

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2015 MEETING

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MONDAY
APRIL 27, 2015

+ + + + +

The Board met in the Ballroom Salons
A-D, La Jolla Marriott, La Jolla, California, at
8:33 a.m., Jean Richardson, Chair, presiding.

PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
PAULA DANIELS
LISA DE LIMA
NICK MARAVELL
ZEA SONNABEND
ROBERT "MAC" STONE
ASHLEY SWAFFAR
JENNIFER TAYLOR
FRANCIS THICKE
C. REUBEN WALKER

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ALSO PRESENT

MICHELLE ARSENAULT, Advisory Board Specialist

REX BARNES, Agricultural Marketing Service,
Associate Administrator

LISA BRINES, List Manager, National Organic
Program

EMILY BROWN ROSEN, Technical Support

CLIVE DAVIES, Design for the Environment Branch,
EPA

MILES MCEVOY, Designated Federal Officer,
Agricultural Marketing Service, Deputy
Administrator

JESSICA WALDEN, Materials Specialist

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1 P-R-O-C-E-E-D-I-N-G-S

2 8:33 a.m.

3 MR. McEVOY: Good morning. All right.
4 Welcome to southern California. This is awesome
5 to see so many people here.

6 This is one of my most favorite weeks
7 of the year, the NOSB meeting, to see lots of
8 friends and people in the organic community. No,
9 seriously, this is one of my most favorite weeks
10 of the year. It is certainly a lot of great
11 conversation and discussions and debate where we
12 work with the National Organic Standards Board, all
13 of us, to make the standards better and make
14 recommendations that we can implement at USDA and
15 make this whole community and the standards better.

16 So, thanks for coming, thanks for all
17 your public input, and thanks especially to the
18 National Organic Standards Board. These people
19 work very, very hard. They are volunteers. They
20 don't get paid for this work. It is kind of
21 amazing, the amount of work they do. I would
22 imagine that each of them puts in at least 10 hours

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1 a week. For a volunteer advisory committee, it is
2 really amazing. I think they deserve a round of
3 applause for that.

4 (Applause.)

5 It is interesting being here in
6 Southern California. At least in this area, it
7 seems like it is a pretty urban setting. But San
8 Diego County has hundreds of certified organic
9 operations. So, if you get outside the city and
10 even in the city you will find certified organic
11 avocado groves and orange groves and vegetable
12 operations, and, also, organic hydroponics.

13 I know we are going to have a couple of
14 people here to talk about organic hydroponic
15 operations. We have a task force that I will talk
16 about more during my report, but take the
17 opportunity to see and talk to those folks.

18 So, I am just opening up the meeting
19 here, as the -- what as I now? -- the Designated
20 Federal Officer for the National Organic Standards
21 Board. I am opening up this spring 2015 National
22 Organic Standards Board meeting and I am handing

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1 it over to the Chair, Jean Richardson, who will
2 facilitate the meeting from this point forward.

3 So, thank you.

4 CHAIR RICHARDSON: Good morning,
5 everybody. Great pleasure to be here.

6 I have in my hand, as usual, when I run
7 this meeting, I have my gavel for controlling the
8 out-of-control. But I have my magic wand which
9 will create joy and happiness -- (applause) and
10 will be the sign of reward for all people that do
11 good things at the meeting, when I have decided that
12 they are good things, of course.

13 (Laughter.)

14 And I should say the other important
15 announcement of the day is that, of course, it is
16 Zea's birthday.

17 (Applause and cheers.)

18 And so, our sort of first formal piece
19 here is just to do the introductions of the NOSB
20 members. We are just going to go around the
21 horseshoe, starting with Francis. Each person
22 will just say a couple of words about themselves,

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1 so you know who they are. And, of course, you will
2 pay attention to the new people that are here this
3 time as well.

4 Francis?

5 MEMBER THICKE: Hi. Francis Thicke.
6 I am an organic dairy farmer from southeast Iowa
7 and a soil scientist.

8 MEMBER WALKER: Good morning. Oh,
9 good lord (referring to the loudness of the
10 microphone). Good morning.

11 My name is Calvin Walker, Southern
12 University, A&M College, Baton Rouge, Louisiana.
13 I am appointed to the position of the consumer
14 advocate.

15 I would like to echo what Miles has
16 said. This Board works so hard. We have
17 differences of opinion, but at the end of the day
18 we try to be always cordial and I appreciate that.

19 But I just have one thing I would like
20 to disagree with Miles on, is the 10 hours. It
21 seems like it is more than 10.

22 (Laughter.)

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1 But I am definitely glad to be a part
2 of this Board for the time that I am.

3 MEMBER DE LIMA: Good morning. Hi.

4 I am Lisa de Lima from MOM's Organic
5 Market, and this is my first meeting in the retailer
6 seat.

7 MEMBER SONNABEND: Hi. Zea
8 Sonnabend, Watsonville, California. I hold the
9 scientist seat on the Board from my long work in
10 reviewing materials with OMRI, CCOF, and the
11 National Organic Standards Board. I own and
12 operate a small fruit farm of about 15 acres in
13 Watsonville, California.

14 (Group sings happy birth to Zea.)

15 (Applause.)

16 Thank you all.

17 MEMBER CHAPMAN: Tom Chapman from
18 Emeryville, California. I work for Clif Bar, and
19 I have the processor seat.

20 Thank you.

21 MEMBER BONDERA: Hello. My name is
22 Colehour Bondera, a small-scale farmer, certified

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1 organic farmer in Hawaii. Like Calvin suggested,
2 I would say that my employer, who is myself,
3 allocates on average of 20 hours a week to unpaid
4 NOSB work through the year on average.

5 I have 10 siblings who I grew up on a
6 farm with. I have six neighbors of my farm in
7 Hawaii. I really think, from my experience and
8 observation, you have got to start at home to make
9 things work.

10 That is why I serve on the Policy
11 Development Subcommittee which is our internal
12 policy. I think we have to make it strong and
13 healthy in order for us to be making good decisions
14 and working together effectively.

15 I was the Chair for two years. I am the
16 Vice Chair. I also serve on the Crops
17 Subcommittee. I serve on the Livestock
18 Subcommittee. I have done both of those for all
19 of my years on the NOSB. This is my fifth of five
20 years.

21 And this year I am also happy to add the
22 Materials Subcommittee because I think very

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1 important things are happening within that,
2 although, frankly, honestly, I am not doing most
3 of them, but I think it is a critical component.
4 So, I am trying to go out with a bang.

5 Aloha.

6 MEMBER AUSTIN: Good morning.

7 I am Harold Austin, in one of the
8 handler positions. I work for Zirkle Fruit out of
9 Washington State. We are an organic
10 producer/handler. We sell our own fruit as well,
11 apples, cherries, pears, wine grapes, blueberries.

12 I have been involved in agriculture,
13 dairy, livestock, crop production, since I was old
14 enough to take and go clean the barn out for my
15 grandpa after he got done milking the dairy herd.
16 So, I have been in it for a long time. I have been
17 involved with organics for over 20 years.

18 I am proud of these individuals that I
19 sit up here with. As it has been said already, why
20 we sometimes will definitely disagree, at the end
21 of the day, like a family, we will do our best to
22 come together in unison for the good of the organic

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1 industry and the organic community.

2 It is a pleasure to serve all of you.
3 The pay is not so good, but the hours, well, they
4 are not so good, either, especially when we are
5 under sunset review.

6 (Laughter.)

7 With that, thank you.

8 VICE CHAIR FAVRE: Good morning.

9 I am Tracy Favre from Grandbury, Texas.
10 I sit in the environmental seat or one of the
11 environmental seats. I'm an organic inspector,
12 and my husband and I have a small, diversified
13 family farm with livestock, vegetables, and
14 fruits.

15 MEMBER SWAFFAR: Good morning.

16 I am Ashley Swaffar. I sit in the
17 producer's seat, and I work for Vital Farms. We
18 are a pasture-based egg-laying operation.

19 MEMBER BECK: Good morning.

20 I am Carmela Beck. I am actually from
21 San Diego. So, it is nice to be home. I work at
22 Driscoll's Strawberry Associates as the Organic

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1 Program Manager. I have been in the organic
2 industry for about 10 years. I sit in the
3 producer's seat. I am on the CACS Subcommittee and
4 the Crops Subcommittee. And it is a pleasure to
5 be here today.

6 MEMBER MARAVELL: Nick Maravell. I am
7 a crop and livestock producer from Maryland. We
8 started over 35 years ago all vegetable and, then,
9 transitioned into crop and livestock. We do a lot
10 of on-farm, value-added processing and direct
11 marketing to consumers.

12 MEMBER TAYLOR: Good morning.

13 I am Jennifer Taylor. I am the
14 daughter of a sharecropper. I am representing the
15 public/consumers, and I appreciate being here.

16 Thank you.

17 MEMBER DANIELS: Good morning.

18 My name is Paula Daniels, and I am in
19 the environmental spot. Among the things that I
20 do currently, I am teaching at UCLA a class on food
21 policy. This year I am the Pritker Environment and
22 Sustainability Education Fellow at UCLA. So,

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1 among the projects my students will be doing will
2 be looking at organic standards between the United
3 States and the European Union.

4 I want to mention, also, as Colehour
5 mentioned that he is from Hawaii, I am going to
6 "out-Hawaii" him for a second because I am from
7 there, but I am also a registered Native Hawaiian.
8 My grandfather was the Maintenance Engineer at the
9 mill in Pu'unene on Maui. My dad was raised on a
10 sugarcane plantation, none of which was organic.
11 It just didn't exist at the time. But their
12 backyard garden at home was.

13 Anyway, I am happy to be here. Those
14 of you who are not from California, welcome to
15 California, the great golden state.

16 CHAIR RICHARDSON: Thank you.

17 Last, myself, I am a biogeographer with
18 a background in the biological and earth sciences,
19 lots of soils and ecology, and then, post-doctoral
20 training in law. Professor emerita at the
21 University of Vermont, where I taught
22 environmental studies and environmental law. My

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1 research included work on dioxin contamination of
2 milk and dairy feed on both organic and non-organic
3 farms.

4 In the 1970s and 1980s, my first husband
5 and I ran a family farm in northern Vermont, where
6 we worked on intensive pasture management. For
7 the last 15 years, I have been doing organic
8 inspections, all scopes, and on the NOSB I serve
9 on Livestock, Handling, Accreditation, and Policy.
10 Then, of course, I sit in on all of the other
11 Subcommittees.

12 The next item on our agenda is the
13 Secretary's report. Harold?

14 MEMBER AUSTIN: Thank you, Jean.

15 At this time, I would like to ask if
16 there are any changes or corrections to the posted
17 October 2014 meeting summary and voting results
18 from member of the Board.

19 (No response.)

20 Seeing none, we will accept these as the
21 official record of the fall 2014 National Organic
22 Standards Board meeting from Louisville.

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1 That concludes the Secretary's report,
2 Madam Chair.

3 CHAIR RICHARDSON: Thank you.

4 Next, it is not written on your agenda,
5 but in order to introduce the NOP staff and make
6 some general comments, I would like to introduce
7 you to Rex Barnes. He is the Associate
8 Administrator at the Agricultural Marketing
9 Service.

10 I welcome you here, Rex, on behalf of
11 all of us. Thank you.

12 MR. BARNES: This is really ironic that
13 Michelle is lifting the microphone up for me.

14 (Laughter.)

15 That's pretty good, Michelle.

16 Thank you, Jean.

17 I am glad to be here. This is my second
18 NOSB meeting. Two things. I am feeling a little
19 guilty now because I do get paid for my work. So,
20 I am sorry we can't pay you any, but, you know, it
21 doesn't take away from the value of your work at
22 all. Doing it on a volunteer basis probably makes

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1 it more notable and shows the passion that you have
2 to contribute that time to such cause.

3 The other thing that I am thankful for
4 is it is not my birthday.

5 (Laughter.)

6 Happy birthday, but it would be
7 embarrassing for everybody singing to me. So, I
8 am glad of that, too.

9 (Laughter.)

10 I wanted to give you a little bit from
11 kind of an AMS perspective. It is interesting for
12 me to come, and kind of my purpose in coming is in
13 order to see because in AMS we have a lot of
14 programs. We pretty much cover all the
15 industries. Our main mission that we operate on
16 in AMS is to facilitate marketing, period. That
17 is what we do, is to facilitate marketing. We
18 facilitate marketing of all agricultural products,
19 is what we are after.

20 So, we get involved in a lot of
21 different aspects of what is going on around in the
22 ag industry. It is a very diverse and very

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1 interesting position to work in all those different
2 sectors and facilitating that marketing program.

3 When we get to these meetings like this
4 from the Administrator's Office, we like to kind
5 of see how is the program going, what is the pulse,
6 what is happening, what is going on. So, any ideas
7 or any things that you have, I will be here today
8 and tomorrow. Feel free to talk to me and let me
9 know if you have something that we need to be aware
10 of.

11 I have already kind of touched on a
12 little bit, that it seems like we need to look at
13 our communication and how we are communicating out
14 to everybody on all of our different issues, which
15 I will say we will look at that and look to see what
16 we can do in that arena, because that kind of is
17 the bottom line for us on anything, is that we
18 communicate, so that everybody understands what we
19 are doing and why we are doing it. So, I will make
20 that commitment for you on that.

21 Organic has been a big piece. If you
22 look back -- and I know Miles will get into a little

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1 bit of some of the things that have been
2 accomplished in some of the organic area -- but I
3 want you to know in AMS we have been participating
4 and we work across the Department. The Secretary
5 has been very committed to getting organic out and
6 available in the other programs. So, whether it
7 is working with Foreign Ag Service on opening up
8 markets in other countries, working with the Risk
9 Management Agency on insurance and providing
10 insurance and looking at how we can make our
11 insurance programs better, and we do that through
12 our Market News Program, in which we report markets
13 for all the products. We are trying to expand the
14 market information available on organic, which
15 opens up a lot of these other programs because they
16 are based off that market information.

17 So, we are working with RMA on that. We
18 work with FSA, their Micro-Loan Program. I think
19 if you look across the Department, you see a lot
20 of changes that have happened over the last few
21 years in organic. I think those are pretty much
22 positive changes that have happened. It has

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1 really opened it up to a lot of programs that
2 traditionally had been closed to organic, quite
3 frankly. I think the Administration has done a
4 really good job of opening that up.

5 But I do want all of our NOP staff to
6 stand up for a moment, who we have. Most of these
7 you know, but this group, while they don't work in
8 all those areas in USDA, they are still the group
9 that everybody goes to for their technical
10 knowledge and what is the rules and the regulations
11 in the Organic Program.

12 So, while they work on this piece of
13 organic, they are also the technical resources that
14 we go to for all of these other programs around in
15 the Department. That is a very valuable piece of
16 knowledge that we have in AMS that is used around
17 the Department. And so, I thank them and I would
18 like to give them a little of applause, too.

19 (Applause.)

20 And they are also all in paid jobs, too.
21 So, they can stay around for a while.

22 (Laughter.)

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1 But that group, we are very proud of
2 them because they do a lot. They have seen a ton
3 of change over the last several years in the organic
4 arena. The staff has increased a lot due to some
5 of the stuff that Congress has passed. They have
6 kind of beefed it up a little bit. I shouldn't use
7 that "beef" term, but I will. So, we have got a
8 lot there that we are really looking as our
9 technical resources for a lot of stuff that goes
10 on around the Department.

11 I know what we want to do is we want to
12 get in and show you a little bit of some
13 accomplishments, some things going on currently
14 that we are working on. But please do feel free.

15 I don't want to take much time, but I
16 would like to turn it over to Miles and have Miles
17 go over some of the things that they are working
18 on currently and some of the successes that we have
19 had over the last few years.

20 I will say one thing on Miles. He is
21 probably, if you looked at all the NOP Deputies that
22 we have had in the program, Miles is probably the

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1 most knowledgeable, passionate one of the bunch
2 because he does come from industry. He is the
3 first one that came from that background into it.
4 Some of the previous ones had to transition into
5 it. And so, we are lucky to get that perspective.
6 He brings a different perspective to it, to the
7 Organic Program.

8 So, with that, Miles, it is all yours.
9 Go over it.

10 Thank you.

11 (Applause.)

12 MR. McEVOY: Thanks, Rex.

13 Okay. Michelle, do you want to bring
14 up the slides?

15 I think I failed to actually introduce
16 myself in the opening. I'm Miles McEvoy, Deputy
17 Administrator for the National Organic Program,
18 part of the Agricultural Marketing Service.

19 And so, I have a number of things that
20 I was going to cover today, as I normally do at the
21 start of the NOSB meetings, to bring people
22 up-to-speed on what is happening at the National

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1 Organic Program.

2 In particular, I am going to talk about
3 the AMS NOP Strategic Plan that we just published
4 on Friday. I will get into some details about that
5 Strategic Plan, then the National Organic
6 Standards Board, cover some topics around the
7 Board, then the USDA Organic Initiatives. Rex
8 touched on some of these Organic initiatives. I
9 will go into some in a little bit of detail, and
10 then, an update on some of the organic standards,
11 some of the Policy Memos and guidance that we have
12 issued over the last six months since we last met.

13 Starting with the AMS, Agricultural
14 Marketing Services, National Organic Program
15 Strategic Plan, this is our plan for from now
16 through 2018. We had a Strategic Plan that was
17 developed in 2010. We like to think that that was
18 sort of our organizing plan. That plan was focused
19 on getting the basic processes in the National
20 Organic Program really soundly established and
21 implemented well.

22 This plan, we feel like those basic

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1 processes are in place in terms of standards
2 development, accreditation oversight, and
3 enforcement. And so, it is more focused on
4 implementation and effectiveness of the work that
5 we do to support the organic sector. So, it has
6 a broader focus.

7 And so, the plan, as you see, if you go
8 online, you can find the plan on our website. It
9 both reviews the past of what we have accomplished
10 over the last five years as well as our plans for
11 the future.

12 First of all, over the last five years
13 a lot of things have been accomplished. I mean,
14 there is always so much to do in this sector. There
15 is so much more to do in terms of standards
16 development, but it is good to reflect on what has
17 been accomplished over the last five years, in
18 particular.

19 When I started in 2009, Deputy
20 Secretary Merrigan at the time talked about the Age
21 of Enforcement. There are a lot of things that we
22 have done to enhance the enforcement provisions of

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1 the National Organic Program. That includes civil
2 penalties. Civil penalties were not used by the
3 program prior to 2009. Now they are just a routine
4 part of our process, one of the many enforcement
5 tools that we use to ensure the integrity of the
6 system.

7 So, we use civil penalties for willful
8 violations. We publish fraudulent certificates.
9 Each year we investigate and resolve more and more
10 complaints. We have very good procedures in place
11 around the process of complaint investigation and
12 enforcing the organic standards.

13 We have put out some specific policies
14 that spell out what those requirements are,
15 including who needs to be certified to ensure that
16 the whole audit trail from farm to market is
17 certified, except for those operations that are
18 excluded or exempt from certification. We
19 continue to work on that.

20 Secondly, the access to pasture rule.
21 The pasture rule was finalized and implemented in
22 2010 to 2011, a huge change. And now, we are

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1 assured that all organic ruminant operations are
2 pastured-based operations. This was a huge area
3 of contention for many years at the National
4 Organic Standards Board and within the organic
5 community. Now that we have that pasture rule in
6 place, we have that verification that all organic
7 ruminant operations are pasture-based.

8 Next, we have the residue testing rule.
9 So, this is part of that whole plan of having better
10 oversight, more effective tools in terms of
11 oversight and enforcement. So now, residue
12 testing is a routine part of the organic
13 certification process. Certifiers are required
14 to test at least 5 percent of the operations on a
15 yearly basis. It has definitely led to detection
16 of fraud and the elimination of those operations
17 from the organic trade, as well as improvement in
18 systems, because we find residues and find ways to
19 improve the system to get those residues out of the
20 system.

21 The NOP Handbook, prior to 2010 when the
22 Handbook was published, there was not a lot of

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1 information from the NOP in terms of
2 interpretations of the organic regulations. So,
3 we implemented this NOP Handbook in 2010. We
4 continue to expand it and put more information in
5 there to provide more specificity about the
6 regulations in terms of guidance and instructions
7 and policy memos. So, it is one place to go to
8 support that consistency in terms of
9 implementation of the rules and the implementation
10 of the certification process.

11 Increased audit consistency and
12 ensuring that audits were conducted. The audit
13 that the Inspector General completed in March of
14 2010 identified that there were some accredited
15 certifiers that had never been audited, and the
16 California State Organic Program had not been
17 assessed. So, those things are now just standard
18 process. We audit all certifiers, all
19 international agreements, all state organic
20 programs, and we have a much more consistent
21 process of how we conduct audits to ensure
22 integrity. All that information is available in

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1 the program Handbook, if you want to see the
2 criteria that we are looking at when we are auditing
3 the certifying agents.

4 We had over the last five years four
5 Office of Inspector General audits. One was a
6 comprehensive audit completed in March of 2010.
7 We had one on the National Organic Standards Board
8 work on the National List, which had no findings,
9 which is testament to the work of the NOSB. And
10 then, we had two audits on the organic milk sector.
11 So, I am happy to say that all those findings from
12 those four audits have been addressed, and we have
13 implemented corrective actions for all those
14 audits.

15 Our international equivalency
16 arrangements, the first one was in 2009 with
17 Canada. We have since expanded that with the
18 European Union in 2012 and, then, with Japan and
19 Korea over the last year to two years.

20 It is interesting that we just got a
21 report, one recent report that indicated savings
22 of \$540,000 in international verification costs

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1 because of these equivalency arrangements. The
2 report goes on to say that that mostly benefits
3 small farmers. So, there are many small farmers
4 that are producing crops for the wholesale market
5 and, because of these equivalency arrangements,
6 don't have those additional costs for the
7 duplicative inspection and certification fees.
8 So, there is real benefit there.

9 The appeals process. When I first got
10 to the NOP in 2009, the average timeframe for
11 handling appeals was more than two years. We now
12 have that down to less than six months. So, huge
13 improvements in terms of the appeals process.

14 Organic Literacy Initiative, this is a
15 Department-wide initiative. The NOP has provided
16 a lot of the content and input to the Organic
17 Literacy Initiative, and over 30,000 USDA
18 employees have now taken basic training on organic
19 standards and the certification work. So, that
20 has been good.

21 The USDA Organic Insider, Rex talked
22 about our need to continue to communicate more, to

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1 get more information out, but the Organic Insider
2 is something that we implemented a few years back
3 that gives us at least a mechanism to get
4 information out in a timely basis about a lot of
5 the activities that are happening at USDA around
6 organic items.

7 A list of certified organic operations.
8 There was no list of certified organic operations
9 five years ago. We now have a list that lists all
10 certified organic operations around the world, and
11 we are working on changing that into a modernized
12 database, so it is much more current. But that was
13 a big accomplishment, to get that list available
14 for everybody to see.

15 And then, Sound and Sensible
16 Certification, which is a more recent initiative
17 to try to make certification accessible,
18 attainable, and affordable by all operations, so
19 that they have the opportunity to participate in
20 the organic market. We have done a lot of things
21 in terms of training and instructions to certifiers
22 to try to implement the Sound and Sensible

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1 Initiative, and we will continue to do that work.

2 The Strategic Plan talks about our core
3 values, which includes independence and
4 objectivity, customer service and public service.
5 We are all proud at AMS to be public servants and
6 strive to provide the best customer service to all
7 of our audiences.

8 Accountability. We are accountable to
9 the National Organic Standards Board, the organic
10 community, and to all of our stakeholders.

11 Communication. Communicating
12 honestly and openly and upholding laws and
13 regulations in the work that we do every day is a
14 core value.

15 And then, diversity. We honor and
16 support the diversity in all of its forms, inviting
17 diversity and inclusion in our workplace and
18 through all the outreach that we do.

19 So, I think it is important that our
20 Strategic Plan includes the core values of the
21 Agricultural Marketing Service and the National
22 Organic Program.

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1 The Strategic Plan has five goals with
2 specific objectives in these goals. This should
3 be somewhat familiar with you in terms of the goals
4 that we have here.

5 But the first and foremost is
6 protecting organic integrity. This is the core of
7 our mission, and all of our activities stem from
8 that, from protecting organic integrity.

9 Second is facilitating market access.
10 When we talk about facilitating market access, it
11 is market access for local, regional, and
12 international markets; ensuring that
13 certification is attainable for all farmers, that
14 they can have an opportunity to participate in this
15 marketplace.

