great. 15 MS. GREEN: I'll ask the event producer. 16 Will, would that be possible for an AT&T to send out 17 the link for the link for the speakers again? 18 AT&T EVENT PRODUCER: The link for the 19 speakers to which parties? 20 MS. GREEN: If I provide a list would that 21 be good? If I can provide a list or a list of 22 names? 23 AT&T EVENT PRODUCER: If you provide me a 24 list of email addresses, I believe I could send out 25 the address for the speaker side, yeah. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 MS. GREEN: Okay, thank you. Are there 2 any --MS. EDELSTEIN: This is Rachel. I have a 3 4 process question. Can we send our -- we are putting together the note for Subcommittee 2. Can we send 5 6 our notes to them tonight or tomorrow morning before 7 the committee starts? Is that allowed? MS. GREEN: Yes. 8 9 MS. EDELSTEIN: Okay. 10 MS. GREEN: Yes, just don't -- the 11 committee is not to deliberate this evening, only 12 during the public forum. But they are permitted to 13 review their notes and make comments and then once 14 they reconvene for the deliberations, then they can 15 continue to refine and develop the recommendations. 16 Any other questions or comments? 17 MR. WILLIAMS: Yes, Valerie, Byron Williams. Will there be a different access code and 18 19 number for the subcommittees? Or will you provide 20 that in the morning once we divide for the 21 subcommittees after the general starts at 9:00? 22 MS. GREEN: I will ask the event producer 23 to send out that information as well for the 24 subcommittees. 25 MR. WILLIAMS: Okay. Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1 MS. GREEN: So once again, when I will ask 2 the event producer, I will provide the list of names and email addresses and ask them to send the main 3 event line as well as the breakout sessions, the 4 dial-in information for the breakout sessions. 5 6 AT&T EVENT PRODUCER: And this is for a 7 conference at a later date or this current 8 conference? 9 MS. GREEN: That's for tomorrow morning. 10 AT&T EVENT PRODUCER: Okay. 11 MS. GREEN: Yes. Are there any other 12 questions or comments? All right, hearing none, 13 we'll adjourn the meeting at 4:47 p.m. We'll start 14 again at 9:00 a.m. in the morning. Thank you all. 15 (Whereupon, the proceedings in the 16 above-entitled matter were recessed, to reconvene 17 the next day.) 18 19 20 21 22 23 24 25 Free State Reporting, Inc. 26 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947

1	<u>CERTIFICATE</u>
2	This certifies that the attached proceeding before the
3	UNITED STATES DEPARTMENT OF AGRICULTURE
4	FOOD SAFETY AND INSPECTION SERVICE
5	IN THE MATTER OF: NACMPI Public Meeting
6	PLACE: Via WebEx
7	DATE: September 24, 2020
8	was held according to the record, and that this is
9	the original, complete, true and accurate transcript
10	which has been compared to the recording
11	accomplished at the hearing.
12	
13	
14	1 on Bow
15	R. Thomas Bowman
16	Court Reporter
17	
18	
19	
20	
21	
22	
23	
24	
25	
	Free State Reporting, Inc. 1378 Cape St. Claire Road Annapolis, MD 21409 (410) 974-0947