16 Standards. Developing clear and
17 implementing clear standards, working with the
18 National Organic Standards Board, listening to the
19 community, and developing and implementing new
20 rules and guidance is one of our primary goals.

21 Information technology. Building
22 information technology systems to advance organic

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1 integrity. Our current focus is building that
2 modernized database of organic operations that we
3 plan to have Version 1 launched in September of this
4 year.

5 Finally, developing the team and
6 organization. Our mission can only be realized
7 through a strong and engaged team at AMS.

8 So, the Strategic Plan has a number of
9 different priorities. First of all, I wanted to
10 announce that origin of livestock is a priority,
11 and the proposed rule is actually on display today.
12 So, there should be a USDA Organic Insider that will
13 be going out today about the origin of livestock
14 proposed rule. It will be published tomorrow in
15 The Federal Register. It has a 90-day comment
16 period, and we welcome your comments on that.

17 The origin of livestock proposed rule
18 is based on a number of NOSB recommendations from
19 1994, 1998, 2000, 2002, 2003, and 2006. So, the
20 NOSB has looked at this origin of livestock issue
21 multiple times over those years.

22 Well, it is interesting on origin of

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1 livestock, when I first started in 2009, I didn't
2 know -- I worked at a state government, but you
3 still have to go through administrative procedures
4 to get things done. So, I got here and I thought,
5 oh, we will get origin of livestock done in the next
6 year. It was one of the priorities when I first
7 started. So, here it is over five years later and
8 we are getting the proposed rule out. So, some
9 things do take a while. I am very happy that we
10 can announce that it is out there for public comment
11 now.

12 So, origin of livestock has a more
13 narrow allowance for transitioning into the
14 organic dairy industry. The last recommendation
15 from the NOSB was that existing dairies could only
16 use organic dairy animals and could not use any
17 transition dairy animals.

18 There is a series of recommendations
19 that are described in the proposed rule. You will
20 see that, as the Board worked on origin of livestock
21 and the organic dairy sector grew, that the
22 recommendations got more and more narrow, narrow

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1 in terms of that one-time transition.

2 So, the purpose of the proposed rule is
3 to support the objectives of the Organic Foods
4 Production Act for a consistent standard. It
5 incorporates those NOSB recommendations and, also,
6 additional stakeholder input from the industry
7 Origin of Livestock Task Force and outreach that
8 the National Organic Program has conducted. It
9 also responds to an Office of Inspector General
10 audit which identified inconsistent
11 interpretation of the current rules. So, all in
12 all, to increase organic integrity in this area of
13 the organic regulations.

14 I am not going to get into a lot of
15 details here, but the basic concept for this
16 proposal, it is proposing a very narrow one-time
17 transition. The current regulations that are on
18 the books use herd as the regulatory unit, and herd
19 is undefined and inconsistently applied.

20 So, the proposed rule uses producer as
21 the regulatory unit, and it proposes a very narrow
22 one-time allowance in a single, continuous,

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1 12-month period for that producer to be able to
2 transition animals into organic production. And
3 then, once that is complete, then all new animals
4 have to be, all replacement animals have to be from
5 last third of gestation or have transitioned on
6 another farm.

7 Okay. So, origin of livestock is out
8 there for proposed rule. In the Strategic Plan we
9 have many what we call priority regulations that
10 we are working on. Remember that the proposed
11 rule, after we get all of the comments on the
12 proposed rule, we have to analyze those comments
13 and, based on those comments, come out with a final
14 rule. So, there is still a lot of work to do to
15 get to the final part of origin of livestock, and
16 we have to do the same with the rest of these things
17 on the list.

18 Animal welfare standards, Secretary
19 Vilsack talked about this a couple of weeks ago and
20 about how this is a priority for the Department to
21 get the animal welfare proposed rule out, published
22 sometime later this year. So, we have a team that

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1 is working on that. It is starting to go through
2 the clearance process, and we hope to have that
3 published later this year.

4 We are also working on organic
5 aquaculture, which should be published potentially
6 by the end of the summer; organic pet food
7 standards, and organic apiculture. Those
8 proposals have been written and are in various
9 stages of clearance. Organic mushrooms is on our
10 list, but we are not currently working on that.
11 But, within the next five years we think we can get
12 that done.

13 And then, one other area that we would
14 like to start working on potentially next year is
15 enhancing the enforcement provisions within the
16 USDA organic provisions. There's a number of
17 different areas that we want to look at. We will
18 probably be working with the National Organic
19 Standards Board on that, certain areas about the
20 exemptions and exclusions of who is excluded from
21 certification. There are some concerns about
22 brokers are not required to be certified. We have

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1 seen some problems with audit trails, with
2 uncertified brokers. So, there are various things
3 that I think that could be looked at to enhance the
4 enforcement provisions, but that is on the
5 Strategic Plan and, hopefully, we will start to
6 work on that next year.

7 Special projects around policy. These
8 are things that go into the Program Handbook. So,
9 grower groups. Currently, there are NOSB
10 recommendations on grower groups, but no specific
11 instructions to certifiers about certifying grower
12 groups. So, we are working on that.

13 We had a nice discussion about
14 pesticide drift at the National Organic Coalition
15 meeting yesterday. We are working on clarifying
16 what the policy and guidance is around pesticide
17 drift.

18 Just as an aside there, we were talking
19 about public comments for the work that we do on
20 the Handbook. We have guidance which we send out
21 as Draft Guidance and ask for public comment. We
22 have instructions and policy memos.

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1 One of the ideas that Rex and I were
2 talking about this morning of how to enhance public
3 comments is that, when we send out instructions or
4 policy memos, that potentially we could do that
5 through a mechanism we could call, then, Interim
6 Instructions or Interim Policy Memos and invite
7 public comment at that time. So that those
8 policies and instructions are effective at the date
9 of publication, but we still get to invite your
10 comments on those, so we can make sure that we get
11 it right and make those revisions when we finalize
12 those instructions and Policy Memos.

13 So, we will provide more details of that
14 as we go back and see how that can work, but that
15 is some of the value of these discussions that we
16 have here at the National Organic Standards Board
17 and other meetings, as you guys come up with some
18 great idea; you ask for things, and we try to figure
19 out how to make changes to make things better.

20 We are also working on clarifying
21 materials allowed in organic crop, livestock, and
22 handling. We do have Draft Guidance out on

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1 materials for organic crop production. We plan to
2 do that for livestock and handling as well, and to
3 finalize those over the next three to five years.

4 Inspector qualifications is a very
5 important thing that certifiers need. Inspectors
6 are doing excellent work and mostly have great
7 qualifications for the work that they do, but we
8 want to make sure that all inspectors around the
9 world meet certain qualifications. We have the
10 concept of eventually having some kind of approval
11 process or licensing process for inspectors that
12 are doing organic certification work.

13 And then, private labels. Private
14 labels is a very important part of the organic
15 trade. There is some information in our Program
16 Handbook about certification of private labels.
17 We have had some good discussions with certifiers.
18 We want to make sure that there is a consistent way
19 of ensuring organic integrity for private label
20 operations. So, we are looking at that as a
21 priority for our policy work over the next couple
22 of years.

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1 In terms of market development,
2 implementing sound and sensible certification
3 through public/private partnerships. There's a
4 number of different projects that are currently
5 underway. We are looking forward to the results
6 of those projects and getting that information out
7 to the organic community.

8 Identifying target countries for
9 potential equivalency arrangements, we are
10 currently working with Switzerland and Mexico.
11 There's a number of countries that have requested
12 equivalency, including Taiwan and New Zealand and
13 Australia and Peru and Chile and Costa Rica. So,
14 lots of people want to get involved in the organic
15 trade, and we are trying to work with these
16 countries to promote their control systems, to make
17 sure that they have effective control systems to
18 protect organic integrity, and also build their
19 internal markets. So, we have some efforts
20 specifically in Latin America, some good
21 organizations there to help them build their
22 control systems and their internal market

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1 development.

2 Finally, on this list is implementing
3 the Secretary's Guidance on Organic Agriculture,
4 which is comprehensive services that USDA can
5 provide to the organic sector to support the
6 sector.

7 In terms of infrastructure, modernized
8 organic integrity database, organic training and
9 technical assistance, we continue to expand on
10 that, our assistance to certifiers, the training
11 we provide to certifiers, but see if we can expand
12 upon the training and technical assistance that we
13 provide.

14 And then, of course, the NOP quality
15 system is very important to make sure that that is
16 maintained and meets international norms around
17 accreditation and certification systems, so
18 keeping that up-to-date.

19 The Strategic Plan includes this vision
20 in terms of our organic community. We envision one
21 organic community embracing all sizes of
22 organizations and institutions, all committed to

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1 and working towards a common vision of organic
2 agriculture.

3 I know we have some very vigorous
4 debates within the organic community, but it is
5 also important to recognize that the basic
6 standards, the basic principles of organic are
7 shared by everyone in this community, and that we
8 all are working together towards common goals.

9 The plan also includes some performance
10 measures to see, well, how are we doing on meeting
11 the goals and objectives within the plan. One of
12 them is compliance with accreditation
13 requirements. So, we do dozens of audits every
14 year, and during those audits hundreds of different
15 criteria are evaluated. So, we, then, can
16 determine how well certifiers are complying with
17 the requirements. For last year, it was over 95
18 percent compliance with thousands of accreditation
19 requirements that we evaluate on a yearly basis.
20 So, that is one of our performance measures, to see
21 how well the certifiers are doing their work.

22 Consumer trust is something that comes

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1 out of the Organic Trade Association's work. They
2 do a survey of consumer attitudes. Specifically,
3 they measure their trust level. In 2012, the trust
4 level was 37 percent, which is not really great,
5 but in 2013 the level jumped to 43 percent; our
6 target is 50 percent for 2014 and 2015.

7 Another performance measure is number
8 of U.S. certified organic operations. We just
9 recently announced that in 2014 there was a growth
10 in 5 percent of the number of certified organic
11 operations in the United States, up to about 19,500
12 certified organic operations.

13 And then, also, our Sound and Sensible
14 Outreach is one of our performance measures. How
15 well are we doing at getting the word out about
16 resources available for the organic sector?

17 Okay. So, that was an overview of the
18 Strategic Plan. I really urge people to take a
19 look at it. If you have any comments about the
20 Strategic Plan, things that you would like to see
21 as priorities or de-emphasized, please let us know.
22 You can email me directly if you have any comments

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1 on the Strategic Plan. We really look forward to
2 your input.

3 So, this shows just the basic
4 organization of the National Organic Program.
5 There are basically four parts to the National
6 Organic Program. There is the Office of the Deputy
7 Administrator, which is responsible for overall
8 coordination and management, communication, the
9 Cost-Share Program, and we work very closely with
10 the National Organic Standards Board.

11 And then, we have the three different
12 Divisions. We have the Standards Division that is
13 responsible for the rules and guidance and
14 instructions and, also, the National List. The
15 Standards Division is the Division that works most
16 closely with the National Organic Standards Board.
17 So, a lot of the support that is provided to the
18 NOSB is provided through that Standards Division,
19 and a lot of the work that the NOSB does really
20 drives the work that the Standards Division does.

21 We just hired a new Standards Division
22 Director who started last week, Andrew Perry. So,

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1 I am sure he will be here at the next meeting. I
2 look forward to having him introduce himself to the
3 community. He comes from the Office of Budget
4 Planning and Analysis at USDA. He is an expert at
5 getting things through the clearance process. So,
6 we really are looking forward to him helping us get
7 things through and published.

8 The other two Divisions, Accreditation
9 and International Activities, are responsible for
10 overseeing certifiers and our international
11 agreements. And then, Compliance and Enforcement
12 handles complaints, investigations, and
13 enforcement actions, and does some market
14 surveillance.

15 Okay. So, that was a quick visit with
16 the National Organic Program. Let's move over to
17 a couple of topics with the National Organic
18 Standards Board.

19 As you know, the NOSB is a federal
20 advisory committee which assists and advises USDA.
21 It has a charter with an established mission and
22 duties. We are almost starting the second year of

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1 the charter. We will have to renew the charter
2 next year. The NOSB, as with all federal advisory
3 committees, has to have a charter to operate. We
4 will be reissuing a charter for the NOSB next year.

5 As a Designated Federal Officer, which
6 is myself, and Michelle acts as the Designated
7 Federal Officer when I'm not available, it has
8 subcommittees, many subcommittees that you will
9 hear from over the course of the next few days, and
10 the Chair, Jean Richardson, and many opportunities
11 for public participation, both in written form in
12 all their proposals as well as public comment which
13 we will start to hear this afternoon.

14 Budget for the NOSB is \$190,000. This
15 is a budget cap that is provided by departmental
16 management. This is for direct NOSB support. So,
17 the Department gets from -- well, actually, I'm not
18 sure exactly; I guess it is from Congress -- gets
19 a certain amount of money to run all the advisory
20 committees at USDA. There's a couple of million
21 dollars that the Department has for all the
22 advisory committee. There's over 160 advisory

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1 committees at USDA.

2 So, the NOSB budget is actually quite
3 large in terms of advisory committees at USDA. It
4 is currently at \$190,000. It covers the salary and
5 benefits for Michelle's position as an Advisory
6 Board Specialist and the cost of the meetings, the
7 travel to the meetings and the cost for these
8 facilities.

9 But there's a lot of other things that
10 we do to support the National Organic Standards
11 Board. We have a lot of technical support that we
12 provide to the subcommittees. Dr. Lisa Brines is
13 our National List Manager. Emily Brown Rosen
14 provides technical support to all the
15 subcommittees, and we also have the rest of our
16 standards staff that also provides support as well.

17 Last year alone we also provided
18 Technical Reports. Over half a million dollars
19 were provided to get Technical Reports that the
20 NOSB and the Standards Division can utilize to do
21 the work on the National List.

22 We do currently have a call for

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1 nominations. So, we just have four new appointees
2 to the National Organic Standards Board at this
3 meeting, but we have five openings for 2016,
4 including two organic farmers, two public interest
5 positions, and one certifier. That is open until
6 May 15th. We are actually looking to extend.

7 There is a flyer out on the table about
8 the nomination process. So, if you know anyone
9 that is interested in serving on the Board, please
10 encourage them to apply. As I said, we are looking
11 to extend the application period by another month.
12 So, look for a Federal Register notice on that.
13 But it really helps us to get lots of applications,
14 lots of nominees for the National Organic Standards
15 Board.

16 A third of the Board will change next
17 year. So, this is really, really important to get
18 a good slate of candidates.

19 Hydroponics has been a topic that there
20 is a lot of interest in. We talked about this
21 yesterday at the National Organic Coalition
22 meeting. So, I just want to give a little bit of

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1 background on hydroponics.

2 In 1995, the NOSB recommended that
3 hydroponic production in soil-less media to be
4 labeled "organically produced" "shall be allowed
5 if all provisions of the Organic Foods Production
6 Act have been met. So, that was a 1995
7 recommendation from the NOSB.

8 During the time between 1995 and 2010,
9 there were certifiers and there were operations
10 that figured out how to produce organic
11 hydroponics, got certified to be organic
12 hydroponic operations.

13 And then, in 2010, the NOSB put out a
14 greenhouse recommendation that included a
15 provision that USDA shouldn't allow organic crops
16 to be produced using organic methods. So, we have
17 a couple of dozen certified organic hydroponic
18 operations in the U.S., certifiers that are
19 certifying these operations, and then, we have this
20 recommendation. So, in order for us to do
21 something to not allow organic hydroponics, we
22 would have to do a rule change, which is, as you

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1 know, quite challenging.

2 So, some farms are currently producing
3 organic crops through hydroponic methods. There
4 are some accredited certifiers that certify these
5 operations under the USDA organic crop standards.
6 This certification is allowed as long as the
7 certifier can demonstrate its process for
8 certifying in a way that is compliant with the
9 regulations. Certifiers that are known to certify
10 hydroponic operations are all over the U.S.,
11 including CCOF, QAI, ACS, Midwest Organic Services
12 Association, A Bee Organic, Oregon Tilth, and
13 Baystates Certifiers. So, a number of different
14 certifiers are providing this service to those
15 interested in organic hydroponics.

16 So, in order to move this topic forward,
17 we did not have enough information from the NOSB
18 2010 recommendation to do a proposed rulemaking to
19 prohibit organic hydroponics. We need more
20 information to be successful.

21 So, that is why we are creating this
22 Task Force. We are establishing a

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1 Hydroponic/Aquaponic Task Force. Their job is to
2 report on the compatibility of these systems with
3 the USDA organic regulations and the Organic Foods
4 Production Act. They will report to the NOSB.
5 So, they don't make a decision in and of themselves.

6 What they do is they will prepare a
7 report and information that will be, then,
8 presented to the National Organic Standards Board
9 on two primary things, the current hydroponic and
10 aquaculture production methods that are being used
11 in organic production, what's happening, and then,
12 whether these practices align with OFPA and the
13 USDA organic regulations. Based on that report,
14 then, the NOSB will be able to provide more details
15 to us, so that we can, then, potentially do
16 rulemaking or guidance based on an NOSB
17 recommendation in the future.

18 Nominations for this Task Force are
19 open until May 7th. We will establish the Task
20 Force this summer. The plan is to have the Task
21 Force have their final report to the NOSB for the
22 spring of 2016.

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1 Okay. A few USDA organic initiatives.
2 Secretary Vilsack, as you know, in May of 2013 put
3 out departmental guidance on organic agriculture.
4 This is a really important thing that Secretary
5 Vilsack did. It really directs all USDA agencies
6 to do specific things to support organic
7 agriculture. And those are in five specific
8 areas, around training and outreach, supporting
9 the transition to organic, what we call regulatory
10 reciprocity. So, we are reducing paperwork. How
11 can different agencies that work with the organic
12 farmers work together to reduce the paperwork?
13 Organic research, supporting that, and all parts
14 of what USDA does in the research arena. And then,
15 better data for the organic sector.

16 I just want to touch on a couple of
17 things that are new in this overarching guidance.
18 The Organic Literacy Initiative, we are in the
19 process of revising the Literacy Initiative and
20 expanding it. So, some of this information I think
21 has already been rolled out. The USDA Organic
22 Resource Guide, "Is Organic an Option for Me?" has

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1 been updated. So, we are putting some new efforts
2 into this information and trying to get this
3 information out beyond just USDA.

4 And then, the other area that has
5 recently had some real success is around
6 conservation activity plans where we are working
7 with the Natural Resources Conservation Service on
8 these conservation activity plans for organic
9 producers.

10 So, the NRCS created a Conservation
11 Activity Plan that mirrors an organic system plan.
12 This is very important for transitioning
13 producers. It helps them with the paperwork and
14 also conservation practices. So, as they are
15 completing their work to get certified with an
16 Organic System Plan, they can also be getting the
17 conservation practices potentially financial
18 support through the EQIP Program, up to \$20,000 a
19 year for conservation practices that support that
20 transition to organic.

21 We also have cost-share resources.
22 The Organic Certification Cost-Share Program was

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1 reestablished last year. We have some states that
2 are very high utilization in terms of the number
3 of producers and handlers participating in the
4 program and some states with lesser utilization.
5 So, we want to continue to get the word out about
6 this program, that certification cost-share is
7 available to offset some of the costs involved in
8 organic certification. So, we will continue to
9 put out more outreach materials. Anything you can
10 do to get the word out about these programs would
11 be greatly appreciated.

12 Okay. Moving on to standards, we are
13 getting to the last part of this presentation.
14 First of all, we did publish Draft Guidance on
15 natural resources and biodiversity conservation.
16 This addressed NOSBB biodiversity recommendations
17 over the last number of years. The purpose was to
18 inform organic operators of specific production
19 practices that demonstrate compliance with the
20 general conservation requirements of Section
21 205.200. So, within the USDA organic regulations,
22 there is basic requirements to protect natural

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1 resources and to maintain or improve soil and water
2 quality.

3 This Draft Guidance is trying to
4 provide specificity in what the responsibilities
5 of producers are, what the responsibilities of
6 certifiers are, and what some potential resources
7 USDA has to help organic producers meet those
8 particular goals. It clarifies the role of the
9 certifier and the inspector and reduces paperwork
10 for operators that are participating in both NRCS
11 and NOP programs.

12 So, there's a number of different
13 conservation practices that organic producers can
14 participate in and where assistance, financial
15 assistance, may be available. They include a
16 number of organic practices like adding organic
17 matter to the soil to increase soil organism
18 biodiversity, conserving woodland and wetlands,
19 vegetative covers, water conservation techniques,
20 plant diversity, conserving wildlife corridors,
21 and controlling invasive species. So, a lot of
22 things that organic farmers are doing, there is

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1 possible federal assistance, financial
2 assistance, for these types of conservation
3 practices.

4 The key elements of this Draft Guidance
5 are that we say that an operator must select,
6 record, and carry out production practices that
7 maintain or improve the natural resources of the
8 operation, and the certifier must review the
9 organic system plan and ensure that the inspector
10 is qualified to evaluate this requirement in the
11 regulations; and that when the inspector is onsite
12 doing the inspection, that they must observe and
13 evaluate the practices already underway, those
14 that are planned, and note any exceptions.

15 So, the Draft Guidance was open for
16 public comment. The public comment period has
17 closed. We are working on analyzing those
18 comments and coming out with final guidance on this
19 very important NOSB recommendation that is going
20 eventually into the Program Handbook.

21 Another topic that we get a lot of
22 questions about is around sodium nitrate, which,

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1 if you look at 7 CFR 205.602, sodium nitrate is on
2 the list of prohibited, nonsynthetic materials
3 list. So, AMS has not renewed sodium nitrate on
4 205.602. That is one of the requirements under the
5 sunset provision, is that the NOSB reviews and the
6 Secretary renews substances. But, for sodium
7 nitrate, we have not been successful at completing
8 our renewal of sodium nitrate on the prohibited
9 natural list. So, the listing is invalid, and it
10 is no longer enforceable.

11 But what we say in our September 11th,
12 2012 notice, that any use of sodium nitrate must
13 meet the soil fertility and crop nutrient standard
14 and the natural resource standard. So, we are in
15 the process of moving that September 11th, 2012
16 notice into the Program Handbook. We had
17 envisioned, when we put out that notice in
18 September of 2012, that this would be a very short
19 period of time when this listing was invalid, but
20 we have been unsuccessful at completing that
21 process on sodium nitrate. So, that September of
22 2012 notice is kind of the current status of sodium

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1 nitrate. We do plan to address this in the future,
2 but that is the current status of sodium nitrate.

3 Biodegradable mulch. Biodegradable
4 mulch was worked on and an NOSB recommendation from
5 the Providence meeting. We did the rulemaking to
6 get it onto the National List through proposed and
7 final rule, notice and comment rulemaking. And
8 so, it is on the National List. So, biodegradable,
9 bio-based mulch film is allowed if it is
10 compostable, biodegradable, and bio-based,
11 meaning the polymer feedstocks consist of
12 biological products or renewable agricultural or
13 forestry products.

14 So, after the final rule came out on
15 biodegradable mulch in October of 2014, we got a
16 number of questions about specific biodegradable
17 mulch products. We learned more about the
18 feedstocks that are used in terms of creating these
19 types of mulch films and found that we needed to
20 put out the clarification. We did that through NOP
21 Policy 15-1, which is also based on the NOSB
22 recommendations.

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1 It says that certifiers must verify
2 that all the polymer feedstocks are bio-based in
3 order to allow a biodegradable, bio-based mulch
4 film. So, this is something that the NOSB may look
5 at again on their work agenda. Because what
6 basically happened is that they did a lot of really
7 good work on this topic, but that they in that
8 process kind of did not hone down on the feedstocks
9 that create these substances that closely.

10 What we found is that a number of these
11 products use about 15 to 25 percent bio-based
12 material, and the other component is petroleum
13 resins. So, we might have the NOSB take another
14 look at this to see how they want to look at the
15 bio-based component of these types of mulch films.

16 Nanotechnology. NOP Policy 15-2
17 states that engineered nanomaterials are
18 prohibited in organic production and handling.
19 This is based on October 2010 NOSB recommendation
20 on engineered nanomaterials. The NOSB at that
21 time considered nanomaterials to be synthetic and
22 prohibited substances under the organic

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1 regulations.

2 What we found out in the couple of years
3 that we have been working on this
4 nanomaterials/nanotechnology policy is that many
5 of the engineered nanomaterials that are being
6 produced would not meet the definition of synthetic
7 under the Organic Foods Production Act or the USDA
8 organic regulations.

9 So, in order to honor/respect the NOSB
10 recommendation that nanomaterials are prohibited,
11 we put out this Policy Memo that clarifies that
12 engineered nanomaterials are prohibited in organic
13 production and handling. This expands the
14 authority of the Board, that the Board then has
15 authority on all engineered nanomaterials, whether
16 they are synthetically-produced or not. So, this
17 is a new Policy Memo that implements that NOSB
18 recommendation from 2010.

19 I think there have been some folks that
20 thought that the NOSB had recommended that
21 nanomaterials should be considered like excluded
22 methods, like GE products, but that is not what the

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1 NOSB recommendation says. The NOSB
2 recommendation says that these materials should be
3 considered prohibited substances. So, that is
4 what this policy does. It clarifies that
5 engineered nanomaterials are prohibited
6 substances and are not allowed in organic
7 production or handling.

8 Electrolyzed water -- and I think this
9 is the last one I am covering here -- last June we
10 issued a Policy Memo on electrolyzed water, 14-3,
11 which addressed a difference in interpretation
12 among certifiers on the allowance of this
13 substance. Electrolyzed contains the active
14 ingredient hypochlorous acid and is generated from
15 the electrolysis of salt, sodium chloride, in
16 water.

17 Hypochlorous acid and electrolyzed
18 water are not on NOP's National List of allowed and
19 prohibited substances. Some stakeholders have
20 asked us to rescind the Policy Memo. They assert
21 that hypochlorous acid is equivalent to other
22 chlorine materials on the National List and should

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1 be allowed for use. We are saying that we
2 encourage companies that would like or operations
3 that would like to use hypochlorous acid to
4 petition to have the NOSB take a look at
5 electrolyzed water and go through the process of
6 having NOSB review. If we get a recommendation
7 from the National Organic Standards Board, then we
8 would go through notice and comment rulemaking to
9 potentially put hypochlorous acid or electrolyzed
10 water on the National List.

11 Okay. So, that is the end of that.
12 This is a picture of me about 15 years ago.

13 (Laughter.)

14 So, I am a little bit younger. But I
15 really want you to look at the background. This
16 is where I am from, Washington State. This is the
17 eastern part of the State, which is orchard
18 country, and a little bit about why I am in the
19 organic sector.

20 When I was young, I worked in the
21 orchards here, actually, in an orchard that it is
22 behind my head on the lefthand side, on the lefthand

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1 side of the river down the river. This was in the
2 late seventies/early eighties. At that time, as
3 far as I knew, I was just working in the orchards
4 and there were no organic operations whatsoever.

5 And so, me and my family, because we
6 lived outside, we were exposed to all the different
7 types of pesticides that are used in conventional
8 operations. And now, if you look at this same
9 landscape 25 years ago -- or is that 35 years
10 ago? -- that is a long time ago. I guess I am aging
11 myself here. Ten percent of Washington orchards
12 are now organic where there was none 35 years ago.

13 And that is a tribute to you all that
14 have been working in this organic sector for all
15 these years to come up with ways of producing
16 organic crops, getting it to the marketplace, and
17 creating this whole organic sector. So, thank you
18 for all the work that you do.

19 But all those workers that are out there
20 in those orchards now have less toxic pesticides
21 that they are exposed to if they are in organic
22 orchards. A lot of the practices that organic

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1 farmers are utilizing conventional farmers are
2 adopting. And so, it is also reducing the use of
3 synthetic pesticides in conventional farming as
4 well.

5 So, with that, thank you to the public.
6 Thank you to the National Organic Standards Board
7 for all your work, and I look forward to all your
8 public comments and working together in the future.

9 Thanks.

10 (Applause.)

11 CHAIR RICHARDSON: I would like to
12 invite the Board members to ask questions of Miles.

13 Zea?

14 MEMBER SONNABEND: Thank you, Miles,
15 and thank you for your comment, and the ending of
16 your talk is leading right into my question.

17 You have talked about the growth that
18 you have seen over your career. I think we are all
19 aware of that. Just recent reports show that the
20 number of organic operations increased by about 5
21 percent in the last year or so. I am sure your
22 Strategic Plan is anticipating further growth.

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1 With that in mind, we are hard-pressed
2 to have our current system of having a lovely
3 audience, which is growing each time we come and
4 more and more public comments that we have to read
5 each time. I think we need some measures to
6 scale-up our process here, so that it is accessible
7 to more people.

8 The two things that come to mind first
9 are a recommendation we passed a couple of years
10 ago on public communications, to have a year-round
11 open docket, so people can submit their comments
12 in a broader window than just a three-week period,
13 three to four weeks each time, and especially on
14 some of our long-term work like GMO work. You
15 know, a number of things lend themselves more to
16 long-term comments than others.

17 And then, the second component of this
18 is that in the State of California, where I am from
19 now, almost all public advisory board meetings from
20 the California Department of Agriculture are
21 audio-streamed and sometimes video-streamed, if
22 they are in the CDFA buildings. But even the ones

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1 that are held in hotels or extension centers are
2 audio-streamed, so that the public out there can
3 hear the meetings. Video is a bit more
4 problematic, and I know it was tried once and was
5 not entirely ideal. But audio-streaming is not
6 nearly so difficult.

7 It wouldn't necessarily have to be the
8 whole four days, but could easily be this morning's
9 presentations, for instance, and maybe the last day
10 for voting. That would enable so many more people
11 to see what our process is like and to be able to
12 listen-in from home.

13 MR. McEVOY: Right. We did look at
14 that. We actually did use that, that
15 video-streaming, a few years ago and found that it
16 wasn't being utilized that much. But, with the
17 growth of the industry, this might be something
18 that we can look at in terms of building
19 infrastructure.

20 You're right, there's a lot more
21 interest in providing audio-streaming. We can
22 look into that as a possibility.

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1 Having the open public comment period
2 is something that is an NOSB recommendation that
3 we have not implemented. We support that concept
4 of an open public comment period. The
5 implementation of that was more challenging than
6 we had thought. So, that is still one of those
7 projects that is on the list that we just haven't
8 had ability to implement, but we certainly support
9 that kind of concept of having an open public
10 comment period for the NOSB. And we can look
11 into -- audio-streaming might be a way to do things.

12 The other thing, with the increased
13 workload that we could look at is doing web-based
14 meetings as well, that we don't even have to
15 physically get into the same room. So, have the
16 NOSB members be able to work and be in the meeting
17 from their home locations.

18 So, those are the kinds of technology
19 things that we would like to pursue. Yes, we will
20 look into that.

21 CHAIR RICHARDSON: Thank you.

22 Colehour?

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1 MEMBER BONDERA: Yes, thank you, and
2 thank you, Miles, for your overview. It was very
3 useful. We are all doing a lot of work.

4 I think I have to thank Zea because she
5 really addressed the question that I wanted to ask,
6 but I would appreciate it if you would even comment
7 further on it, which is I really do think that,
8 between the National Organic Program and the
9 National Organic Standards Board, the public is the
10 lynchpin. That is why we did pass that
11 recommendation from the Policy Development
12 Subcommittee. It was actually Jennifer Taylor who
13 did the work on it, and we did unanimously pass it
14 as an NOSB, that the public docket would be an open
15 opportunity for better communication, because we
16 anticipated that this buildup that is being
17 referred to would occur.

18 I understand, and I have understood
19 from the beginning -- I was the Chair at that time
20 of the Policy Development Subcommittee -- that it
21 is not going to be a simple process, but I would
22 like to put the pressure back on you and ask you

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1 more specifically, where is that process at and
2 what can we hope for in terms of a public docket
3 being open?

4 Thank you.

5 MR. McEVOY: Yes, we are currently not
6 working on that. The focus of our IT team is
7 working on the modernized database. There are
8 many projects that we have on the list. We have
9 something called our Quality -- what is it
10 called? -- Quality Project Management List. There
11 are, I think, about 60 items on that list. So, it
12 would be one of those 60 items.

13 This is why I think taking a look at the
14 priorities that we spell out in our Strategic Plan
15 is important for you all to look at. These are the
16 things that we feel are the highest priorities. If
17 you think there are other things that should be our
18 priorities, please let us know and tell us which
19 ones of the things that are on the list we should
20 take off to replace with these other priorities.

21 Because we are getting a lot done. We
22 intend to continue to get a lot done, but we can't

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1 get it all done at the same time. So, for us, the
2 modernized database, animal welfare, those are
3 really two of our really top priorities. And so,
4 these other things are also important. It is just
5 hard to get it all done at the same time.

6 CHAIR RICHARDSON: Harold, you have a
7 question?

8 MEMBER AUSTIN: Yes. Miles,
9 regarding Policy Memo 14-3 on electrolyzed water,
10 when that came out, that has had the potential for
11 pretty serious impact on organic handlers and
12 retailers from a produce quality and, also, from
13 a produce safety standpoint. Could you give us a
14 little bit more detailed update on where we are
15 currently at? Have we heard from the industry at
16 all? How do we continue to help them move this
17 forward?

18 MR. McEVOY: Well, we have actually
19 heard from the industry quite a bit on this because
20 they weren't happy with Policy Memo 14-3 because
21 there were certifiers that had allowed
22 electrolyzed water and others that had not. So,

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1 I think we do have a petition that we have received
2 on electrolyzed water. It is not complete. We
3 have responded back to the petitioner of what the
4 information is that we need to make that petition
5 complete, but we are still waiting to have a
6 complete petition before we would, then, turn that
7 over to the NOSB for your consideration.

8 CHAIR RICHARDSON: Other questions
9 from Board members? Paula?

10 MEMBER DANIELS: Miles, thank you for
11 your report. I have to say I needed a lot of coffee
12 and felt a little exhausted after I saw all the work
13 that you are doing. It is quite a lot. I think
14 just developing the work through the National
15 Organic Standards Board is only one part, as you
16 presented to us, of a very large and complex set
17 of activities.

18 The question I wanted to ask you about
19 was the trust level question because one of the
20 things that is, as I understand it, unique to this
21 body is that we are making the decisions as part
22 of a public process, which we find very valuable,

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1 as Zea and Colehour pointed out.

2 The other labels and certifications
3 that are out there are done in a more private way.
4 So, the public interaction, very valuable, but also
5 reveals a lot of difference of opinion, which we
6 also cherish. We have 15 different members on the
7 Board designed to represent different points of
8 view that are going to bump up against each other
9 from time to time. Does that factor in or what are
10 the things you are seeing that are causing for the
11 level of trust, which I must say I think is a
12 relatively high level, given that this is a
13 government-related process. So, if you could just
14 comment on what you are learning from that survey
15 information?

16 MR. McEVOY: Well, I think what we are
17 learning is that we need to get more information
18 out about the comprehensive nature of organic
19 standards and the certification work. The
20 standards are very comprehensive from farm to
21 market, from everything from crop production to
22 livestock production and handling.

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1 As you see here, we get down in the weeds
2 on materials, materials in material, so the
3 ancillary ingredients and processing aids. I
4 think that the public doesn't understand that part
5 as well as the amount of oversight and integrity
6 there is in the system, whether it is from a local
7 organic producer or something that has been
8 produced in a foreign country and that is coming
9 in from overseas.

10 So, explaining the rigor that is
11 involved in that certification process and how we
12 do that, probably through presentations, through
13 communication materials, and having people within
14 the organic community continue to explain the rigor
15 of the organic certification process.

16 MEMBER DANIELS: And maybe that is
17 something we can participate in as a Board as well,
18 in helping to get the information?

19 MR. McEVOY: Sure. Yes. I mean, we
20 can certainly work together to provide
21 communication materials that you can utilize or you
22 can provide us with ideas of how to get the

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1 information out. I mean, especially within the
2 organic trade sector, there is a lot of
3 opportunities to get information out, the NGO
4 sector. There is a lot of opportunity to get
5 information out about the rigor of the organic
6 certification process, yes.

7 MEMBER DANIELS: Thank you.

8 CHAIR RICHARDSON: Thank you.

9 Other questions from Board members?

10 (No response.)

11 Very good. I think we are heading
12 along right on time. So, we will go into our next
13 item on the agenda.

14 Thank you, Miles, for your
15 presentation.

16 Do we have enough chairs for everybody
17 back there? I see a lot of people coming and going.
18 I just want to make sure that there is nobody
19 standing that doesn't want to stand. We do have
20 a couple of chairs up here that people could use,
21 and, hopefully, we will get a half a dozen more
22 before the morning goes much further.

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1 So, the next item is for me just to make
2 a short report from the perspective of the Chair
3 of the Organic Standards Board and try to sort of
4 set the tone for how we might deal with all of the
5 public comments and the questions that we are going
6 to be dealing with and the decisionmaking for the
7 next few days.

8 When giving a presentation, you can
9 really always just expect the audience to remember
10 three things. You know, Miles gave us far too
11 many. We are not going to remember all of those.
12 But they were very good, of course. So, I am only
13 going to try to emphasize three things in my few
14 minutes here.

15 First, just the synergy that we get when
16 we work together to seek common ground. I know
17 this sounds repetitive from my last presentation,
18 but really if we seek common ground, I think we will
19 be able to move the industry even further forward
20 and faster.

21 And secondly, to remember that all of
22 the work that we do takes place within

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1 multidisciplinary contexts. I think that we get
2 often so deep into the weeds listening to the
3 presentations and the questions. We get really
4 deep into the weeds. So, we have got to keep
5 standing back and looking at the context.

6 And then, thirdly and very importantly
7 is an appreciation for the contributions of all the
8 stakeholders, especially for this meeting of
9 groups and individuals. Last October when I gave
10 this presentation, we were all struggling with how
11 to adapt to the new, revised sunset review process
12 and other NOP changes to our traditional ways of
13 operating.

14 In my remarks that time I urged us all
15 to work together to seek common ground because our
16 community, our organic community, it might be
17 almost a \$40 billion industry, but it is still a
18 very small, small, small part of U.S. agriculture,
19 maybe only 5 percent, and certainly only about 1
20 percent in terms of farmable land being used. So,
21 we are really still extremely small. That is why
22 working together is so very important.

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1 The October meeting went very well, and
2 I thank everyone very much for the manner in which
3 we were able to deal with our differences and get
4 through the necessary work of the meeting in a very
5 professional manner. I heard from many of you that
6 you appreciated the way in which I ran the meeting.
7 So, I am going to do the same thing this time,
8 hopefully, run a tight ship and with a bit of humor
9 now and then, as I hope all of you will also
10 contribute some humor.

11 So, you can say or do the most
12 outrageous things that you want to at this meeting.
13 All I ask is that you please do it concisely and
14 politely while remembering that we are all human,
15 and kindness and a smile goes a long way.

16 I would also like to express my
17 appreciation for the incredible outpouring of
18 written public comment that we have received for
19 this meeting. I kind of choke up when I say this,
20 but the Board has read it all and we are in absolute
21 awe of the amount of professional, detailed,
22 heartfelt comments from all sectors of the organic

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1 community. I mean, I just can't say thank you
2 enough. The professional manner in which we got
3 your portfolios and the detail that you went into,
4 all sectors, absolutely remarkable. To me, that
5 really is working together. So, you who represent
6 the stakeholders deserve an enormous set of thanks.

7 I would also like to acknowledge that
8 there is a cohort of our organic community that has
9 filed two lawsuits against the AMS/NOP in order to
10 seek clarification, so to speak, of NOP actions in
11 regard to the revised sunset process and, also, in
12 regards to guidance on allowance of green waste.

13 Judicial challenge to the
14 administrative procedure is a well-established
15 aspect of our American system of checks and
16 balances. So, while all of those issues go through
17 the judicial system, I am asking that we just get
18 on with our work. We obviously can't talk about
19 a lot of those things in detail. Certainly, the
20 NOP can't. So, we just need to accept that they
21 are going through the correct process and they will
22 be dealt with in a timely and appropriate manner.

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1 I would also like to note that I
2 personally am very sad to see the Cornucopia letter
3 dated April 24, signed by Will Fantle, asking for
4 Miles McEvoy to be replaced. I mean, I choke up
5 just to even read it. I was very sorry to see that,
6 and I would love him to withdraw it.

7 Anyway, on a more cheerful note, in the
8 last few months I have given quite a few lectures
9 to university classes, to farmers and to
10 organizations. I have heard a lot of students,
11 young, wonderful, naive students with their
12 expectations of organic, and a lot of the things
13 that they are really, really interested in I think
14 we can all identify with. It is a reminder from
15 their perspective for what it is that we have to
16 work on.

17 The students are uniform in really
18 wanting to be sure animals are treated well. And
19 so, they are very interested in and looking forward
20 to the proposed animal welfare standards coming out
21 very soon.

22 I am pleased to note that, I believe it

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1 was at the OTA conference -- I wasn't there, but
2 certainly I heard that Secretary Vilsack spoke,
3 that he demonstrated the fact that he was obviously
4 very supportive of animal welfare standards coming
5 out. So, let's hope that this summer that, indeed,
6 does happen.

7 The students also were very concerned
8 about the cost of organic food, and we just had
9 lengthy discussions on our cheap food policy.
10 America likes cheap food. We have been that way
11 since the 1930s, and it certainly makes our task
12 as organic farmers and producers very difficult.

13 I always comment on it because the cheap
14 food policy creates a tension between large-scale
15 and small-scale operations, and that is part of the
16 tensions that we all deal with, the stakeholders.
17 This places an unfortunate tension really in the
18 way in which we can produce agricultural goods.

19 Because in America most farms are small
20 and their margin of profit is extremely tiny. Most
21 farmers do not receive enough or adequate income
22 for their products. That is a reality of one of

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1 the contexts within which we work and makes that
2 tension of big and small particularly complex.

3 There is also the obvious context of
4 global climate change to be recognized in all of
5 the things that we are doing. Given the huge
6 demands that agriculture places on water,
7 especially here in the West, that really strikes
8 one coming from the more moist Northeast; the water
9 laws of the western United States are so radically
10 different from the water laws of the eastern
11 states, where we have riparian rights. And so,
12 that is an enormous tension and, also, a context
13 within which our discussions of agriculture must
14 take place.

15 Here in California water is the key to
16 sustainable agriculture. It changes the dynamics
17 of the way perhaps that we are going to look at
18 hydroponics and aquaponics because the issues are
19 very different on two sides of the country where
20 there is lots of water or not so much water.

21 So, some of the things that I would ask
22 us to think about, as we are evaluating the

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1 materials and discussing things with each other,
2 is, are we asking the right questions as we
3 deliberate organic issues at this meeting? Are we
4 thinking in an interdisciplinary manner? Our
5 deliberations and recommendations will affect the
6 lives and livelihoods of a large number of
7 individual people and businesses. We will be
8 making recommendations at this meeting on
9 substances by saying yes or no. And yet, really,
10 there are no easy black-and-white answers. They
11 are all nuanced answers that we will be providing
12 based on the input we have received from all of you.

13 But now, to some well-deserved facts.
14 First, to our Deputy Administrator Miles McEvoy,
15 I find Miles to be pretty amazing in his capacity
16 to answer all those emails, the phone calls, and
17 yet, traveling around the world, building
18 cooperative organic agreements with other nations,
19 writing Policy Memos, whether we like them or not,
20 guidance and instructions.

21 And it is impressive to me that pretty
22 much any member of the public can reach out to Miles

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1 or to any one of his staff at the NOP and get a human
2 being on the phone. That is a remarkable change
3 to what it was not that many years ago, and it makes
4 a really big difference to have a person at the end
5 of the phone instead of one of those telephone
6 queues.

7 In addition, I just want to be sure we
8 are on the record to say that we have had tensions
9 with the NOP, the NOSB has over the last year and
10 a half. But, in the last year and a half or last
11 year especially, I have found that the relationship
12 between the NOP and the NOSB has improved
13 enormously. We are working together more
14 collegially than we were a year and a half ago, and
15 we are working on our own policies and procedures
16 again. And I think that there is much more
17 thoughtful rapport and exchange between us, even
18 though our roles are all quite different, and we,
19 all of us, are doing a better job at understanding
20 our roles, I think.

21 Thanks are also due to the Board
22 members. No one can really imagine the energy and

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1 stress that goes into getting ready for this NOSB
2 meeting twice a year and the work that the members
3 do week after week after week after week.

4 In the last six months, all of the
5 subcommittees met regularly, except for the Policy
6 Subcommittee, which has only recently restarted
7 working again on editing the Policy and Procedure
8 Manual. And that is primarily because we just
9 haven't had time for it to be a high priority, given
10 the incredible sunset load that we have had to deal
11 with.

12 Because of the sunset review, the
13 Crops, the Livestock, and the Handling
14 Subcommittees have all added about five extra
15 subcommittees each in the last few months.
16 Indeed, I have to say that no other NOSB Board has
17 ever done such an incredibly-detailed analysis of
18 sunset materials. And I certainly thank the NOP
19 staff and all the stakeholders for all the input
20 that they have given us, and I have said that again
21 and I will say it yet again.

22 We have left no stone unturned to try

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1 to find the necessary scientific information and
2 the history of use of every one of the materials.
3 I am amazed when I look around my colleagues here
4 at the table. They are an astounding group to work
5 with, and I thank them for allowing me to be Chair
6 of the Board. It really is an honor.

7 I certainly thank Emily and Lisa for
8 their incredible work over the last few months, for
9 setting up all those templates that all of you have
10 had to struggle with, to try to learn to work with.
11 I think it has improved the sunset review process.
12 It has certainly made it more open and transparent,
13 but it has also meant that we have had to spend an
14 enormous amount of extra time and energy in getting
15 all the necessary Technical Reports and reviewing
16 these materials.

17 I have to say that the Technical Reports
18 that we are getting now are well worth the half a
19 million dollars that I note they cost because they
20 are so much better than they used to be and they
21 have helped us a great deal to come more accurately
22 to a fuller understanding of each of the materials.

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1 And a special shoutout to Michelle
2 Arsenault, our ABS, who puts in long hours on an
3 incredible array of tasks, from being in on every
4 conference call, setting up all these meetings and
5 all the minutiae, answering calls from members of
6 the public, and dealing with all the challenges of
7 computed data inputs while everything has been
8 changing, including our office a couple of times,
9 I think, at the NOP, and all those day-to-day
10 minutiae. Michelle is the glue that keeps us all
11 together.

12 (Applause.)

13 Then, since October, we also brought
14 onboard four new NOSB members. They received
15 in-depth training in Washington in February this
16 year. At that meeting and all the subsequent
17 conference calls we have tried to be sure that they
18 understand the depth, the breadth, and the volume
19 of the work on their plates, especially having
20 joined the Board during the sunset review year. So
21 far, none of them have quit.

22 So, please be nice to them. This is

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1 their first meeting, and I ask that you be sure to
2 stop and chat with them and get to know them. I
3 can tell you a bit about them from my perspective.

4 Let's see, Tom Chapman, down here, he
5 has a very mischievous sense of humor. So, watch
6 out for him.

7 And then, there is Lisa de Lima. Let's
8 see, Lisa is that way, too. Lisa has an
9 incredible attention to fine detail and she is just
10 amazing at the amount of effort that she is already
11 putting into one of the projects on soils on the
12 Accreditation Subcommittee.

13 And Ashley, down the other side here,
14 Ashley has a wonderful energy in her committee
15 work, and, of course, she has been to many NOSB
16 meetings before. So, she is very familiar with a
17 lot of the nuances and complexities of what we are
18 doing.

19 And then, there is Paula over here next
20 to Emily. Paula is determined to help us to find
21 much more efficient ways for us to accomplish our
22 work. And I really encourage her to give us some

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1 of her good ideas from her range of broader
2 experience in government.

3 And I should say all four of them
4 demonstrate an openness to listening to
5 stakeholders. That is always very refreshing to
6 see. They don't come with closed agendas.

7 Of course, now a reminder, just as Miles
8 did, that this is a good time for all of you to be
9 thinking of who would be good people to nominate
10 to the Board. It is fun, and the tasks next year
11 will be easier because sunset is another five years
12 away. All we have to do is make it through to the
13 end of October, and then, things do lighten up, and
14 I am sure that they will. So, encourage people to
15 do this work because you do feel like you accomplish
16 something. It is not a totally thankless job
17 really.

18 So, I would like to congratulate the new
19 Board members for not quitting and welcome them to
20 what I hope will be a very enjoyable week, so that
21 we can all work together to learn something new and
22 fascinating. And so, let's get to work together.

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1 (Applause.)

2 There will be one more presentation
3 before we take a break. I would like to at this
4 point call on Dr. Lisa Brines, who will provide with
5 a material summary update on the new and
6 outstanding petitions.

7 DR. BRINES: All right. Good morning,
8 everyone.

9 I will do my best to keep us back on
10 schedule, so we are not too late going into the
11 break.

12 The purpose of this presentation is to
13 give an overview of currently outstanding
14 petitions, what is on the agenda for this meeting
15 in terms of material review, as well as an update
16 on where we are with Technical Reports that are
17 under development or recently posted.

18 So, as a reminder, there is a lot of
19 materials on the agenda for the meeting this week.
20 The criteria that the Board will use to evaluate
21 all of these materials are provided for under the
22 Organic Foods Production Act of 1990, or OFPA.

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1 In support of that evaluation, there
2 are multiple ways that the Board will document its
3 review. The NOSB checklist is based on the OFPA
4 criteria as well as the evaluation questions that
5 are part of the technical reports.

6 There are different criteria for
7 production uses. So, crop and livestock use
8 versus handling and a few additional criteria that
9 apply just to synthetic processing aids and
10 adjuvants under Section 205.600(b).

11 Okay. So, for this meeting, we have 10
12 petition materials that are on the agenda spread
13 over the Crops, Livestock, and Handling
14 Committees. There are 12 materials that are under
15 consideration for sunset 2016. These materials
16 were previously reviewed at the last fall meeting.
17 So, this is the second meeting under which they are
18 under consideration. At this conclusion of this
19 meeting, the NOSB will complete the review of the
20 2016 sunset materials.

21 In addition to those dozen sunset
22 materials, there are 198 material listings that are

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1 up for sunset review for 2017. So, this is the
2 first meeting at which the NOSB will consider those
3 material listings for the sunset 2017 review. The
4 Board will not be voting on any of those sunset 2017
5 listings at this meeting, and they will complete
6 their sunset review for those materials at the
7 fall -- that should be 2015 -- meeting in Vermont.

8 In addition to the petitions that will
9 be considered at this meeting, there have been two
10 petitions that have been withdrawn since our last
11 meeting. These petitions were also listed on the
12 agenda for this meeting. So, they were withdrawn
13 following the publication of the agenda. Allyl
14 isothiocyanate, that is a crops petition which was
15 requesting addition to Section 205.601 and, in
16 addition, a petition for ammonium hydroxide for
17 addition to 205.605 was withdrawn.

18 So, the Subcommittee proposals that
19 were prepared for this meeting are available on the
20 NOP website for petition substances. The work
21 that the Subcommittees did for those materials is
22 available on the NOP website, should those be

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1 petitioned in the future.

2 Okay. So, for this meeting, the Board
3 will be considering three materials for crop use,
4 one for exhaust gas or carbon monoxide, a second
5 petition for calcium sulfate as a soil amendment,
6 and a petition for 3-Decen-2-one for use.

7 There's a few other outstanding
8 petitions for crops materials before the Board,
9 many of which are still under Subcommittee review
10 and have been recently provided to the
11 Subcommittee. There is a petition for aluminum
12 sulfate. The Technical Report for that is in
13 development as well as a petition for laminar, and
14 there is a Technical Report in development as well.

15 We have recently received a petition to
16 add a new annotation to the listing for ash from
17 manure burning. That is prohibited nonsynthetic
18 material that is currently listed at Section
19 205.602(a).

20 There is also a petition pending to
21 remove one of the listings for lignin sulfonate on
22 the National List.

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1 And we have a few petitions that have
2 just recently been provided to the NOSB Crops
3 Subcommittee. All these petitions are currently
4 posted on the NOP's website. One of them addresses
5 the use of sulfuric acid to pH-adjust anaerobic
6 digestate products. Another petition also deals
7 with sulfuric acid for pH adjustment of seaweed
8 extract under 205.601(j). Finally, we have a
9 petition that is requesting the use of sulfuric
10 acid as a solubilizing agent for micronutrients
11 that are currently allowed under 205.601(j).

12 So, a couple of Technical Reports that
13 are in development, all of these petitions that are
14 on the slides here are available on the NOP website.

15 Okay. A few petitions that are going
16 to be considered at this meeting. For livestock
17 materials, methionine, acidified sodium chlorite,
18 and zinc sulfate as a livestock foot bath.

19 Currently, under Livestock
20 Subcommittee review, we have three related
21 petitions concerning the use of materials for
22 poultry litter treatment. Those are

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1 acid-activated bentonite, aluminum sulfate, and
2 sodium bisulfate. The petitions for aluminum
3 sulfate and sodium bisulfate have been with the
4 Subcommittee for a little bit. We just recently
5 got the petition for acid-activated bentonite.
6 So, we don't have a Technical Report in development
7 for that one yet. But all three were submitted by
8 different petitioners, but requesting similar use
9 for ammonia control for poultry litter.

10 In addition to those three petitions,
11 we do have the aquaculture petitions that are still
12 outstanding. That is all I want to say about that
13 one.

14 For Handling Committee, we have four
15 petitions that are currently on the agenda,
16 glycerin, which was originally petitioned for
17 removal; polyalkylene glycol monobutyl ether,
18 which was petitioned for addition to 205.605, as
19 well as triethyl citrate, again, petitioned for
20 205.605, and whole algal flour, which was
21 petitioned for allowance as well.

22 All right. Also under the review by

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1 the Handling Subcommittee, but will not be
2 addressed at this particular meeting, there is a
3 petition under review for an annotation change for
4 the allowance of natural flavors on Section
5 205.605(a) of the National List. And the Handling
6 Committee is also, at the request of the NOP,
7 considering an historical petition for sodium
8 lactate and potassium lactate. That Technical
9 Report was developed for that petition for the
10 lactate salt, and that is now available on the NOP
11 website. Both petitions are also available on our
12 website as well.

13 Just a reminder on the voting
14 procedures for these petitions. For most of the
15 petition substances, the Board will vote on two
16 motions that have come out of the Subcommittee.
17 The first motion is generally a classification
18 motion, which is necessary if the material has not
19 been previously classified by the Board. So, for
20 crop and livestock substances, that is generally
21 a classification as synthetic or nonsynthetic.
22 For some of the handling materials, there may also

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1 be a classification motion on whether the substance
2 is agricultural or nonagricultural. The
3 nonagricultural substances can be either synthetic
4 or nonsynthetic.

5 Following the classification motion,
6 the Board will vote for the petition, whether that
7 is to list, to remove, or to amend the listing as
8 appropriate. As directed by OFPA, the majority
9 needed for the motion to carry is a decisive
10 majority, which is two-thirds. With this Board of
11 15 members, that is 10 votes for the motions to
12 pass.

13 All right. So, for the 2016 sunset
14 materials for crops, there are two substances that
15 are under review, ferric phosphate and hydrogen
16 chloride, and the updated Technical Report was
17 prepared for hydrogen chloride to assist in the
18 review.

19 For the sunset 2016 materials for
20 handling, there are 10 materials that are under
21 review. I will, in the interest of time, not read
22 through these individually, but we will have this

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1 report posted on the website following the
2 presentation.

3 There are a couple of update Technical
4 Reports developed in conjunction with the 2016
5 review. So, I will point those out. Those were
6 microorganisms and tetrasodium pyrophosphate,
7 TSPP.

8 For the sunset 2017 materials, as many
9 of you are aware, the majority of materials on the
10 National List are scheduled to sunset in 2017. We
11 do have the complete list of those materials in the
12 agenda and on the NOP website. We had also
13 previously published a memo about sunset review
14 timelines back in January of last year. And I
15 won't go through these sunset materials
16 individually, although you can look forward to that
17 later this week.

18 We have also been working, as Jean had
19 mentioned, very closely with the Board on the need
20 to update many of the Technical Reports in
21 conjunction with the sunset 2017 review. So, I
22 just want to mention a few of the reports that have

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1 been recently made available to the public.

2 For crop materials, those include
3 ethanol, isopropanol, hydrogen peroxide, lime
4 sulfur, potassium bicarbonate; two separate
5 reports for soaps, one covering the
6 algicide/demosser use and one for the herbicidal
7 soaps. And just this morning, we posted the
8 Technical Report for vitamins B1, C, and E that
9 addresses the crop use on 205.601(j) and we also
10 prepared a report for just a limited number of the
11 EPA List 4 materials, specifically to address
12 nonylphenol ethoxylates.

13 For livestock materials, we have
14 recently made available a number of reports.
15 Ethanol and isopropanol have been available for a
16 while, but we have recently posted chlorhexidine,
17 iodine, copper sulfate, hydrated lime, mineral
18 oil, and a few categorical listings that hadn't
19 been updated since their original review,
20 including incipients, electrolytes, and vitamins.
21 There is one outstanding Technical Report for the
22 livestock materials under review for sunset, which

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1 is a combined report to address the three
2 parasiticide materials fenbendazole, ivermectin,
3 and moxidectin.

4 For the handling materials, lots of
5 Technical Reports that were requested and that were
6 in development. I am going to just highlight two
7 that we are still waiting on for posting. Whey
8 protein concentrate, that report was just recently
9 provided to the Handling Subcommittee and will be
10 posted as soon as it has been approved. The
11 Enzymes Technical Report is still under
12 development, but we expect that to be available to
13 the public soon as well.

14 We did combine, for purposes of the
15 review, some of these materials. So, you will see
16 listings for citric acid, calcium citrate,
17 potassium citrate, and sodium citrate. Those were
18 all covered in a single Technical Report for citric
19 acid and its salts.

20 One additional note. At the spring
21 meeting last year in San Antonio, the NOSB did pass
22 two different recommendations about the petition

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1 process. One of those recommendations involved a
2 change to the petition process to eliminate the
3 provision for petitioners to submit confidential
4 business information. The second recommendation
5 addressed a number of changes to the petition and
6 Technical Report process, including a way for
7 petitions for annotations changes to be more
8 streamlined, so that not as much information was
9 needed to request those changes.

10 We are still working on implementing
11 those two recommendations that were passed by the
12 Board last April. But, until that time where those
13 changes are published, the current procedures that
14 were published in The Federal Register in 2007 are
15 still current.

16 We have had a couple of petitions come
17 in the interim that did include confidential
18 business information. We are working with those
19 petitioners on an individual basis to make sure
20 they are aware of the previous Board recommendation
21 on CBI. But, until that recommendation has been
22 implemented, they can still take advantage of that

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1 old process.

2 I think that is it unless there are
3 questions.

4 CHAIR RICHARDSON: Any questions for
5 Dr. Brines?

6 Harold?

7 MEMBER AUSTIN: Lisa, not really a
8 question, but I think just a point of clarification
9 for those in the audience: that with the Technical
10 Reports that we have listed, the majority of those
11 are full-blown Technical Reports, but that we did
12 have some limited-scope Technical Reports
13 requested by the subcommittees as well.

14 DR. BRINES: Right. Thank you,
15 Harold. Yes, I didn't make that distinction on
16 this slide. That distinction is made on the report
17 itself. Generally, in the footer on the first
18 page, we have indicated if it is a limited-scope
19 Technical Report, and, generally, we have worked
20 with the contractors to identify that within the
21 text on the first page. So, it is not confusing
22 to the public why only a few of the evaluation

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1 questions might be addressed.

2 CHAIR RICHARDSON: Great. Thank you
3 very much.

4 DR. BRINES: All right. Thank you.

5 CHAIR RICHARDSON: So now, we can take
6 a 10-minute break before our next presentation,
7 which will be from the EPA, a 10-minute break. So,
8 we should be back here by 10:35 on my watch, 10:35.

9 (Whereupon, the foregoing matter went
10 off the record at 10:23 a.m. and went back on the
11 record at 10:36 a.m.)

12 CHAIR RICHARDSON: Okay. The next
13 item on our agenda is going to be a presentation
14 by the Environmental Protection Agency. I would
15 like to call on -- oh, Zea is not here. Zea was
16 going to introduce Emily. No, I don't see her.
17 Maybe we should just go straight in.

18 Let's just hold on a second until we can
19 find Zea. It is her birthday, so we have to cut
20 her some slack.

21 (Laughter.)

22 Has anyone seen Zea out there? You

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1 want to nag her and tell her to come in? That would
2 be great. Thank you.

3 (Pause.)

4 Hey, Zea, we are waiting for you.

5 Okay, Zea, if you would like to kick off
6 this agenda item, please?

7 MEMBER SONNABEND: Thank you.

8 Well, the Crops Committee has been
9 charged with the overall inerts policy going
10 forward, which is both a 2017 sunset item and a
11 longer-term item to decide how inerts are going to
12 be looked at and reviewed.

13 So, myself and Paula from the Crops
14 Subcommittee serve on the Inerts Working Group as
15 well as Emily Brown Rosen and Lisa Brines. And so,
16 I am going to turn it over to Emily, who is going
17 to give you some background and, then, introduce
18 the Safer Choice Program.

19 MS. BROWN ROSEN: Thanks, Zea.

20 I am glad to be here to give you another
21 update on what we are doing on the plan to revise
22 the current listing in the National List for

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1 inerts. I am going to just give a little opening
2 background update because it is kind of a complex
3 topic and just to let you know what progress that
4 we have made so far.

5 For background, the OFPA, Organic Foods
6 Production Act, says that the National List can
7 provide for the use of inerts in pesticides as long
8 as they are not classified by EPA as inerts of
9 toxicological concern. And so, it is clearly
10 provided for in the OFPA, but this is kind of a
11 general statement here.

12 So, the NOP definition of inert
13 ingredient which is in the regulations is actually
14 based exactly on the EPA FIFRA definition in their
15 pesticide law. So, we are congruent with what EPA
16 is saying. Basically, that inerts are the
17 substances other than active ingredients that are
18 found in pesticide products.

19 Now in the National List there is a
20 listing in two places for a list of inerts of
21 minimal concern, which are in the Crops section at
22 601(m) and in the Livestock section at 603(e). In

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1 that listing, synthetic inert ingredients that are
2 considered List 4A and 4B by EPA are allowed only
3 in pesticides; pesticides active ingredients
4 themselves are allowed for organic use. There is
5 a separate listing for List 3 inerts that are
6 allowed in passive pheromone dispensers only.
7 Both of these listings, as Zea mentioned, are
8 subject to sunset review. The List 4 listing is
9 due to be renewed or removed by October 17th, and
10 List 3 has an October 2018 date.

11 Now the problem is with this current
12 listing is that this EPA categorized list, this was
13 originally proposed by the NOSB in 1999. At that
14 point, this was a way that EPA was kind of
15 informally handling their plans to review inerts
16 that are used in pesticides totally. So, they have
17 these four lists that are categorized, List 1 being
18 the really bad ones and List 4 being the ones that
19 were thought to be not of toxicological concern or
20 of minor concern.

21 But it wasn't really a regulatory
22 scheme. It was basically put out in public

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1 notices. So, EPA did revise this system in 2006
2 and no longer uses or maintains these Lists 1
3 through 4, in fact. And so, all inerts have to
4 appear in the Code of Federal Regulations now and
5 have tolerance exemptions.

6 So, we are operating with this obsolete
7 list of inerts that is still on the EPA website,
8 but it is not actively maintained and it was last
9 updated in August of 2004. So, the problem is that
10 manufacturers are continually trying to revise and
11 upgrade or develop new products, and the inerts,
12 you know, there is new material, some of which may
13 be more benign or more environmentally friendly,
14 but they are not on the old List 4, so they don't
15 have an option to use them.

16 Now the NOSB history has gone a little
17 ways back on this. So, I thought I would just
18 summarize it for everyone.

19 In April 2010, there was an initial NOSB
20 recommendation that was for the 2012 sunset period.
21 At this point, the NOSB recommended that NOP should
22 work with EPA on the review of inerts, and there

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1 were several options posed for the review and
2 listing. And there was a desire to see if we could
3 somehow get EPA to help us out with this whole
4 process, because it is quite lengthy and
5 complicated.

6 And then, that same following meeting
7 in October, the NOSB did review the listing for List
8 4 inerts for that sunset period. After that, we
9 established the Inert Working Group in December of
10 2010 and we started meeting with two of the Board
11 members, including Zea and Jay Feldman and, then,
12 myself and Lisa Brines. And then, we were meeting
13 with two EPA members under the Office of Pesticide
14 Programs to start talking about how we were going
15 to move forward on this project.

16 Then, following that, in October '12,
17 NOSB took it up again and recommended a policy to
18 review all known inerts by groups with individual
19 inclusion on the National List. This was partly
20 because, during our time with the initial work with
21 the Inerts Working Group and our discussions with
22 EPA, the people who were working with the pesticide

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1 programs indicated that they were not going to be
2 able to take this on and like review inerts for us
3 or provide us with actually a plan of how to
4 categorize these things. And they also thought it
5 wasn't within their authority to deal with special
6 criteria for organic.

7 So, after that, then, the Working Group
8 made a proposal to the Crops Committee, and then,
9 the Crops Committee and the NOSB made this
10 recommendation that we should go ahead and list
11 them all on the National List, cluster them in
12 groups, and start the process as soon as possible
13 to try to winnow through them.

14 Between October of 2012 and May of 2013,
15 the Inerts Working Group developed lists of known
16 inerts, basically, by working with a couple of
17 materials review organizations who kindly gave us
18 information that was not confidential. It was
19 identifying the inerts that were known to them
20 without being associated to any particular
21 products because these inerts are all held
22 confidential by the manufacturers.

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1 So, we developed a list. We developed
2 a plan, how we would notify the public and call in
3 for data. We were working on this path. But,
4 basically, we found that there was approximately
5 127 of these inert ingredients known at that time
6 in pesticide products approved for organic use.

7 So, we started along that path, and
8 then, it kind of got put on hold while, suddenly,
9 NOP became aware and other staff became aware of
10 a new program at EPA. At that time it was called
11 Design for the Environment. And now, they have
12 changed their name and put out a whole new marketing
13 effort under the Safer Choice Program label.

14 Basically, what this is is a voluntary
15 label program to promote the use of safer chemical
16 products. Initially, when we first looked at it,
17 it was basically about a labeling program that goes
18 on products like cleaning materials, degreasers,
19 industrial chemicals, but basically they go
20 through a lot of criteria and they work with EPA.
21 We will hear much more about how that works.

22 But, then, they also came out around

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1 this time period with -- they decided not only to
2 publish their product list, but also to publish
3 what is called a Safer Chemical Ingredient List.
4 This is a list of all the individual chemicals that
5 are approved for use in these types of products.
6 They include many different categories, such as
7 surfactants, antioxidants, the same kind of
8 ingredients that are used as inert ingredients in
9 a number of pesticides.

10 So, they also have published all these
11 criteria about how they review these products and
12 how they make this list. And then, that became
13 much more interesting. So, we started meeting
14 with these EPA people to see if there was some
15 overlap there where collaboration would be
16 possible.

17 Since last spring, within USDA/NOP, we
18 have been trying to talk this idea over of
19 collaborating with EPA's Safer Choice Program, met
20 with our lawyers in the Office of General Counsel.
21 They thought it sounded like a good idea. They
22 approved the idea of collaborating with other

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1 agencies, where we can, to save redundancy and to
2 produce a better product.

3 NOP, we have also been going back and
4 forth, meeting with the EPA people and their staff
5 and giving them more information about how we work
6 and have had several meetings with their team and
7 our team.

8 So, what are the next steps now that we
9 would like to propose for the Board to take up? We
10 would like NOSB to review the Safer Choice Program,
11 and the Safer Chemical Ingredient List
12 particularly, and consider using it as a reference
13 for approved inerts in organic production.

14 We would have the Crops Subcommittee
15 and the Livestock Subcommittee. We would ask them
16 to review this current List 4 reference. They have
17 to do this anyway as part of 2017 sunset. But,
18 then, what we would also see is the possibility,
19 if this looks promising to you, to draft an
20 alternative proposal for a new annotation that
21 would be separate from the sunset proposal. It
22 would have to work on a whole separate regulatory

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1 track, but to replace these current references to
2 List 4 and List 3.

3 These kinds of options could include
4 referring to the Safer Choice Skill List. It
5 probably also should continue to allow for
6 individual petitions of manufacturers that still,
7 for one reason or another, do not want to choose
8 to participate in that process. We still have the
9 option of petitioning their chemicals directly to
10 the NOSB.

11 There's a lot of details to work out,
12 but this is what we are thinking may turn out to
13 be a workable plan. So, the Subcommittees would
14 review, with the help of the Inerts Working Group
15 which would probably start the effort, and then,
16 transmit it to the Subcommittees. We would do a
17 careful review of all the Safer Choice criteria and
18 compare it to the OFPA criteria for reviewing all
19 materials on the National List.

20 We believe the EPA criteria is very
21 comprehensive regarding environmental impacts and
22 health impacts. And then, we would ask the NOSB

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1 to additionally review their program for any other
2 criteria that may not be a direct match, like, for
3 instance, the compatibility with organic
4 production or the availability of alternatives. I
5 think that can be done by the NOSB committees who
6 are looking at this.

7 Then, the NOSB would continue to
8 provide overview of the program as a whole in the
9 sunset review every five years as far as, is it
10 still a good match; is this working; let's see what
11 chemicals are allowed and compare it to any known
12 concerns.

13 So, it would be a different way of doing
14 it, but we think it would be a very valuable way
15 to add a lot of expertise to the technical reviews
16 of some very complicated materials that are really
17 important in organic agriculture.

18 That is all I am going to say right now.
19 I am going to turn it over to Clive Davies who is
20 here from EPA. He is the Chief of the Safer Choice
21 Program. He has been at EPA for 25 years working
22 both in water quality protection, air quality

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1 protection, and he is now working in the Chemical
2 Division.

3 This is Office of Pesticide Programs
4 toxic substances. They are a different group than
5 we were working with previously in the Registration
6 Division of Pesticides and Biopesticides.

7 So, this is actually quite a new
8 opportunity, and we are very excited that he came
9 out here to speak to us. So, I will turn it over.

10 MR. DAVIES: So, we have got the
11 highly-technical fix going here, so that I can
12 speak into the microphone.

13 (Laughter.)

14 Did everybody see this? Duct tape.
15 It's great.

16 Thanks for the introduction, Emily. I
17 am very pleased to be here. I am very pleased to
18 be in sunny California, although it looks like a
19 Washington, D.C., meeting room to me.

20 (Laughter.)

21 The thing I want to do, I just want to
22 run back through what Emily just said, so that folks

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1 can understand what this program is, what the Safer
2 Choice Program is, and why we have this list of
3 safer chemicals.

4 The Safer Choice Program, it is
5 confusing, a lot of moving parts right now. It is
6 not too confusing, actually.

7 We were the Design for the Environment
8 Program for a number of years. We allowed use of
9 that logo on products that were safer than other
10 products in their class, but we understood that the
11 Design for the Environment logo that we were
12 allowing use on products really didn't communicate
13 with consumers who bought products, and the driving
14 of the development of safer products was something
15 that just wasn't happening.

16 But we felt this program had potential.
17 And so, we rebranded to this Safer Choice label.
18 We did that just over a month ago. We did that
19 because -- I want to show you the picture -- we did
20 that because we really did want to appeal to
21 consumers. You know, the old logo had this appeal
22 for the environment. Consumers didn't

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1 understand. People who would buy products really
2 didn't understand how that would translate to their
3 health.

4 And so, we came up with this new label
5 through consultation with environmental NGOs, the
6 industry, and then, a lot of consumer testing to
7 show that Safer Choice, two people means that it
8 is safer for me; it is safer for my family; it is
9 safer for pets with kind of a sub-message of the
10 environment. We feel that this can drive the
11 purchase of safer products and help people who go
12 into a grocery store, for example, choose a safer
13 cleaner for their home.

14 What I want to talk about, about this
15 Safer Choice Program, is the label and what it
16 means -- I think I have done that already -- and
17 then, why we have that program and the Safer
18 Chemical Ingredient List that supports it, the
19 potential for benefits to NOP, and then, a little
20 bit about our work with our sister office, the
21 Pesticides Office, to also label antimicrobial
22 products which fall under their jurisdiction.

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1 The Safer Choice Program, just to
2 understand what it is right now, it is a program
3 that has been largely historically directed at
4 industrial products, those that are used to clean
5 buildings, for example, and schools and hospitals,
6 and degreasers and a number of other products. But
7 we did see this potential for helping consumers
8 choose safer products, and that was the rebranding
9 effort.

10 The 2000 products, the majority of
11 those are for industrial uses, but we have got about
12 600 consumer-facing products from manufacturers
13 like Clorox, CLR, Earth Friendly, a number of other
14 names I think you would recognize, and that number
15 is growing as well.

16 And then, product categories you can
17 see up here, deicers, holding tank treatments, and
18 fire suppressants being newer categories versus
19 laundry and cleaning, where we have got quite a few
20 products.

21 And the potential for expansion to a
22 number of areas, including personal care products,

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1 where we label now several hundred products.

2 So, what does it mean to have the Safer
3 Choice label on a product, just so you can
4 understand this program? Well, first of all, the
5 chemicals that go in the products have to meet our
6 standards, our published standards. They are
7 about human health. They are about the
8 environment. There are also product-level
9 requirements that are more life-cycle-based. The
10 product has to perform well, and it has to use
11 environmental and sustainable packaging and there
12 are ingredient disclosure requirements as well.

13 The company signs an agreement with EPA
14 who is making the product to use the ingredients
15 that are specified, and there are annual audits.
16 If you want to find safer products, look for that
17 Safer Choice logo, especially coming this summer.
18 It has not really appeared in stores yet, but it
19 will soon.

20 This is our website that has quite a bit
21 of information on the program, if folks are curious
22 about it. But, if you come down here in the lower

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1 left part of our home page, you will see our Safer
2 Chemical Ingredients List. What the Safer
3 Chemical Ingredients List is, it is chemicals that
4 can be used by product manufacturers to make
5 products that bear the logo.

6 This is an important piece for our
7 program. It is a way that we communicate with
8 product manufacturers, help them, help empower
9 them really to make safer products. Also, it sends
10 a message to the chemical industry that says, hey,
11 if you make safer chemicals, if you invent safer
12 chemicals, you can list them on EPA's website
13 specifically noted as safer for the environment and
14 meet the Safer Choice criteria.

15 So, you cannot see this, sadly. Sorry
16 about that. But what we have got on the screens
17 are the lists of types of chemicals for which we
18 have criteria and which are listed on our website.

19 They include things like Emily was
20 saying -- well, I can see this one over here -- like
21 chelating agents, colorants, solvents,
22 fragrances. The list goes on.

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1 Surfactants is one example. I am going
2 to show you now, if you clicked on surfactants on
3 this Safer Chemical Ingredients List web page, you
4 would see this. This page would come up.

5 This shows the chemicals that meet our
6 criteria. This is just the first few of several
7 hundred surfactants that meet our criteria with
8 information. They are listed by the Chemical
9 Abstract Service Number.

10 And you see that red circle up there.
11 That red circle is around our criteria for
12 surfactants. So, if you were curious to learn more
13 about the criteria that surfactants in our program
14 have to meet, you could just click on that link and
15 up comes our criteria. It is good bedtime reading.

16 (Laughter.)

17 Okay. So, the criteria for Safer
18 Chemical Ingredients, what is it, that criteria I
19 was talking about? Basically, what it does is it
20 goes through a series of human health and
21 environmental toxicological endpoints and says
22 these are the limits under which we don't want to

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1 see effects. If we see effects, toxicological
2 effects, above our thresholds of concern, or below
3 our thresholds of concern actually, then the
4 chemical can't be listed. But, if it meets our
5 criteria, it can be listed.

6 So, it is a toxicological definition
7 per chemical class. And here is a more readable
8 listing of the classes that you will find on our
9 Safer Chemical Ingredients List.

10 And here is a listing of the types of
11 criteria that the chemicals have to meet. If you
12 are a chemical manufacturer and you have a solvent
13 and you want your solvent to be on our Safer
14 Chemical Ingredient List, it has to meet our
15 criteria for all of these endpoints. You see human
16 health on the left, carcinogenicity, mutagenicity,
17 on and on and on. And then, on the right you see
18 the environmental effects, what happens if it is
19 discharged into the environment. So, both are
20 important for us.

21 I would also mention something that
22 comes up a lot, I think, is endocrine, endocrine

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1 effects. It is obviously a controversial area.
2 What we do in terms of endocrine is chemicals that
3 are on lists of concern for endocrine activity, we
4 look at those chemicals very carefully. We review
5 all the data that is available for those chemicals,
6 all the test data that is available, but also look
7 at their structures and try to understand whether
8 they might have some impact for a
9 relevant -- "apical" is the term that I hear the
10 toxicologists use -- endpoint.

11 But, for example, you might see
12 endocrine activity reflected in reproductive or
13 developmental toxicity tests and neurotoxicity
14 tests. So, that is the kind of thing that we look
15 for for those chemicals that have been marked as
16 endocrine-active on someone's list. And we
17 disallow them if they show actual toxicological
18 effects.

19 So, what is the outcome of our criteria
20 and the chemicals that are allowed on the list?
21 Just to give you a sense, we think of the chemicals
22 that could be used on our Safer Chemical

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1 Ingredients List as spanning or that are candidates
2 of spanning a spectrum. That spectrum goes from
3 green to red.

4 We think of chemicals that are on list
5 of chemicals of concern like a list of carcinogenic
6 chemicals, for example. Those are well over in the
7 red section. What we do is we don't allow those
8 chemicals that are over in the red section. We
9 also don't allow chemicals that are structurally
10 similar to those because they might exhibit similar
11 effects.

12 But that is not where we stop because
13 what we are trying to do, rather than disallow the
14 red chemicals, is focus on and allow only the green
15 ones. The green ones are the ones, the green and
16 fading a little bit to yellow are the ones that
17 because we want to allow chemicals that can be used
18 in products and result in high-functioning
19 products, and you can't always have the perfect
20 green chemical, but what we do is we only allow
21 chemicals that are on the green end of the spectrum.

22 That is why every single chemical that

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1 gets on our Safer Chemical Ingredients List has
2 been reviewed by EPA experts and made sure that it
3 meets those criteria. So, it is not just
4 disallowing the red. It is focusing only on the
5 green. So, here are some authoritative lists that
6 we would look to, just in case people are curious,
7 to eliminate the red.

8 I think this is just interesting and
9 illustrative about the way that we think of
10 chemicals. I think this is a lovely, simple
11 example of the kind of structural look that we take
12 at chemicals to make decisions about which should
13 be on our list or not. Because, for some families
14 of chemicals, there isn't as much data as we would
15 like there to be out there.

16 On the left, 2-butoxyethanol is a
17 chemical that has been marked as a concern, and the
18 industry has largely moved away from. But,
19 unfortunately, there are similar chemicals out
20 there, like this 2-propoxyethanol. If you look at
21 the structure of the butoxyethanol and the
22 propoxyethanol, they are quite similar. In fact,

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1 if you don't look carefully, you won't see the
2 difference at all.

3 But that is the kind of structural
4 relationship or a simple version of the structural
5 relationship that we look to. So, we don't allow
6 2-butoxyethanol on our list. We also don't allow
7 2-propoxyethanol. And neither of those meet our
8 criteria.

9 So, the person who put these slides
10 together assumed that I would know why they put this
11 one in, and I have no idea.

12 (Laughter.)

13 But it is very nice. It is a shot of
14 our website. I am sure I will figure it out on the
15 next slide. Ah, here it is.

16 So, this is designed to be a slide where
17 I can stop for a second and explain to you what a
18 chemical manufacturer would do to list a chemical
19 on our Safer Chemical Ingredients List. They
20 would start through a process on the lefthand side
21 where they would put together all the information
22 that they have got on that chemical. They would

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1 pass it to one of our qualified third-party
2 profilers.

3 We qualify third parties because EPA
4 doesn't have the resources to investigate all of
5 these chemicals ourselves. We actually qualify
6 third parties who do an independent review of these
7 chemicals for us and, then, provide a dossier on
8 each chemical to us. So, we have now just gone
9 through orange and yellow.

10 In the green square, we perform an
11 expert evaluation of that dossier and make a
12 decision about whether the chemical belongs on our
13 list. If it does, we list it. If it doesn't meet
14 our criteria, we don't. So, it is a process that
15 offers the advantage, the opportunity to list on
16 our Safer Chemical Ingredients List the chemical
17 manufacturers in a way that leverages our resources
18 and doesn't use taxpayer dollars to do all the work.

19 So, the Safer Chemical Ingredient List,
20 I haven't mentioned about it. It is obviously a
21 list of chemicals that meet our criteria. It is
22 by the functional class of the chemical, so

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1 surfactants, solvents, chelants, et cetera, et
2 cetera.

3 It has got more than 500 chemicals on
4 it that can be used in Safer-Choice-labeled
5 products. So, it has got a nice choice for
6 chemical manufacturers that we believe provides a
7 good degree of functionality in products that can
8 bear the label.

9 We are constantly adding chemicals and
10 sometimes, unfortunately, removing chemicals from
11 that list. We look to revisit the toxicological
12 information on every single chemical once every
13 three years.

14 It is responsive to stakeholders. I
15 think that is in there to indicate that, if someone
16 has a concern about a chemical on the list, that
17 we will review it. It has been there since
18 September of 2012.

19 So, what is this Safer Chemical
20 Ingredient List good for? It is good for product
21 manufacturers to help them figure out which
22 chemicals can be used in Safer Choice products.

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1 Actually, when we put it up in September 2012, our
2 program had been around for a decade, but it was
3 a really important step for us to take in terms of
4 transparency of our program and empowering product
5 manufacturers, especially smaller businesses, to
6 make products that can meet our criteria.

7 Chemical manufacturers have seen our
8 list and our criteria as a way to benchmark their
9 chemicals and, frankly, a way to influence the way
10 that they do research and development. A number
11 of chemical manufacturers have developed -- well,
12 the way that it worked a number of years ago, more
13 than five years ago, we saw chemical manufacturers
14 either inventing new surfactants or testing
15 existing surfactants to show that they met our
16 criteria. That was a great step. That was a
17 fantastic thing and resulted in hundreds of
18 surfactant chemicals coming onto our list.

19 But the thing about surfactants is,
20 chemically, that is a pretty easy thing to do.
21 They are relatively simple. It is not that it is
22 no challenge, but they are relatively-simple

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1 molecules with a lot of choices for ways to design
2 those chemicals.

3 What we have seen more recently is
4 development of chelants and solvents that meet our
5 criteria and in the case of solvents meet our
6 criteria and are also low VOC, which is a really
7 a high bar for chemical design. We have seen that
8 be very successful in a couple of instances where
9 we now have chemicals that are on our list that are
10 highly effectively and being used in cleaning
11 products that are low tox.

12 So, it is a great thing and it is a tool
13 that the chemical manufacturers are using to show
14 their sustainability profiles. And potentially,
15 it could be useful for NOP.

16 So, potential benefits. There is a
17 methodology. This is a methodology that has
18 undergone public comment. It has been developed
19 in many cases through work groups that involve
20 environmental NGOs and industry. It covers a wide
21 range of endpoints. You can see there in blue.

22 There is some flexibility here because

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1 it is not depending solely on EPA resources. It
2 could be a marriage of the two agencies. And also,
3 our third parties who would enhance the Safer
4 Chemical Ingredient Listing, if it were to be
5 chosen to be used by the Organics Program, could
6 accommodate the listing and the research into
7 additional areas, additional attributes that would
8 need to be there for the Organics Program, like
9 Emily was mentioning just a moment ago. And it
10 could help influence the direction of products
11 allowed under the program.

12 Now this is just to sort out -- I hope
13 this doesn't introduce confusion. I think there
14 is a danger that it might. So, this is completely
15 separate, but something that we felt we wanted to
16 talk about for just a moment, so you understand what
17 it is.

18 It is a separate thing. But the office
19 that I work in, which regulates chemicals under the
20 Toxic Substances Control Act, is a sister office
21 to the office that regulates pesticides and also
22 antimicrobial products. The Federal Advisory

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1 Committee Act group, the FACA group, that advises
2 our Pesticides Office said to EPA, to that branch
3 of EPA, my sister office, they said, "Wouldn't it
4 be great for you guys to differentiate safer
5 antimicrobial products?"

6 And that office responded by saying,
7 okay, we'll work with what was at the time the
8 Design for the Environment Program and label safer
9 antimicrobial products with the logo. We will
10 allow a route for that labeling, for a pilot
11 program. And that is what is going on right now.

12 It is a very narrow pilot program that
13 allows use of the DfE logo on products that meet
14 our criteria for the inerts, but also uses a very
15 limited set of actives for antimicrobial purposes.
16 You see hydrogen peroxide, lactic and citric acids,
17 and ethanol and isopropanol are additional
18 products that can be used.

19 And very few have been through the
20 program so far, but we wanted to make sure that you
21 knew that that existed because I think there has
22 been some conversation about it.

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1 There we are. And if you are
2 interested in more information on the Safer Choice
3 Program, here are websites that you can go to and
4 get that information.

5 So, thanks very much. I think I am
6 taking questions now for a few minutes.

7 CHAIR RICHARDSON: Yes. Thank you
8 very much, indeed.

9 Zea?

10 MEMBER SONNABEND: Thank you.

11 I have like probably a dozen questions,
12 some of which we will have to maybe have a Working
13 Group meeting with you to hammer out.

14 But I am sure that Emily has told you
15 this, but one of the primary concerns is that the
16 NOSB has some additional criteria to the ones that
17 you used. Two I can think of right off the bat
18 include the prohibition on excluded methods or
19 genetically-engineered products and the
20 availability of alternatives.

21 And so, in that regard, are those two
22 criteria that you can, then, incorporate into your

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1 program and your third-party profiler training, or
2 whatever, or your departmental review to address?

3 And secondary to that, the alternatives
4 one does involve looking at what other products are
5 out there in the marketplace and what is in them,
6 which is often confidential business information,
7 but the rest of the EPA has access to that. And
8 so, do you have access to that confidential
9 information held in the other part of the EPA to
10 complete those reviews?

11 MR. DAVIES: Yes. Thank you very much
12 for that question.

13 And it does seem to me that to implement
14 this type of a program for organics would require
15 a great deal of thought and conversation and
16 forging of pathways that don't now exist, it occurs
17 to me.

18 But I would say that the third-party
19 profilers are qualified third parties that now do
20 our reviews. If there is a funding source for
21 review of chemicals, they would probably be very
22 interested in that review. I could imagine a

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1 scenario where the owners of those chemicals might
2 fund.

3 And so, there certainly would be the
4 ability to have that information developed by a
5 third party, but I imagine that there would have
6 to be some kind of a marriage, an EPA/FDA marriage,
7 a USDA marriage, about how to deal with what is
8 appropriate reveal. I mean, I don't think that
9 that is going to be an EPA function necessarily.

10 And then, on the alternatives, we
11 certainly would have access to information, but,
12 again, I think that that would have to be -- we would
13 have access to any information at EPA, but I think
14 that that needs to be further discussed as well,
15 something that would probably be worked out between
16 the agencies.

17 CHAIR RICHARDSON: Colehour?

18 MEMBER BONDERA: Thank you. Thank
19 you, Clive for your presentation.

20 MR. DAVIES: You're welcome.

21 MEMBER BONDERA: I am not sure how to
22 ask this question, but I want to bring it up as a

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1 topic. I am not sure that it is per se a question.

2 But, from my experience -- and I don't
3 mean to age myself, but it goes back to the eighties
4 dealing with inert ingredients, and I have worked
5 with the Northwest Coalition for Alternatives to
6 Pesticides to start creating publications of what
7 inert ingredients were in what formulations
8 because those weren't listed at all for the public
9 to know.

10 I recognize, then, and then serving on
11 the National Organic Standards Board, we often have
12 things that we are considering where we have to
13 consider what is basically the active ingredient
14 or what it is that is trying to do the job at hand.

15 My question to you is really regarding
16 the fact from those experiences and observations
17 over time, if you all are considering or looking
18 at or if you can comment on the full formulations
19 of these materials or the combinations of the
20 chemicals that are the ingredients? Because,
21 realistically and honestly, and I think pretty much
22 everyone in this room knows, oftentimes even if

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1 something is hypothetically inert or benign, that
2 when you combine it with something else that is part
3 of an ingredient package, you end up with quite a
4 different result than the things when they are
5 tested or evaluated on their own, even if they are
6 perceived as, quote/unquote, "safe".

7 And so, I wonder if you could at least
8 comment on or talk about how you all address or deal
9 with that topic and how you perceive that we could
10 or should or would either use your strategy or deal
11 with it as well.

12 Thank you.

13 MR. DAVIES: You're welcome. Thanks
14 for the question.

15 The way that we implement our program
16 and our criteria, we look at every single
17 ingredient in a product, actually, individually.
18 So, we actually do look at, review, and require that
19 only the safest inerts be used to make a Safer
20 Choice product.

21 But there are two stages to our review.
22 The first stage is the ingredient at a time, and

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1 then, a second review is a product-level review
2 once those chemicals are combined to make a
3 product.

4 And so, we look at the potential for
5 synergistic effects. We look at pH, a range of
6 factors. We do have whole product as well as
7 individual chemical criteria.

8 I thought you were actually going to ask
9 a question about ingredient disclosure when you
10 started. Just a comment on that. The Safer
11 Choice Program does require disclosure of
12 ingredients, but protects confidential business
13 information in that disclosure.

14 What we do is we ask that the chemical
15 manufacturers or product manufacturers list either
16 the chemical or the closest-possible broad
17 chemical name for that chemical, like non-ionic
18 surfactant, for example, on the label or on a
19 website.

20 I think the best thing about our
21 ingredient disclosure provisions is that there was
22 an industry NGO negotiation over how ingredient

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1 disclosure should happen for consumer products
2 like Scrubbing Bubbles, for example. And it
3 almost produced an outcome that could be used in
4 the commercial space.

5 Unfortunately, negotiations didn't
6 quite make it all the way, but the issues that they
7 had disagreements on were really not relevant to
8 our program because they were about how do you
9 disclose a Prop 65 ingredient, for example.

10 So, we actually borrowed that criteria
11 at the request of somebody from NRDC and somebody
12 from the industry who came in together and said,
13 "Hey, we think you should use our criteria." And
14 we did. We borrowed it, modified it slightly
15 because we needed to for our program, but
16 implemented it almost entirely whole. And it
17 worked really well with the industry and the folks
18 who made the products. It was, I think, a great
19 way to go and a great example of the kind of
20 collaboration that can provide kind of a win/win
21 outcome.

22 CHAIR RICHARDSON: Francis?

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1 MEMBER THICKE: Thank you.

2 You mentioned that the spectrum of
3 toxicity is like from red to green, and green and
4 yellow might fit for the safer products. And I can
5 see for consumers one category is good, but do you
6 have some kind of numerical internal rating that
7 manufacturers could look at to see on the lower end
8 which is better and which is not so good?

9 MR. DAVIES: Yes, I don't think that we
10 have anything that provides quite that level of
11 gradation. But where we have chemical that we
12 label on our Safer Chemical Ingredients List, we
13 actually have these geometric color codes that
14 range from a green circle to a yellow triangle.

15 A green circle indicates that the
16 chemical is fully described by all of the test data
17 that we asked to see for that chemical and that it
18 fully meets every element of our criteria. And
19 then, there is a half-green circle where we use more
20 structure/activity relationship than we would like
21 to, and we are encouraging chemical manufacturers
22 to develop information.

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1 But a yellow triangle means that we have
2 had to set our criteria in a place that allows
3 excursions and toxicological criteria from the
4 ideal. So, a slightly more toxic to mammalian life
5 or something of that nature. You will see yellow
6 triangles for preservatives. Preservatives are
7 necessary for these kinds of products, but,
8 unfortunately, they are designed to prevent
9 microbial growth. So, they do have some tendency
10 to have effects that don't meet our ideal
11 toxicological criteria.

12 And also, solvents, for example, where
13 solvents, there are very few solvents that meet,
14 for example, California's VOC requirements and our
15 toxicological criteria. So, we allow for slight
16 excursions of our toxicological criteria to hit the
17 VOC standard that is required for folks who make
18 products to sell across the country.

19 So, in those two areas you do see these
20 yellow triangles, and that does indicate to product
21 manufacturers and chemical manufacturers that we
22 would like to see safer chemistry in those areas.

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1 CHAIR RICHARDSON: Any other Board
2 questions? Zea, do you want another one?

3 MEMBER SONNABEND: No.

4 CHAIR RICHARDSON: No? Okay. Okay.
5 There are no more questions from the Board. And
6 so, therefore, I thank you very much for your
7 presentation. Much appreciated.

8 MR. DAVIES: Thank you very much.

9 (Applause.)

10 CHAIR RICHARDSON: We now come to the
11 exciting part of the agenda and where we are going
12 to start public comments.

13 Just sort of the rules of procedure. I
14 think that Michelle is going to sort of have them
15 up on slides. Just a reminder that we have limited
16 time. There's a large number of speakers over the
17 next two days. Today we have how many hours? We
18 have five-and-a-half hours scheduled for public
19 comment today.

20 There will be a timer that will go off
21 when you have finished your time, four minutes. I
22 don't know whether we are awarding T-shirts this

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1 year or not, but at least I will cast my magic wand
2 if you do a really good job, which, of course, is
3 always good for everybody, as we know.

4 And so, I am going to ask Mark Kastel
5 if he would kindly come up and kick us off, as he
6 traditionally does with his comments.

7 And I would ask that, let's see, I have
8 Phil LaRocca is going to be onboard after that.

9 Is there a seat up close to you,
10 Michelle? You will get that, so that the second
11 person could be in line? Okay.

12 MR. KASTEL: Okay. Thank you, Madam
13 Chairman.

14 CHAIR RICHARDSON: Okay.

15 MR. KASTEL: Good morning.

16 My name is Mark Kastel. As
17 Co-Director, I represent approximately 10,000
18 members of the Cornucopia Institute. Certified
19 organic farmers are our primary constituency.

20 Welcome. Welcome to organic
21 regulatory theater. The workload at this meeting
22 so far exceeds the capacity of this volunteer Board

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1 and stakeholder groups that this exercise has
2 become a bit of a farce.

3 Two hundred and twenty materials, in
4 addition to other issues. Under the new rules, the
5 2017 sunset materials must be addressed here.
6 Some NOSB members have made extraordinary efforts
7 and still tell us there is no way they can review
8 all the material necessary.

9 At the Cornucopia Institute, multiple
10 scientific and policy staff members spent months
11 preparing our comments and, without sacrificing
12 scientific rigor, we weren't even able to cover
13 half of the materials that Congress required to be
14 reviewed every five years.

15 In the past when the workload has
16 dictated, NOSB meetings have been extended to five
17 days and sometimes three meetings per year. Maybe
18 we should even consider staggering the sunset
19 reviews earlier, if necessary, and getting on a
20 different schedule in perpetuity.

21 The NOSB has failed to deliver
22 technical reviews Congress provided for and were

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1 requested by this Board. Although the NOP brags
2 about transparency, the fact of the matter is this
3 is a pretty darn secret agency. Much of the
4 material that should be available to the public is
5 only accessible through FOIA requests and, then,
6 redacted to near uselessness.

7 In preparing for this meeting, the most
8 recent NOSB subcommittee meetings on the NOP
9 website were from February 2nd. As I understand
10 it, there were six subcommittee meetings between
11 February 2nd and the date the public comments were
12 due. This lapse in transparency is inexcusable
13 and cuts stakeholders out of the loop.

14 So, to a certain extent, we are just
15 going through the motions here and we will
16 rubberstamp many 2016 and 2017 sunset materials.
17 Some are troubling. Some have a history that is
18 troubling in terms of how they were listed
19 initially.

20 The Cornucopia Institute's Board of
21 Director's Secretary, Dr. Barry Flamm, a former
22 NOSB Chairman, reminded me recently of potential

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1 corrupt and disturbing histories of how some of
2 these materials initially got on the list. Barry
3 reminded me that some of these materials were put
4 on the list even after three out of three Technical
5 Review Panel members concluded that these
6 materials did not meet OFPA criterion and the
7 subcommittees voted against them; the full Board
8 still added them. We will be reviewing these in
9 the next couple of days.

10 So, these sunset materials deserve and
11 justify a thorough examination, not a cursory
12 review. Today one of the TR contractors is the
13 Organic Center. Their Board of Directors is
14 appointed by the industry's largest lobby group,
15 the Organic Trade Association. They are
16 principally funded by agribusiness members and
17 housed at the OTA offices.

18 So, do you get this? This is the fox
19 guarding the organic chicken coop. You have the
20 largest lobby group controlled and funded by
21 corporate agribusinesses, the same businesses
22 petitioning many of these materials, hiring secret

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1 scientists to do independent analysis. And then,
2 we have many NOSB members that are members of the
3 OTA and some sitting in seats that were mandated
4 for farmers.

5 So, I couldn't make this up. Who owns
6 the organic label? We all do.

7 (Signal that time has expired.)

8 I've got two sentences here.

9 We all do, farmers, consumers, big and
10 small, business enterprises. We are not being
11 well-served by this process. Let's do the best we
12 can during the next day or two here throughout the
13 week, and let's hope that we return excellence and
14 get a good return on our tax dollars and our
15 heartfelt investments in building the organic
16 community.

17 Thank you, Madam Chairman.

18 CHAIR RICHARDSON: Thank you.

19 Questions for Mark? Calvin?

20 MEMBER WALKER: Mark, could you share
21 with us briefly what else can we do to get more
22 feedback from the public? I know that the public

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1 is broader than what we see here.

2 MR. KASTEL: Well, many groups, the
3 Cornucopia Institute, the Organic Trade
4 Association, Food and Water Watch, the National
5 Organic Coalition. Although there aren't
6 thousands of people in this room, cumulatively,
7 these stakeholder groups and the OTA represent
8 thousands of interested parties.

9 But I will remind the Board that this
10 body requested, passed a resolution. As I
11 understand it, the NOP accepted that and concurred,
12 to form an open docket that all documents that were
13 being reviewed by the subcommittees could be
14 accessible to the public in real time.

15 So, dig it. We are here and you folks
16 are here to attend to this agenda. Under this new
17 sunset provision, the 2017 materials that are
18 on the agenda must be addressed by stakeholders
19 because this is our last meeting before the
20 subcommittees will consider those materials. If
21 we wait until six months from now at the second
22 sunset meeting, or whenever that occurs, those

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1 will be potentially material changes that you will
2 want to make. As I understand it, the NOP won't
3 allow that.

4 So, this public document, this public
5 docket would allow the subcommittee meetings, the
6 TRs, which how can we review the 2017 sunset
7 materials as stakeholders intelligently and
8 testify at this meeting, which is necessary, when
9 we don't have the Technical Reviews accessible?
10 One of them was posted, I understand from our staff,
11 today.

12 CHAIR RICHARDSON: Much, much too
13 long. Can you be a bit more concise because there
14 are other Board members and --

15 MR. KASTEL: I don't know if there is
16 another question --

17 CHAIR RICHARDSON: Yes.

18 MR. KASTEL: -- but that is the end of
19 my answer, Madam Chairman. Thank you.

20 CHAIR RICHARDSON: Jennifer, I think
21 you had your hand up?

22 MEMBER TAYLOR: I did. I was probably

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1 going to ask a similar question, in that I wanted
2 to know, what else could be done? Because these
3 are present challenges that we are facing as a Board
4 and with the program.

5 MR. KASTEL: Well, as I read OFPA,
6 Congress gave this Board the authority to secure
7 Technical Reviews, not the NOP. And just like the
8 Cornucopia Institute is a public charity, just like
9 our Board has to review and consider and, then, hire
10 an auditor every year because that auditor reports
11 to the Board, these Technical Review agencies,
12 whether it is the Organic Trade Association or
13 someone with less of a vested interest, they report
14 to you because you have to have confidence in the
15 authors.

16 So, first of all, do you know of any
17 other scientific papers that are ever made public
18 where the authors, the scientists that produce
19 them, their credentials, their identities, and
20 their potential conflicts of interest are
21 maintained in secrecy?

22 So, you folks should be reviewing

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1 upfront who does the Technical Reviews, deciding
2 who does the Technical Reviews. You can contract
3 with Mr. McEvoy and his staff to procure the
4 contracting with these folks, but these reviews
5 have to be done on a more timely basis and they need
6 to be available to the public because not every
7 group -- we have five staff members here -- not
8 every group can afford, and we're strained, to make
9 the investment.

10 And you can see that we couldn't even
11 complete our task, and one of the reasons is that
12 we don't have the budget that the USDA has for the
13 Technical Reviews, so we are somewhat limited.

14 I hope that answered your question.

15 MEMBER TAYLOR: Thank you.

16 CHAIR RICHARDSON: Thank you, Mark.

17 MR. KASTEL: Thank you.

18 The next speaker is Phil LaRocca. And
19 after that, it will be Derin Jones.

20 MR. LaROCCA: Excuse me. I have
21 testified in front of this Board many times. I
22 have never been second, and having to follow Mark

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1 is always a tough act to follow. So, I will try
2 to be brief and concise.

3 First, I would like to thank the Board
4 because I know you put, as a Chairman of the CCOF's
5 Board, I know all the volunteer hours that you
6 people put into this, which is pretty incredible.
7 I want to really thank you for that because, without
8 you, the NOP wouldn't be functioning as it is today.

9 I'm also the owner and winemaker for
10 LaRocca Vineyards, and that is what I want to
11 address today, is some ingredients that we use in
12 organic winemaking.

13 I want to start off with yeast and yeast
14 nutrients. We have been asked to convert over to
15 organic yeast, when possible. I am pretty close
16 to the other organic winemakers and we have worked
17 together to try to come up with a source, and it
18 is very, very limited.

19 We have come up with five that we have
20 experimented at our winery. One was very
21 successful with white wine. One for pinot noir was
22 absolutely a failure, and the other three are okay,

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1 but they don't meet the quality standards that
2 we're using from some of the French varieties of
3 yeast.

4 So, keep this in mind. Use common
5 sense in your judgment. I believe it comes up next
6 year.

7 The other item that we use quite a bit
8 is kaolin clay or bentonite, which we use as a
9 fining agent for white wines. I mean, you can use
10 it on cuts and wounds, so it is pretty benign.

11 Potassium tartrate we use, better known
12 as cream of tartar, which you can buy in a store.
13 That is going to be coming up. Very simple, we
14 basically just use that on white wines as well.
15 What that does is attaches to the proteins in white
16 wine and allows them to drop. So, it cuts your time
17 in cold stabilization from about 21 days to five
18 days. So, it is kind of energy-efficient to use
19 this product.

20 Tartaric acid, it comes from a grape
21 source. So, again, we have been using that from
22 day one. It has been allowed in the program.

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1 And then, one of the most essential
2 things in organic winemaking is cleanliness. So,
3 you do have a couple of lightweight chlorine
4 products that will be coming up. We use them for
5 stains. They actually get washed off. We
6 basically finish everything with steam. So, it
7 never touches the wine at all.

8 And the last one that we use, and we have
9 been using for quite some time, is peracetic acid,
10 which will also be coming up.

11 So, those are just some of the
12 ingredients that you will be looking at, and I ask
13 you to continue their use on the NOP.

14 As a final word, I would like to
15 encourage this Board to do due diligence, keep an
16 eye on GMO contamination to both the organic farmer
17 and the organic community.

18 Thank you.

19 CHAIR RICHARDSON: Thank you, Phil.

20 Questions for Phil?

21 (No response.)

22 Thank you.

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1 The next person up is Derin Jones.
2 Just before he speaks, I just want to mention there
3 is a gentleman who is taking a film, doing a
4 documentary film on organics, and he is wandering
5 around taking pictures. So, just in case some of
6 you are wondering what he is doing.

7 Thanks, Phil.

8 Come on up. Sorry, Derin.

9 MR. JONES: No problem.

10 Good morning, Madam Chairperson and
11 ladies and gentlemen of the panel. Thank you for
12 your time today.

13 My name is Derin Jones, and I'm the Food
14 Safety Coordinator for Chin Family Farms, Chin
15 Family Farms Organic, as well as Wong Potatoes,
16 Incorporated, located in the Klamath Basin. For
17 those of you who don't know, that is southeastern
18 Oregon and northeastern California.

19 The owner of my company, Mr. Daniel
20 Chin, is a third-generation farmer in this region
21 where his grandfather first started growing
22 potatoes for market for Oregon and California in

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1 the 1920s. Mr. Chin started farming himself in
2 1975, and we grow over 5,000 acres of potatoes,
3 dehydrated onions, grains, alfalfa, wheat, barley.
4 About 60 percent of our total operation is organic.

5 Mr. Chin has been active in local,
6 state, and national boards and commissions within
7 the potato industry, locally and abroad. Eleven
8 years with the U.S. National Potato Council, the
9 U.S. Potato Board. For 14 years, he has been with
10 the Oregon Potato Commission, on which he is the
11 current Chairman.

12 Fourteen years ago, Chin Family Farms
13 began delving into the organic market, and it has
14 been a great venture, one we have been proud to be
15 a part of. We believe that if we grow and deliver
16 the best-quality organic potatoes available,
17 people will not only support us, but the organic
18 movement as well. Other products will benefit.

19 However, with the current tools we have
20 available, delivery of our company promise is
21 sometimes a challenge in our industry due to the
22 sprouting issues that we encounter with long-term

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1 storage potatoes. Wong Potatoes, we pack potatoes
2 approximately nine months of the year, months
3 September through May. We ship to the U.S.,
4 Canada, and we also do a lot of shipping to Pacific
5 Rim countries. Mr. Chin is currently in the
6 Pacific Rim and was unable to attend. That's why
7 I am here. So, again, I thank you for your time.

8 Especially in the exports is where we
9 encounter a lot of issues with sprouting because
10 our potatoes will be on a container for three to
11 four weeks at a time. And our current tools
12 available, the clove oil that we use just simply
13 isn't effective to meet our needs of delivering a
14 quality product.

15 We currently see that our product
16 leaves our facility and our sorting -- gosh darn
17 it, I'm sorry, Madam --

18 CHAIR RICHARDSON: That's okay.

19 MR. JONES: Our product we treat in the
20 storage and online with clove oil. We usually get
21 about a seven-day window from when it leaves our
22 facility to the consumer before we start seeing

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1 sprouts appearing. That is a definite concern
2 because we want to maintain the integrity of
3 quality organic products.

4 Now, as you can see, I brought you a
5 picture. This is a picture of some of our potatoes
6 that have been treated three times with traditional
7 clove oil, which is currently NOP-listed. It was
8 a great experience to get this on the Board. It
9 is a good tool. However, we feel that other
10 products can handle this better.

11 Can you go ahead and switch to the other
12 picture, please, Ma'am?

13 The next picture will show storage
14 potatoes of red potatoes that we have that were
15 treated just one time with SmartBlock. And you can
16 see, after one treatment, we have no sprouting at
17 all, as opposed to the three treatments with
18 traditional clove oil.

19 Okay. Clove oil we agree is helpful,
20 but it just simply is not as efficacious as
21 SmartBlock is. You can see by mid to late storage
22 season we are struggling. So, also, the economic

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1 issues, paying for multiple applications of our
2 product is economically difficult for a family
3 farm.

4 Also, add in the fact the cullage. We
5 are culling a large percentage of potatoes that
6 could otherwise be going into the market and
7 feeding families.

8 So, anyway, it is our understanding,
9 Madam Chairman and the Board, that 3-decen-2-one
10 is currently approved on the FEA, the EAFUS Direct
11 Food Additive List, also classified on the GRAS,
12 which gives us really great confidence in the
13 organic safety of it.

14 (Signal that time has expired.)

15 I guess that's it. So, I thank you much
16 for your time, and we really firmly believe that
17 the addition of SmartBlock would greatly help our
18 industry as well as other potato growers.

19 CHAIR RICHARDSON: Thank you.

20 Questions for the speaker? Question?

21 MR. JONES: Yes, Ma'am?

22 MEMBER TAYLOR: Hi. I just have a

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1 question, just because I don't know. But what was
2 done before for transport, for transport before?

3 MR. JONES: Clove oil. Oh, I'm sorry,
4 Ma'am, I cut you off.

5 MEMBER TAYLOR: I'm sorry. That's
6 okay.

7 MR. JONES: Clove oil is currently
8 listed, and it is available. It has been a
9 wonderful product, but we believe that, as the
10 organic knowledge continues to expand and improve,
11 we are realizing that other organic substances can
12 do better.

13 As the picture showed, the clove oil
14 with three treatments in a storage season, we are
15 still fighting sprouts. And so, there is
16 currently a product available, but we don't believe
17 it is effective enough and it is hurting our
18 business.

19 Is that helpful, Ma'am?

20 MEMBER TAYLOR: Thank you.

21 MR. JONES: Yes.

22 Any other questions?

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1 CHAIR RICHARDSON: Any other
2 questions?

3 (No response.)

4 Great. Thank you very much.

5 MR. JONES: Madam Chairperson, thank
6 you.

7 CHAIR RICHARDSON: The next speaker is
8 Dr. Linley Dixon, and that will be followed by Trudy
9 Bialic.

10 MS. DIXON: I didn't realize I was on
11 deck.

12 Good afternoon.

13 My name is Linley Dixon. I have a PhD
14 in plant pathology and I am a Policy Analyst for
15 the Cornucopia Institute.

16 My husband and I own a 120-member CSA
17 and farmers' market for a vegetable farm in
18 Durango, Colorado. And I think I have become
19 infamous in this group for being the outspoken
20 vegetable farmer whose farm was contaminated with
21 aminopyralid herbicides.

22 Even my five-year-old daughter rolls

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1 her eyes when her mom starts talking about
2 Milestone again. I am still trying to convince the
3 NOSB to put pressure on the EPA to get
4 Pyridinecarboxylic acid use restricted. I
5 recognize this request is outside of the typical
6 NOSB operations, but it is necessary.

7 According to our local Extension,
8 reports of herbicide carryover incidents are
9 increasing across the country. After personally
10 experiencing the devastation of this issue, you can
11 imagine my excitement when I found out that the NOSB
12 was discussing the contamination of farm inputs.
13 Here we are a year later, and the Crops
14 Subcommittee's proposed plan does not take
15 appropriate action to solve herbicide carryover in
16 compost.

17 This is a diagram from the Milestone
18 label. This is a persistent herbicide in the
19 Pyridinecarboxylic acid class, and it is used
20 widely in my region. A characteristic of this
21 herbicide, along with others in this class, is that
22 its persistence during composting remains and it

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1 affects crops.

2 Thus, hay or manure from hay sprayed
3 with Milestone cannot be composted. Sprayed hay
4 cannot be used as mulch on vegetables, either.
5 Unfortunately, the presence of this image on the
6 label does not prevent this scenario from
7 occurring.

8 It is nearly impossible for a farmer to
9 know when they are applying herbicide-contaminated
10 organic matter from off-farm. Inevitably, hay
11 without spray history is bought and the manure from
12 this hay ends up in commercial and state composting
13 facilities. This stuff just gets moved around.

14 This is the result of herbicide
15 carryover on tomatoes. This is the result of
16 herbicide carryover on beans. How many more
17 farmers are going to go out of business because they
18 applied contaminated compost to their fields?

19 I hope that the issue of persistent
20 herbicides will be tackled head-on by the NOSB with
21 this discussion document. Persistent herbicides,
22 unlike other contaminants, can cause complete crop

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1 failures. There is precedent for action. There
2 is a ban on the use of Pyridinecarboxylic acids in
3 New York. Pyridinecarboxylic acids cannot be used
4 in six states in New England. The UK banned them
5 in 2008 and re-released them in 2011 for restricted
6 uses.

7 Let these small victories pave the way
8 for restrictions nationwide. The NOSB must work
9 with the EPA to restrict Pyridinecarboxylic acid
10 use.

11 I would like to quickly switch topics
12 to the 2017 sunset of copper materials for disease
13 control. As a PhD student studying tomato
14 diseases in organic systems, I had the opportunity
15 to travel to hundreds of organic farms to collect
16 disease data.

17 There were two obviously very different
18 styles of organic tomato production. There was
19 organic tomato multi-cropping, farms that produced
20 tomatoes along with many other vegetables, and
21 then, there is organic tomato mono-cropping, farms
22 that have acres and acres of blue tomatoes.

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1 Blue tomato farms, I came to call them,
2 were often split operations with both organic and
3 conventional acreage. To these farmers, copper
4 was essential. Phytophthora, alternaria, septoria,
5 cercospora, these fungi would devastate the crop
6 if they didn't keep the plants coated in copper.

7 However, copper was only considered
8 essential under these production systems. More
9 diverse operations rarely used copper, if at all.
10 It became clear that split organic/conventional
11 monoculture-style operations were using frequent
12 copper sprays as their primary disease management
13 strategy.

14 What struck me as particularly
15 problematic was that they had to take acreage out
16 of organic production after a few years because
17 copper levels became toxic. So, the overreliance
18 on copper for disease management is not in line with
19 OFPA.

20 Further investigation --

21 (Signal that time has expired.)

22 CHAIR RICHARDSON: Questions for

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1 Linley? Colehour?

2 MEMBER BONDERA: Thank you.

3 Linley, thank you for your comments. I
4 want to ask you to go back to a comment you made
5 regarding the EPA because you said that examples
6 could be learned from around the country, but I just
7 wonder how the EPA could do a different or better
8 job. I mean, is that the way? Is it they use
9 examples from around the country or there are other
10 things that would make sense that the EPA could be
11 using to deal with this persistent herbicide
12 question?

13 MS. DIXON: Yes, what I find really
14 interesting is that traits that might be considered
15 really good to the EPA are actually really
16 problematic, things like small quantities are
17 effective. That means that, if a farmer is
18 spraying next to you, your chances of getting drift
19 are really, really high. So, what looks really
20 good is actually really problematic from a
21 different perspective.

22 So, something like single applications

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1 are effective. This means that this compound is
2 lasting, it is persistent. So, what might look
3 really great from the EPA's perspective can be
4 really problematic from a farmer's perspective.

5 CHAIR RICHARDSON: Other questions
6 from the Board?

7 (No response.)

8 No? Great. Thank you very much,
9 Linley.

10 MS. DIXON: Thank you.

11 CHAIR RICHARDSON: The next speaker is
12 Trudy Bialic, and she will be followed by Curtis
13 Bennett.

14 MS. BIALIC: Thank you for the chance
15 to comment.

16 I'm Trudy Bialic. I'm the Director of
17 Public Affairs for PCC Natural Markets. We are a
18 certified organic retail co-op doing \$230 million
19 in sales from 10 stores with 55,000 members.

20 In addition to my written comments, I
21 wanted to emphasize the need for NOP to catch up
22 to what consumers are demanding for animal welfare.

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1 Our data shows that organic consumers are migrating
2 to pastured eggs, organic or not, and to grass-fed
3 milk and beef, organic or not. So, organic is
4 losing sales because the label does not mean
5 chickens are pastured or the beef was grass-fed.
6 So, the standards need to catch up with that.

7 Consumers also are wondering how food
8 with artificial additives such as xanthan gum and
9 sodium hydroxide can be organic. And they are
10 right because the regs prohibit those.

11 This slide was prepared -- it is hard
12 to read from here, but it is a sentence diagram.
13 I consulted with three professors of English and
14 technical writing at UCLA to make sure I was reading
15 this right, criteria for prohibited substances.

16 One provided the diagram because some
17 people seem to be misreading it. And we all agree
18 that, if a substance is used to improve texture,
19 the food cannot be labeled organic unless the law
20 requires it. So, xanthan gum and the other
21 texturizers that are on the list shouldn't be
22 allowed, period. So, please recognize the law as

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1 written when you are petitioned.

2 We need a transitional to organic label
3 claim to help grow the organic supply chain. When
4 we lost the transitional label in 2002, it
5 strangled the supply chain. Bloomberg News
6 reported about 10 days ago that growing demand for
7 organics and the dominance of GMO corn and soy in
8 the United States is driving a surge in imports.
9 Bloomberg quoted the National Corngrowers
10 Association saying, "Although our can of corn sells
11 for three times the price of conventional corn,
12 lower yields, and a three-year transitional period
13 makes it not worth the headache or cost for most
14 farmers."

15 We can fix that by allowing a
16 transitional label. It is good for farmers. It
17 is good for consumers, and consumers want to help
18 grow the supply chain in organics. If we can't
19 help producers get to the next step, we are all
20 going to lose.

21 Finally, don't forget that the consumer
22 pays for everything here today. We all exist only

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1 because we've got the good graces of the consumer.
2 But the views of consumer-oriented organizations
3 and watchdog groups are routinely belittled and
4 marginalized by some in our own community.

5 Every decision that you make must
6 support and be aligned with what the consumer
7 expects organic to be. Their perception is the
8 reason they buy.

9 We defeat ourselves by allowing
10 preventive antibiotics in organic eggs, methionine
11 as a growth promoter, synthetic texturizers that
12 shouldn't be there anyway, an upside-down sunset
13 rule, or nanotechnology.

14 Just keep allowing these vested
15 interests, self-serving additions to the rules and
16 regs, and the organic brand will break consumer
17 trust. As you heard from Miles earlier, right now
18 we are only at 43 percent consumer trust, according
19 to that OTA survey, and that is not very good.

20 Surveys show over and over that
21 consumers demand transparency and authenticity.

22 Was that my beeper? No?

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1 Social media makes it easy to critique
2 and call it discrepancies in the organic story.
3 Non-believers always said, "Organic is just a
4 marketing scheme anyway." We've had plenty of
5 industry-friendly votes over the past few years.
6 I think it would be good to see a shift to be in
7 line with what the market is demanding.

8 Thank you for the opportunity to
9 comment. I am going to give a copy of the Bloomberg
10 article to Michelle.

11 CHAIR RICHARDSON: Thank you very
12 much.

13 Questions from the Board? No? Oh,
14 sorry. Zea?

15 MEMBER SONNABEND: Trudy, I have a
16 question.

17 MS. BIALIC: Sorry.

18 MEMBER SONNABEND: Your sentence
19 diagram was interesting for that sentence.
20 However, the sentence right above it that you
21 quoted from 205.600(b) said that "The criteria
22 below apply to processing aids and adjuvants." It

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1 does not apply to ingredients, as Lisa Brines
2 stated this morning.

3 And so, you know, we would use that for
4 a processing aid such TSPP. We will be discussing
5 that. But for an ingredient, not so much.

6 MS. BIALIC: I'm sorry, for which
7 ingredient?

8 MEMBER SONNABEND: I forget which
9 ingredient you were commenting about, but I think
10 it was xanthan gum or other texturizers --

11 MS. BIALIC: Uh-hum.

12 MEMBER SONNABEND: -- which are
13 ingredients, not processing aids.

14 MS. BIALIC: I would view it as their
15 primary use is a texturizer. So, if its primary
16 use is a texturizer, it would fall under that
17 clause.

18 MEMBER SONNABEND: No, the heading
19 above it says that it applies to processing aids
20 and adjuvants.

21 MS. BIALIC: I'm not following the
22 argument.

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1 MEMBER SONNABEND: Go back and look at
2 the rule where you have commented and see what the
3 rule structure of it is.

4 CHAIR RICHARDSON: Are there any other
5 questions for Trudy?

6 MS. BIALIC: I'm not sure what I'm
7 supposed to look at. I will --

8 CHAIR RICHARDSON: Yes, Calvin?

9 MEMBER WALKER: Trudy, thank you for
10 your presentation.

11 I represent the consumer sector, and we
12 were always asked to stay in our lane. So, I am
13 trying to do that.

14 What would you consider a good passing
15 grade? We heard it is consumers' view of organics
16 at 43 percent. I'm a teacher. Forty-three
17 percent is an F.

18 MS. BIALIC: It's a failing grade.

19 MEMBER WALKER: Forty-three percent is
20 an F. You know, passing in my class is 80 percent.

21 MS. BIALIC: Uh-hum.

22 MEMBER WALKER: So, what would you

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1 suggest that we need to do as a family, farmers,
2 consumers, environmentalists to get that better?

3 MS. BIALIC: I think that transitional
4 label will go a long way to help loosening up the
5 supply chain. But I am not sure what Zea is
6 referring to on this section here, but I think the
7 texturizers have done a lot of damage to the brand.
8 And the animal welfare failures are not keeping up
9 with the market demand. That has done a lot.

10 We can only take so many dings over time
11 before it really affects it and people just turn
12 to another label like "natural" or "local". And
13 we are seeing that.

14 CHAIR RICHARDSON: Great. Thank you
15 very much, Trudy.

16 The next speaker is Curtis Bennett, and
17 he will be followed by Terry Shistar.

18 MR. BENNETT: Hi. Thank you.

19 Curtis Bennett, Clarkson Soy Products.

20 I have two goals. One is to come
21 underneath the four-minute time limit. And the
22 other is to ask the NOSB to make a recommendation

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1 to remove lecithin deoiled from 205.606 because it
2 is available.

3 In March 2012, the NOP made the listing
4 for lecithin deoiled. By October of that same
5 year, this product was developed. It was sent out
6 for testing to the world's leading lecithin expert.
7 In his words to us, it's the best deoiled lecithin
8 he has ever seen in his career. Why? Because of
9 two primary reasons. No hexane, no acetone.
10 Those are volatile solvents used in non-organic
11 processing of lecithin.

12 Even one of the government agencies,
13 the U.S. Agency for Toxic Substances and Disease
14 Registry lists hexane as causing neurological and
15 reproductive disorders in humans. Why would this
16 be allowed in certified organic food? Ask
17 yourself that question.

18 We have been innovators in the organic
19 lecithin world. In 2004, we brought out the
20 world's first organic lecithin. We now have over
21 seven organic lecithins available. This product
22 is currently being used in organic food, organic

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1 personal care, organic pet care, nutritional, and
2 other industries in organic. It is being used by
3 small, medium, and very large -- actually, one of
4 the largest organic food companies in the U.S. is
5 currently a customer for this product.

6 I want to speak to the size of lecithin
7 because lecithin is a little, tiny ingredient in
8 things. It has very powerful properties. Think
9 of oil and water; they don't mix. A little bit of
10 lecithin makes them mix and stay together. It is
11 used for many things, but it is also currently in
12 organic infant care. So, that addresses the
13 sensitive part of this product.

14 I will change my thought. We will go
15 back to the inclusion thing. It is .2 percent to
16 .5 percent in a formulation typically. So, even
17 though it is a very tiny ingredient, we ask that
18 you consider removing it from 205.606 and sunset
19 it off the 2017. 205.606 needs your help to
20 support organic innovation. When these products
21 become available, please support their removal.

22 Thank you.

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1 CHAIR RICHARDSON: Questions? Let's
2 see, I've got Tom and, then, Calvin.

3 MEMBER CHAPMAN: Two quick questions.
4 Are you aware of other manufacturers of deoiled
5 lecithin and are you aware of other farms other than
6 soy?

7 MR. BENNETT: Actually, currently,
8 there are two facilities producing this product.
9 One first started producing it in about mid-2012.
10 It was added to our USDA NOP Organic Certificate
11 in July of 2013. One of these facilities currently
12 is working on bringing out the sunflower version
13 of it for non-allergen.

14 One thing I might add to that is 205.605
15 and 606 are a wishlist for organic innovators. If
16 you want to see a product change or the industry
17 change, innovators look at that list as new product
18 development, and that is exactly what this product
19 is. It is a result of what was put on 606. And
20 here we are, it took us from 2004, when we first
21 brought it out -- our first petition was in 2006
22 to change the rule -- it took until March 2012, six

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1 years later, for the NOP to require organic
2 lecithin be used. Let's not let that take this
3 long this time.

4 Thank you.

5 CHAIR RICHARDSON: Calvin, you had a
6 question? Answered? Okay.

7 Harold?

8 MR. BENNETT: Thank you.

9 MEMBER AUSTIN: Curtis, I guess one of
10 the comments and the questions to direct is the
11 availability of the amount of your lecithin that
12 is available. Because with the material currently
13 on 606, one of the requirements under 205.606 for
14 any material listed there would be that an organic
15 form of that material should be looked at and used,
16 if available, before using the product listed on
17 606.

18 So, that in its own right should divert
19 anybody that is using it, if availability is there,
20 towards you or the other producer. Isn't that
21 correct?

22 MR. BENNETT: That is correct.

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1 Unfortunately, as long as we have the loophole
2 where it is listed on the 2017 sunset, companies
3 won't move to that. Why? Because it costs more.

4 There are currently two facilities
5 making this product right now. We were the only
6 facility making organic lecithin back in 2004. We
7 were the only facility making it in 2010. After
8 the NOP made the change, there are now over seven
9 manufacturers in the world making organic
10 lecithin. That is why this Committee, we need your
11 support. We need that in this community.

12 CHAIR RICHARDSON: Calvin?

13 MEMBER WALKER: So, if I heard this
14 right, you are saying that you all are able to
15 commercially supply, along with the other seven,
16 what is needed by the industry?

17 MR. BENNETT: I'll address that
18 specifically. Because worldwide usage of
19 lecithin, less than 5 percent of it is in a deoiled
20 form. So, look at organic scale, which, as Ms.
21 Richardson said earlier, is something like 1 to 2
22 percent in the world.

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1 Now you look at the formulation. We
2 are using .2 to .5 percent of this little, tiny
3 ingredient in a formulation. You see the scale of
4 that. These two facilities alone cannot produce
5 worldwide usage of organic lecithin right now.

6 CHAIR RICHARDSON: Any other
7 questions, comments?

8 (No response.)

9 No? Okay, great. Thank you very
10 much.

11 MR. BENNETT: Thank you.

12 CHAIR RICHARDSON: The next presenter
13 is Terry Shistar, and she will be followed by Steve
14 Etko.

15 MS. SHISTAR: I'm waiting while
16 Michelle gets this up.

17 Okay. My name is Terry Shistar, and I
18 am on the Board of Directors of Beyond Pesticides.

19 Beyond Pesticides has a long history of
20 involvement with organic production. Our roots
21 are in problems of agriculture from poisoning of
22 farm workers to contaminated food, soil, air, and

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1 water. We have promoted organic production and
2 the organic model in non-production situations as
3 a solution to pollution.

4 On this slide, you can see some of our
5 present and former Board members.

6 We have submitted comments on many of
7 the issues before the Board at this meeting. My
8 comments today summarize some of the highlights
9 concerning compatibility issues and areas in which
10 the Board needs to be proactive.

11 The fact that chlorine is so
12 universally associated with the production of
13 persistent toxic chemicals has led some
14 environmental groups to seek a ban on
15 chlorine-based chemicals. We believe that
16 chlorine production should, for the same reasons,
17 avoid the use of chlorine as much as possible.

18 The allowance of chlorine in the rule
19 reflects the fact that many organic growers, like
20 most of us, depend on water sources that have been
21 treated with chlorine. We don't believe that
22 organic producers should have to filter chlorine

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1 out of the tap water they use for irrigating,
2 cleaning equipment, washing vegetables, or
3 cleaning food contact surfaces, but they should not
4 be adding more chlorine. Organic production and
5 handling should be to the extent possible
6 chlorine-free.

7 The regulations allow the addition of
8 synthetic nutrients only when the replacement of
9 nutrients is required by law. The listing of
10 nutrients, vitamins, and minerals goes beyond
11 those required by law and, therefore, needs to be
12 changed. Organic consumers expect superior
13 nutritional value in organic food to come from
14 organic production practices, not synthetic
15 additives.

16 Contributions from those with roots in
17 organic agriculture, including the original
18 Aquatic Animal Task Force and the frequent
19 commentaries from public interest organizations,
20 are underrepresented in the aquaculture legacy
21 document. Organic aquaculture must be based on
22 organic principles, including the recycling of

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1 nutrients, support for livestock with organic feed
2 from the system, and protection of the organic
3 integrity of the products.

4 Exhaust gas does not belong in any of
5 the categories of allowed synthetics in OFPA.
6 Although it may contain sulfur, sulfur is not the
7 active ingredient. In addition, pumping toxic
8 chemicals into burrows harms other species as well
9 as the target species.

10 Copper is a toxic material that brings
11 criticism to organic production. Its listing
12 cannot be fully compliant with OFPA without a
13 specific listing of the allowed uses. Section
14 6517(b) of OFPA states that the National List
15 "shall contain an itemization by specific use or
16 application of each synthetic substance
17 permitted". The NOSB must start by requesting a
18 Technical Review to enumerate and evaluate needs
19 for copper materials in organic production.

20 There are a number of issues associated
21 with fermentation that need to be addressed by the
22 NOSB regarding classification and criteria for

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1 listing. We ask that fermentation be put on the
2 Materials Subcommittee work plan.

3 Like inert ingredients in pesticide
4 products, excipients in animal medications are not
5 necessarily biologically or chemically inactive
6 and are not always listed on the label. The NOSB
7 should make a commitment to identifying and
8 reviewing the excipients used in organic
9 production comparable to the process adopted for
10 inerts.

11 Finally, we agree with the approach
12 outlined by the Crops Subcommittee to address
13 contaminated inputs by looking at feedstocks and
14 pathways, and we agree with those commenters who
15 point out the urgency of examining manure from
16 conventional farms.

17 Thank you.

18 CHAIR RICHARDSON: Thank you, Terry.

19 Questions? Yes, Paula?

20 MEMBER DANIELS: Thank you for your
21 comments. I just have a quick question.

22 This is in the context of having this

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1 summary of comments from the Cornucopia Institute,
2 which I actually find helpful. Even though I don't
3 always appreciate ad hominem attacks that
4 sometimes are advanced, I do appreciate the
5 analysis and the data, and I do want to take into
6 account all viewpoints as I make my decisions.

7 The one question I had for you was about
8 whether your views presented just now were
9 consistent with the Beyond Pesticides itself or if
10 it is your own, because I was trying to track them
11 in this document, and there were some slight
12 differences in what you said from what Beyond
13 Pesticides is reported to have said.

14 MS. SHISTAR: Oh.

15 MEMBER DANIELS: So, are you
16 skipping --

17 MS. SHISTAR: I wrote the Beyond
18 Pesticides comments.

19 MEMBER DANIELS: Okay. All right.
20 Great. And I want to compliment you on presenting
21 a lot of information very efficiently in a short
22 amount of time. Thank you.

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1 MS. SHISTAR: Thank you.

2 CHAIR RICHARDSON: Other questions,
3 comments for Terry?

4 (No response.)

5 Great. Thanks very much, Terry.

6 The next speaker is Steve Etko, and he
7 will be followed by Kelly Tavares.

8 MR. ETKO: Good afternoon.

9 I'm Steve Etko. I'm the Policy
10 Director for the National Organic Coalition.

11 As always, I wanted to reiterate our
12 thanks for the job that you all do for the entire
13 organic community as NOSB members. We all
14 recognize how challenging your job is in light of
15 the huge number of materials up for review, as well
16 as the challenges created by the new sunset review
17 process established by NOP.

18 As you know, NOC members have been very
19 critical of both the substance of the sunset review
20 policy, change imposed by NOP, as well as the lack
21 of adequate due process used in making those
22 changes. Last year NOC submitted to you all a

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1 White Paper with suggestions for sunset process
2 improvements. Many of our recommendations
3 revolved around having a clear record of decision
4 about materials decisions and having all
5 information about a material easily accessible to
6 the public in one place in a timely manner.

7 You all have made some good progress in
8 that regard in terms of gathering some of the
9 information needed to complete the record and
10 providing links to previous documents as part of
11 the summaries concerning sunset materials.
12 Continuing to build a full record of decision for
13 all materials will have huge payoffs, particularly
14 in five years when those materials are up for review
15 again.

16 I want to touch, also, briefly on the
17 issue of organic standards for aquaculture. NOC
18 and its members have expressed our support for the
19 promulgation of aquaculture standards as long as
20 the rules meet the strict 100-percent organic feed
21 requirements of OFPA and do not allow for the use
22 of open-ocean net pens because of the offsite

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1 pollution and negative impacts to wild fish
2 populations associated with such fish farming
3 practices.

4 From our perspective, only land-based,
5 closed-loop, recirculating systems have the
6 potential to meet OFPA criteria. So, we eagerly
7 await the publication of the proposed aquaculture
8 rule and look forward to working with both the Board
9 and NOP to ensure that any U.S. organic standards
10 for aquaculture meet strict standards of OFPA.

11 I would also like to touch on our
12 suggestions for improvements in the process used
13 for Section 205.606 to consider whether a product
14 is commercially available in organic form. As the
15 organic sector continues to evolve and mature, so,
16 too, should the process for considering additions
17 to the 606 list and the process for removing
18 ingredients from the 606 list.

19 We believe that simply stating that an
20 organic agricultural ingredient is not
21 commercially available is insufficient. Done
22 right, the 606 list should be a great tool for

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1 organic farmers interested in exploring new
2 markets. But, instead, the addition of an
3 ingredient or crop to the 606 list essentially
4 shuts down a potential market for organic farmers
5 and ingredient manufacturers. If processors are
6 given permission to use the non-organic form of
7 that ingredient, it greatly discourages any farmer
8 from growing that crop organically. We believe
9 that is backwards.

10 So, we have two suggestions. First, we
11 believe that something to be put on the list, the
12 NOSB should determine that it is either extremely
13 difficult or impossible to overcome barriers to
14 organic production of that crop or ingredient.

15 And second, we argue that 606 materials
16 should be reviewed using the full OFPA criteria.
17 According to OFPA, all substances on the National
18 List should be reviewed to determine their impact
19 on human health and the environment, their
20 necessity in organic production and handling, and
21 their consistency with organic farming and
22 handling.

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1 The fact that something is placed on the
2 606 list suggests that there is a market failure.
3 Let's work together to make sure that we address
4 that problem and not allow a flawed 606 process to
5 permanently close those markets to organic
6 farmers.

7 I also wanted to just mention we are
8 really encouraged by Miles' comments about
9 organic, the origin of livestock rules.

10 (Signal that time has expired.)

11 So, we look forward to reading that.

12 Thank you.

13 CHAIR RICHARDSON: Thank you, Steve.

14 Questions for Steve? Colehour? And
15 then, Tom.

16 MEMBER BONDERA: Thank you, Steve, for
17 your comments.

18 I would appreciate it if you would be
19 willing to briefly tell me if NOC has any
20 reflections on what we put together in terms of an
21 aquaculture history document. Because you
22 commented about the rule that is going to be coming

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1 out in the near future, but I think the reason we
2 put that document together was to try to get up to
3 that point, and I would appreciate any comments
4 that you, as a representative of NOC, would have
5 on that thinking.

6 MR. ETKA: I think one of our comments
7 on that is that we feel like the history needs to
8 be broadened a bit and that there is not enough
9 recognition of the public comments on this issue.

10 One thing I wanted to point out is, back
11 I think it was in 2002, Congress in the early days
12 of the organic rule tried to bypass the rule to say
13 that, if an organic feed was not available because
14 it was too expensive, that you didn't have to use
15 100-percent organic feed, particularly for
16 chickens. And the organic community all came
17 together to oppose that, and that was quickly
18 repealed, which doesn't happen much in Congress.
19 So, we are just hoping that in this aquaculture rule
20 that we don't try to revisit that issue.

21 CHAIR RICHARDSON: Tom?

22 MEMBER CHAPMAN: I wanted to address

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1 your comments on 606 or pose a question back to you.
2 Your concern is that these items, when listed,
3 don't create a market for organic farmers of these
4 items. We have seen a few in recent years come off
5 the list, annatto as a color and lecithin in other
6 forms, like a previous public commenter spoke to.
7 Why do you think it has been successful in some
8 forms and not in others?

9 MR. ETKA: And I would mention hops,
10 too a few years ago. But I would also mention that
11 that was not an easy thing to do. I think, like
12 in the example of hops, typically, farmers don't
13 grow hops unless they are doing it on contract.
14 So, to put something on the 606 list essentially
15 stops that process.

16 Like I was saying, that list is a
17 perfect opportunity for farmers to look to see what
18 new markets are; what is a market that we can be
19 filling that is not being met? But if there isn't
20 a lot of scrutiny on what goes onto that list, and
21 on the other side, if there isn't some skin in the
22 game for the petitioners to work to find a way to

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1 allow for that product to be available in organic
2 form, it is just going to create a barrier to
3 raising that product in organic form.

4 CHAIR RICHARDSON: Thank you.

5 Other questions?

6 (No response.)

7 Thank you, Steve.

8 MR. ETKA: Thanks.

9 CHAIR RICHARDSON: The next presenter
10 is Kelly Tavares, and she will be followed by
11 Urvashi Rangan.

12 MS. TAVARES: Ready?

13 Good afternoon, Madam Chair.

14 My name is Kelly Tavares, and I serve
15 as the Digital Communications Manager for the
16 Organic Trade Association.

17 My comments today will serve as an
18 introduction to OTA, our NOSB comment process, and
19 the work we are doing as it relates to sunset
20 material review.

21 My colleagues Gwendolyn Wyard and Nate
22 Lewis will be speaking later today and tomorrow on

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1 agenda-specific topics.

2 Before I get started, OTA's NOSB
3 Resource Booklet has just been passed around.
4 Inside the booklet, you will find OTA's positions
5 on all of the agenda topics along with some great
6 infographics and articles that we trust you will
7 find interesting and informative.

8 OTA is a membership-based
9 organization. With last week's official
10 announcement of our Farmers' Advisory Council
11 strategic partnership with the Tilth Producers of
12 Washington, OTA now represents 8500 organic
13 businesses across all 50 states.

14 Half of OTA members are small
15 businesses reporting less than a million dollars
16 per year in organic sales. OTA members are
17 represented either through direct membership or
18 through strategic partnerships with regional
19 organic producer organizations. These
20 partnerships form the backbone of our Farmers'
21 Advisory Council, more commonly referred to as FAC.

22 Established in 2013, FAC gives organic

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1 farmers a voice to directly influence OTA's policy
2 work and provides OTA an avenue to effectively
3 share import information with a stakeholder group.

4 I want to take a moment to talk about
5 OTA's NOSB comment process. OTA submits comments
6 on behalf of our membership. In order to do this,
7 we carry out an extensive process of membership
8 engagement, so that we can understand how NOSB
9 recommendations will impact certified farmers and
10 handlers on a day-to-day basis.

11 The feedback collected informs our
12 draft comments that are distributed to membership
13 for feedback at least one week in advance of the
14 comment deadline. This process takes time, and it
15 takes at least 30 days. It is important to note
16 that the comment period for this cycle was cut short
17 to only 27 days. This short amount of time,
18 particularly in the face of nearly 200 sunset
19 materials, simply does not provide a membership
20 organization like ours the ability to maximize
21 engagement in the comment process. In order to
22 facilitate a more meaningful comment process, we

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1 urge NOP to please in the future provide organic
2 stakeholders with, at a minimum, a 45-day comment
3 period.

4 Finally, I want to touch on OTA's sunset
5 surveys. To help facilitate a thorough comment
6 and review process, OTA created an electronic
7 survey for each individual input under review for
8 2016 and 2017. The surveys are confidential,
9 user-friendly, and available to every NOP
10 certificate-holder. Each survey is comprised of
11 seven to ten questions addressing the necessity or
12 essentiality of the National List input under
13 review.

14 To ensure wide distribution of the
15 surveys beyond just the OTA membership, we worked
16 with the accredited certifying agencies and
17 through our Farmers' Advisory Council to
18 distribute the surveys to NOP-certified
19 operations. All participants were encouraged to
20 provide comments directly to NOSB as well. The
21 survey simply provided operators with a
22 confidential opportunity to weigh-in on the sunset

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1 materials in a simple and efficient manner.

2 You have our written comments, which
3 include all of the survey responses we received as
4 of April 3rd. We will also share additional survey
5 responses that have been collected to date.

6 Despite the challenges that a shortened
7 comment period presented, OTA has received 456
8 unique survey responses from organic businesses.
9 This effort could have been greatly improved with
10 more time.

11 Survey responses are still being
12 collected, and we hope to provide even more
13 feedback on the inputs under sunset review prior
14 to the fall 2015 meeting.

15 OTA thanks the National Organic
16 Standards Board for your commitment to furthering
17 organic. If you have issue-specific questions,
18 please refer those to my colleagues.

19 Thank you.

20 CHAIR RICHARDSON: Thank you.

21 Questions from the Board members?

22 Yes, Calvin?

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1 MEMBER WALKER: Thank you very much.
2 OTA always put out great work.

3 The 45 days minimum, would this just be
4 for when items come up for sunset or would you all
5 recommend a 45-day period for all of our meetings
6 material?

7 MS. TAVARES: I think I will defer to
8 my colleagues on that, but I think the more time,
9 the better when it comes to being able to engage
10 our full membership in the process of submitting
11 feedback to NOSB on all issues.

12 CHAIR RICHARDSON: Any other comments,
13 questions?

14 (No response.)

15 Great. Thank you very much.

16 MS. TAVARES: Thank you.

17 CHAIR RICHARDSON: The next speaker is
18 Urvashi Rangan, and that will be followed by
19 Johanna Mirenda.

20 MS. RANGAN: Yes, thank you.

21 Good afternoon, everybody.

22 My name is Urvashi Rangan. I'm the

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1 Executive Director of the Food Safety and
2 Sustainability Center for Consumer Reports.

3 We really appreciate the time and
4 energy and sentiments of this Board, and we also
5 had a very difficult time covering all the comments
6 in the well over 100 materials for review at this
7 meeting, and concur with a lot of the comments
8 previously made.

9 We would like to ask the Board to
10 consider urging the NOP to keep a docket open on
11 materials, so you can receive comments after this
12 meeting, so that you can get the best-possible
13 public input on these important decisions.

14 We spend a lot of time educating
15 consumers and our 8.5 million subscribers about
16 labels, what they mean, what they don't. And like
17 cars or toasters, we rate labels. Over the last
18 15 years, several more labels have appeared on the
19 market and many of them have very, very good
20 standards, in some cases higher than organic.

21 While the 100-percent organic label is
22 still rated as a highly-meaningful label, the

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1 rating of the organic label has been downgraded and
2 compared to other labels in its class. We have
3 national survey data we submitted to you last year
4 that shows that organic is out of line with certain
5 attributes that consumers expect from the label.
6 Artificial ingredients, outdoor access for
7 poultry, antibiotic loophole in poultry
8 production, and animal welfare standards are all
9 issues we are very concerned about that have led
10 to the downgrading of this rating, and where other
11 labels actually exceed organic.

12 With regard to welfare for poultry
13 compared to other labels like animal welfare
14 approved, which are filling the void and go well
15 above and beyond organic standards for animal
16 welfare, it also requires pasture for poultry.
17 So, organic is falling well behind that animal
18 welfare label that is out on the market.

19 We are also concerned about a loophole
20 that exists for antibiotic use in poultry for use
21 at the hatchery in the day-old chicks, which is very
22 common. Tyson and Purdue have announced that they

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1 are discontinuing this practice.

2 The NOP did reply to a letter of concern
3 that we submitted, and they let us know that it
4 would require a change by Congress. However, at
5 the National Organic Coalition meeting yesterday,
6 Miles McEvoy suggested we ask you to add this
7 important issue to your work plan. So, we
8 respectfully request that here.

9 We urge the NOSB to add its voice of
10 support to a rule change that would prohibit
11 antibiotics in organic poultry production and at
12 all stages of production, to really eliminate the
13 last remaining exception for antibiotic use in
14 poultry.

15 With regard to sunset, we continue to
16 be concerned about the NOP rule issued without
17 public comment or due diligence that makes it
18 easier for synthetic substances to remain on the
19 National List and we are supportive of the lawsuit
20 that has been filed challenging the veracity of
21 that decision.

22 We are also concerned about the duality

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1 that exists when you are being directed to make a
2 motion to remove a substance that is up for sunset
3 in order to relist that substance. That leads to
4 tremendous consumer confusion about your
5 positions, again, in very important decisions that
6 are being made.

7 We also remain seriously concerned
8 about the two-thirds vote required to remove a
9 synthetic substance after it has been listed for
10 five years and is in sunset. This is a serious
11 undermining of the integrity of this label program
12 where the law explicitly prohibits synthetic
13 materials, and 89 percent of consumers in our
14 national surveys expect that artificial
15 ingredients are not in organic food. Eighty-four
16 percent of consumers think synthetic materials
17 should be discontinued after being allowed for five
18 years. We conducted a very comprehensive survey
19 on this very issue in March 2014 last year and
20 submitted those findings to you.

21 We also have submitted detailed
22 comments on the various materials for this

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1 conference. Charlotte Vallaeys will be
2 presenting those for us, and Aimee Simpson will be
3 presenting the legal analysis on 606 and what we
4 think needs to be done there.

5 We also want to make you aware of a
6 pesticide report that we issued in March of 2014
7 with a Consumer Reports story, along with a 50-page
8 scientific report. It highlights a couple of
9 different issues. It is a great read I think for
10 anyone who is in the organic area.

11 (Signal that time has expired.)

12 And maybe you can ask me about that
13 afterwards.

14 Thanks.

15 Hi, Jennifer.

16 CHAIR RICHARDSON: Questions? Yes?

17 MEMBER TAYLOR: Yes. I just wondered
18 if you could complete your --

19 MS. RANGAN: Thanks so much. Yes.

20 MEMBER TAYLOR: Yes.

21 MS. RANGAN: It is regarding that one
22 of the commodities we tell consumers to always buy

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1 organic -- we did a whole risk assessment of
2 various fruits and vegetables based on toxicity,
3 based on the EPA reference doses and the frequency
4 of finding those residues. We worked with Chuck
5 Benbrook to do that.

6 Carrots, for example, are one of the
7 vegetables we tell consumers always buy organic,
8 based on our evaluation of the risk. And yet,
9 conventional carrots are the basis for three
10 materials listed on 606 for colors.

11 We really want to encourage this Board
12 to think about, when organic colors are available,
13 they should be used. In the acceptance of colors
14 that are not organic, we really encourage you to
15 take a look at conventional production. When we
16 took a closer look, we really found issues,
17 especially with certain types of fruits and
18 vegetables out there that we don't think consumers
19 would want to have a conventional color version and
20 we think an organic version should be possible.

21 CHAIR RICHARDSON: Great. Thank you.

22 Any other questions?

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1 (No response.)

2 Thank you very much.

3 MS. RANGAN: Thank you.

4 CHAIR RICHARDSON: Johanna Mirenda is
5 up next.

6 MS. MIRENDA: Okay. Hello, everyone.

7 I'm Johanna Mirenda, Policy Director
8 for PCO, a USDA-accredited certifying agency that
9 certifies approximately 700 organic operations in
10 the Mid-Atlantic region of the U.S.

11 Material review is a critical and
12 ubiquitous part of the certification process.
13 Proper material classification and use of the
14 National List are critical for accurate material
15 review decisions. To remain useful as the
16 industry expands and listings are reviewed, added,
17 amended, the Board must keep the National List
18 clear, clean, and consistent. Two items on the
19 NOSB's agenda for this meeting are actions that
20 would make the National List less clear, less
21 clean, and less consistent.

22 First is acidified sodium chlorite.

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1 The Livestock Subcommittee has proposed to add two
2 separate listings for this material to the National
3 List, when we believe only one listing on 603(a)
4 would be sufficient to address the petitioned use
5 of the substance as a sanitizing teat dip.

6 Second is the proposed annotation for
7 ancillary ingredients in microorganisms. PCO
8 commends the Handling Subcommittee on embarking on
9 the first trial process for ancillary substance
10 review. However, the annotation as proposed would
11 create a lot of confusion. We have provided
12 details of our concerns in our written comments.
13 Most notably, the term "ancillary ingredient" has
14 not been defined, and it should not appear in the
15 regulations until there is a definition for this
16 word. Undefined terms will inevitably be
17 inconsistently applied.

18 PCO strongly suggests that the
19 Subcommittee withdraw this proposed annotation.
20 And furthermore, we would like to see annotation
21 changes be submitted through the petition process.

22 PCO supports the NOSB's review of

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1 ancillary ingredients and is eager to see the
2 process evolve and improve. The Subcommittee has
3 done a really great job of soliciting, reviewing,
4 and documenting information about ancillary
5 substances in their recommendations.

6 According to the February 2014 NOP memo
7 to the NOSB, the NOP instructs that, to conclude
8 the ancillary substance review, the Board should
9 submit its recommendation to NOP for any future
10 guidance, Policy Memos, or rulemaking, as
11 necessary.

12 The NOP also stated in a September 2013
13 memo that they could communicate any restrictions
14 or prohibitions in an annotation for generic
15 substances or in published guidance regarding
16 permitted substances for organic handling. PCO
17 strongly suggests that NOP pursue the latter
18 option, that the results of the NOSB ancillary
19 ingredient reviews are submitted to the NOP for
20 inclusion in NOP guidance or policy, such as the
21 forthcoming Permitted Substances List.

22 Through the Program Handbook, the NOP

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1 can provide more detailed information, and it can
2 also more easily update this information to keep
3 up with the industry innovation and ingredient
4 formulations. This option will allow for
5 transparent and thorough explanations, leading to
6 more consistent and accurate material review.

7 The guidance on reviewing vitamins and
8 minerals in livestock feed is a good example of how
9 the Handbook document can clarify the expectations
10 of reviewing minor ingredients in a National List
11 substance without cluttering the National List or
12 burying the listing in annotations.

13 In closing, I want to thank the Board
14 for their time, diligence, and effort in reviewing
15 materials for the National List. As you consider
16 additions or revisions to the National List, think
17 of the certifiers that depend on the list for
18 thousands of brand-name materials reviews. Even
19 though my copy of the National List is wrinkled and
20 coffee-stained from almost daily use, your job is
21 to keep the content clean, uncluttered, relevant,
22 and versatile enough to be used in one of the most

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1 innovative industries in the world.

2 Thank you.

3 CHAIR RICHARDSON: Thank you, Johanna.

4 Questions? Tom? And then, Zea.

5 MEMBER CHAPMAN: I have a question
6 related to a public comment received from PCO about
7 glycerin. Real quick, should I ask that to you or
8 should I wait? I know there are other PCO
9 commenters.

10 MS. MIRENDA: Yes.

11 MEMBER CHAPMAN: Should I ask that
12 question to you or should I wait until --

13 MS. MIRENDA: You can ask me. Go
14 ahead.

15 MEMBER CHAPMAN: Okay. So, on the
16 petition, you note forms that you assume will be
17 allowed under the petition or the proposal if it
18 is accepted. One of them is glycerin produced by
19 hydrolysis of natural fats and oils using a
20 solution of sodium carbonate, sodium hydroxide,
21 and potassium hydroxide, all processing aids
22 approved for the National List.

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1 It is my understanding from reading our
2 proposals that that would not be allowed as a
3 non-organic form of glycerin, but it would be
4 allowed to be certified as an organic form of
5 glycerin.

6 So, if you could review that and provide
7 additional clarification at some point, that would
8 be great.

9 MS. MIRENDA: Great. And I will just
10 hint that that is an example of how complicated
11 glycerin is.

12 CHAIR RICHARDSON: Zea?

13 MEMBER SONNABEND: Thank you for your
14 comments on ancillary substances. I believe we
15 will be talking about addressing some of those
16 tomorrow in the presentation.

17 But I am a little perplexed by your
18 saying that there isn't a definition of ancillary
19 substances because I believe in our document, which
20 I couldn't find in just the few minutes since we
21 have been here, but that we adopted a year or so
22 ago, we did provide a definition of ancillary

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1 substances in there.

2 MS. MIRENDA: In the April 2013
3 recommendation, the term was still being used
4 "other ingredients". So, there might be a
5 definition there. But we would like to see a
6 definition in 205, too, as part of the regulations.

7 MEMBER SONNABEND: Okay.

8 CHAIR RICHARDSON: Okay. Any other
9 comments?

10 (No response.)

11 Great. Thank you very much, Johanna.

12 Before we break for lunch, I would just
13 like to make a correction. I received a note from
14 Gwendolyn Wyard of the OTA to correct some of the
15 misperceptions that Mark had in his comments, Mark
16 Kastel, on Technical Reviews. We are just going
17 to read it out into the record, so we are all aware
18 of it.

19 It states, "The Organic Center does not
20 have a contract for Technical Reviews. There was
21 a contract years ago before TOC was brought under
22 the administrative auspices of OTA. We cut that

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1 contract the minute that happened. TOC is not
2 conducting TRs."

3 And I would like, further, to invite Dr.
4 Brines to make some comments to respond to some
5 misperceptions about TRs.

6 Lisa?

7 DR. BRINES: Thank you, Jean.

8 Yes, I can confirm that information
9 that was in that email, that the Organic Center did
10 previously have a contract with NOP, but they are
11 not currently a contractor working on reports for
12 the program. And it is correct that the reports
13 were prior to their current affiliation with OTA.

14 We do work with multiple contractors on
15 the development of Technical Reports. For any
16 report, the identification of the contractor is
17 always listed on the first page of the report in
18 the footer. So that information is transparent
19 for the public.

20 Oh, just one I guess note in terms of
21 the contracting process. As an advisory board,
22 the NOSB doesn't have contractual purview over

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1 contracting requirements, which is why contracts
2 with Technical Report contractors are agreements
3 held between the contractor and the Organic
4 Program.

5 That being said, all federal contracts,
6 including those that we issue for Technical
7 Reports, are governed by federal acquisition
8 regulations, which include specific provisions on
9 preventing personal conflicts of interest for
10 staff that work on those contracts.

11 So, this section is incorporated by
12 reference into our contracts with the contractors.
13 So that, if at anytime we believe there is a cause
14 to question conflict of interest, we can work with
15 those organizations.

16 Thank you.

17 CHAIR RICHARDSON: Thank you very much
18 for those clarifications.

19 We will now take a break for lunch of
20 75 minutes. So, you should be back here at -- say
21 what time -- 1:45, 1:50, 1:45-1:50, somewhere in
22 there.

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1 All right. Have a good break. Go
2 outside in the fresh air.

3 (Whereupon, the foregoing matter went
4 off the record for lunch at 12:35 p.m. and went back
5 on the record at 1:54 p.m.)

6 CHAIR RICHARDSON: The first presenter
7 this afternoon will be Lisa Bunin, and she will be
8 followed by Nate Lewis.

9 MS. BUNIN: Good afternoon.

10 My name is Lisa Bunin, and I'm the
11 Organic Policy Director at the Center for Food
12 Safety, a public interest organization with
13 650,000 members nationwide.

14 Since the passage of OFPA, CFS has been
15 a staunch defender of the organic standards and a
16 staunch supporter of organic market growth in a
17 manner that maintains a high bar of integrity. CFS
18 takes to heart the expectation under OFPA that
19 robust public participation in organic policy and
20 rulemaking is essential to ensure that the
21 standards live up to the quality and integrity that
22 consumers expect in organic food.

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1 At every opportunity, CFS taps the
2 organization's breadth of science, legal, and
3 policy expertise to provide informed input on
4 issues confronted by the organic community. So,
5 when the expected public participation process is
6 either circumvented or public comments with a sound
7 scientific, legal, or policy basis are not taken
8 into serious consideration, we say it is a breach
9 of the social contract the organic community made
10 with the passage of OFPA, and we feel obliged to
11 set the record straight.

12 That is exactly what we have done in our
13 written comments with respect to the Livestock
14 Committee's institutional memory document on
15 aquaculture. Although we appreciate the NOSB's
16 initiative to create an institutional memory for
17 the edification of future NOSB members, we do not
18 appreciate the document's omission of key
19 arguments that support substantive public comments
20 that have been presented to this Board for over a
21 decade.

22 The document is mainly a chronology of

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1 events. It relies upon reports and
2 recommendations from a Work Group dominated by the
3 conventional aquaculture industry with an interest
4 in expanding their markets into organic. Final
5 reports failed to discuss repeated evidence
6 presented by the public about pollution from fish
7 farms at sea, inevitable fish escapes, the
8 ecological impacts of fish farms, and the many
9 other reasons why ocean-based fish farms can never
10 be organic.

11 Throughout the 15 years of regulatory
12 development, the conventional industry wielded far
13 too much influence, and the final NOSB
14 recommendations on aquaculture reflect that.
15 Recommendations ended up directly conflicting with
16 a large majority of public comments on several
17 significant points, the most egregious of which was
18 regarding the certification of ocean-based fish
19 farms as organic.

20 According to the NOP, this
21 recommendation has been retained in the draft rules
22 to be released this summer. Sadly, the unbridled

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1 industry influence has resulted in a draft rule
2 that allows a polluting and ecologically-damaging
3 technology to be certified organic. This
4 contravenes OFPA. And if the rule is finalized
5 without modification, it will surely taint the
6 integrity of the organic label.

7 Moving on to copper, while copper may
8 be the only tool available for controlling some
9 serious plant diseases, it is also toxic. Its
10 breakdown product, elemental copper, can be toxic
11 to birds and animals, aquatic life, to the workers
12 who apply it, to those who ingest, breathe, or come
13 into contact with it, and it negatively impact
14 microorganism activity.

15 That is why it is imperative that
16 organic farmers reduce and eventually eliminate
17 it, see if it supports relisting copper with the
18 caveat that the NOSB recommend that the
19 systems-based approach to research is urgently
20 funded to help forge a roadmap towards its
21 elimination. Clarifying language is also needed,
22 and the annotations for copper products is

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1 emphasized, the requirement that farmers minimize
2 toxic buildup in soils.

3 Nanotechnology, while we appreciate
4 the NOP's recommendation of the imperative to
5 prevent the intrusion of nanomaterials into
6 organic in its recent policy statement, this does
7 not constitute a permanent prohibition, as CFS and
8 many of the organic community had expected.
9 Instead, it leaves the door open for engineered
10 nanomaterials to be included in organic foods, for
11 instance, through the National List petition
12 process. We urge the NOSB to revisit this matter
13 at the next Board meeting and recommend a permanent
14 prohibition.

15 Please continue your good work on GMO
16 contamination prevention and the push for shared
17 responsibility from GMO patent-holders and
18 technology users.

19 And thank you very much for all the good
20 work you all do.

21 CHAIR RICHARDSON: Thank you, Lisa.

22 Questions? Calvin?

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1 MEMBER WALKER: I would like to be fair
2 and balanced. But Robert Kennedy said a mistake
3 is not a mistake until you refuse to correct it.
4 Ronald Reagan said it is morning in America.

5 What can we do to correct that in terms
6 of if certain aspects of the aquaculture legacy
7 document wasn't fully -- that's something we can
8 do in the future, going forward, to bring that out?

9 MS. BUNIN: Yes. Thanks very much for
10 that question.

11 Well, one of the things that I think
12 that most people did not notice was there was this
13 footnote that, then, you clicked on and was
14 attached to a URL that did at least begin to look
15 at some of the public comments. So, I think that
16 that URL needs to be part of the full document.

17 Also, we have corrected the history in
18 our written public comments. But there is a bigger
19 issue here that I would really like to raise. And
20 that is the fact that it is one thing to solicit
21 public comment and it is a very different thing to
22 really take it into serious consideration.

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1 I feel, on behalf of the Center for Food
2 Safety, that we have not really had our concerns
3 taken into serious consideration. Our scientific
4 information has never been refuted by the NOSB.
5 And yet, recommendations are going forward.

6 And I want to remind you that last time
7 I did circulate this document that we wrote, and
8 now, on your desk for a short form for the crib sheet
9 I gave you a fact sheet.

10 Thank you.

11 CHAIR RICHARDSON: Jennifer?

12 MEMBER TAYLOR: Thank you.

13 Thank you, Lisa.

14 Do you see any way with the
15 communications, with us not having an ongoing
16 communication with the public, do you see any way
17 that the work that you are presenting to us right
18 now can be incorporated into the work that is taking
19 place with the Livestock Subcommittee?

20 MS. BUNIN: I think that an open
21 docket, if that is what you are referring to --

22 MEMBER TAYLOR: Uh-hum.

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1 MS. BUNIN: -- I think where we can have
2 regular communication with the NOSB would be great.
3 I know that there is a reluctance, and I can
4 understand that, to not want to give out your email
5 address and be inundated.

6 So, there has to be some sort of process
7 where you can elect to go get that information, but
8 I think an ongoing public docket is something we
9 have talked about, and let's make it happen.

10 CHAIR RICHARDSON: Other comments,
11 questions?

12 (No response.)

13 Great. Thanks very much, Lisa.

14 MS. BUNIN: Thank you.

15 CHAIR RICHARDSON: The next person up
16 is Nate Lewis. And who do I have next? Abby
17 Youngblood, yes, Abby Youngblood comes up next.

18 MR. N. LEWIS: Hello.

19 Distinguished Members of the Board, my
20 name is Nate Lewis, Senior Crops and Livestock
21 Specialist with the OTA. Thanks for the
22 opportunity to provide comment today.

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1 I would first like to commend the Board
2 on the work you have done in face of the seemingly
3 insurmountable task of the 27 sunset reviews, and
4 I hope none of you feel like writing, "What for?"
5 across the morning sky.

6 One of the elements you must consider
7 when reviewing substances used in organic crop and
8 livestock production is its necessity to the
9 success of these farmers. Part of this analysis
10 includes evaluating the availability and efficacy
11 of alternatives, and that is a common theme I would
12 like to explore with you today.

13 There is a surprising near consensus
14 among the organic sector to renew the listing for
15 hydrogen chloride for cottonseed delinting.
16 There is promising research into non-chemical
17 alternatives, but they are not yet commercially
18 available. In this case it appears that we all
19 agree that the necessity or lack of alternatives
20 for the substance trump the valid concerns about
21 other National List criteria.

22 In the case of methionine, there isn't

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1 this same consensus. There aren't any
2 alternatives for the essential amino acid
3 methionine. We are simply discussing where this
4 amino acid should come from and how it should be
5 metered out over the lifetime of a bird.

6 If you consider the availability of
7 alternatives for synthetic methionine, the same
8 reality holds true here. There are promising
9 alternatives, but none that have shown to be
10 commercially viable.

11 When alternatives do become
12 commercially viable, we see widespread adoption.
13 In the organic pear industry, no one is using lignon
14 sulfonate to float their pears anymore. They use
15 floatless dump tanks or alternative substances
16 currently allowed on the National List. This is
17 why OTA submitted a petition to remove lignon
18 sulfonate for this specific use, and we encourage
19 you to take action on that petition at your next
20 meeting.

21 The Crops Subcommittee reviewed
22 petitions for three materials, all of which have

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1 effective alternatives available. These
2 substances shouldn't be added to the National List
3 because there are viable alternatives and they are
4 not necessary.

5 The Livestock Subcommittee reviewed
6 petitions for two materials, zinc sulfate and
7 acidified sodium chlorite, both of which do already
8 have effective alternatives available. However,
9 what you need to keep in mind when looking through
10 the lens of livestock health is the concern about
11 pathogen resistance. Veterinarians and producers
12 would agree that having the ability to rotate
13 between disease treatments maintains efficacy.
14 And so, the formula for determining necessity for
15 controlling disease in a livestock operation is
16 different than that for the formula for necessity
17 of a fertilizing material in crop production.

18 Lastly, with regards to NOSB's
19 evaluation of inert ingredients in organic pest
20 control products, you don't have the information
21 to assess the necessity or potential for
22 alternatives on a substance-by-substance basis.

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1 The nature of confidentiality in pest control
2 product formulas prevents you from getting this
3 information, and that is not likely to change.

4 As one of the less than a half of dozen
5 people in this room who has actually reviewed
6 confidential pest control material formulas for
7 compliance to the organic standards, I know about
8 the nature of R&D, testing, formulating, and label
9 review with the EPA. A two-year phaseout of any
10 inert currently in use is not enough time to get
11 a new formula approved by EPA, let alone present
12 a reasonable timeline necessary for reformulation
13 and testing.

14 A system like the one proposed by EPA's
15 Safer Choice Program is a good way forward, and we
16 encourage you to make this collaboration work.

17 Thanks so much.

18 CHAIR RICHARDSON: Thank you, Nate.

19 Questions from the Board? I see a hand
20 up there. Ashley?

21 MEMBER SWAFFAR: Thanks for your
22 comments, Nate.

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1 Have you reached out to your members
2 about how on methionine, if the proposal goes
3 through on the averaging, how could that be audited
4 from a certifier's standpoint or have you
5 researched any of that?

6 MR. N. LEWIS: Sure. Yes. Well, we
7 haven't heard any concerns about the ability
8 of -- we have a lot of certifiers who are members,
9 and we haven't heard any concerns about the ability
10 to conduct that average analysis over the lifetime
11 of a flock.

12 And speaking from my own experience of
13 conducting those audits on the various scales and
14 types of poultry operations and at feed facilities,
15 I think it is completely doable. I would also
16 remind you all that we have been evaluating
17 averages on ruminant animal livestock operations
18 for some time since the pasture rule, which
19 requires an average approach to DMI from pasture.
20 So, I think it is completely doable and probably
21 even easier than the pasture requirement because
22 we will be looking at specific formulas and mix

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1 sheets at those inspections and audits.

2 CHAIR RICHARDSON: Calvin?

3 MEMBER WALKER: I have seen OTA's
4 comments that relate to how you verify that. Being
5 an animal scientist, I could see some logistic
6 issues with it. Besides, when you have your feed
7 schedules, if you said you are feeding a certain
8 amount of methionine, calcium phosphorus, many
9 times what we do, when we take that sample and we
10 take that and get that analyzed to see how it
11 matches up, but even when you get it, you can't
12 determine is that methionine already in the corn
13 and soybeans or is it synthetic methionine.

14 I am trying to balance that as a Board
15 member. OTA did say that it is something that can
16 easily be done, but CCOF stated that it could not.
17 Oregon Tilth suggested some ways that it could be
18 done. They suggested that the program come up with
19 a way to give guidance to certifiers and others to
20 verify that.

21 So, that is the dilemma that I am in,
22 is that I am seeing some stakeholders and the public

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1 comments that it can easily be done, but a good
2 number are saying that it is very complicated. But
3 you are saying that it can be done.

4 MR. N. LEWIS: Well, yes, based on my
5 experience, when you are evaluating a formula for
6 compliance to the organic standards, you get a list
7 of ingredients. Included in that are your corn and
8 soybeans and your agronomic crops and, then, all
9 the additives and minerals, and in the case of
10 organic poultry, rations of synthetic methionine
11 inclusion.

12 And then, when you are at the inspection
13 conducting that feed audit, you are looking at
14 mixed sheets. If you are at a feed mill, you will
15 look at how much was actually included in there.
16 So, the pounds of methionine is very clearly
17 delineated in those mix sheets. So, it depends on
18 where you are in the process, but there is always
19 a point in the process where you can determine how
20 much synthetic methionine has been added.

21 CHAIR RICHARDSON: Tracy? And then,
22 Paula.

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1 VICE CHAIR FAVRE: Hi, Nate.

2 One of the struggles that we have had
3 in the Livestock Subcommittee about methionine is
4 there is just a real divergence between sort of the
5 public expectation and what reality says is
6 commercially available. While there are some
7 products that are in development and we are hopeful
8 about, we are not there yet, as you stated.

9 So, in your perspective with all your
10 members, do you have any suggestions for how we can
11 sort of reconcile or kind of explain the
12 complexities of the challenges with this to the
13 general public? Have you got any thoughts on that?

14 MR. N. LEWIS: I think that is a
15 challenging proposition in the world of social
16 media and soundbites. But the piece that I try to
17 communicate to folks who are trying to learn about
18 it is that this is an essential element of animals'
19 diet, and leave at that, that this is part of proper
20 nutrition. You know, protein is part of our diet.
21 We need good protein. We encourage our children
22 to get enough protein in their diet, something

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1 along those lines.

2 CHAIR RICHARDSON: Paula?

3 MEMBER DANIELS: Thank you.

4 So, again, on the topic of
5 methionine --

6 MR. N. LEWIS: Oh, boy.

7 (Laughter.)

8 MEMBER DANIELS: You brought it up.

9 You mentioned that there are promising
10 alternatives that are not yet commercially viable.
11 Could you elaborate on that? Like what are the
12 alternatives and what is the stage of development?

13 And then, I have another question after
14 that.

15 MR. N. LEWIS: Sure.

16 I think I will defer to the methionine
17 representatives that are on the Methionine Task
18 Force who know the specifics about that better than
19 I.

20 MEMBER DANIELS: Okay.

21 MR. N. LEWIS: I mean, I could rattle
22 off a couple of alternatives, but I don't think that

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1 would necessarily be terribly helpful to you.

2 MEMBER DANIELS: Somebody else is
3 going to be speaking on that?

4 MR. N. LEWIS: Yes. There will be
5 representatives --

6 MEMBER DANIELS: Okay.

7 MR. N. LEWIS: -- from the Methionine
8 Task Force here.

9 MEMBER DANIELS: Well, you may or may
10 not know this. Are you aware of any poultry farms
11 that have successfully raised their flock
12 completely on pasture and have been able to get
13 enough methionine? Is that even possible?

14 MR. N. LEWIS: Well, they are not
15 ruminant animals. So, you do need to supplement
16 with some sort of grain.

17 MEMBER DANIELS: So, they are still
18 supplemented?

19 MR. N. LEWIS: Well, yes. Yes, I mean,
20 a chicken can't obtain all its nutrition from
21 grass. So, you need to supplement it with some
22 sort of ration. I have heard of operations that

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1 have been able to do that without methionine, but,
2 again, I wouldn't want to speak to that ability to
3 be adopted widespread by the industry because I am
4 not in that position.

5 MEMBER DANIELS: All right. Thank
6 you.

7 CHAIR RICHARDSON: Okay. Thank you
8 very much, Nate.

9 MR. N. LEWIS: Thank you all.

10 CHAIR RICHARDSON: The next person up
11 is Abby Youngblood, and she will be followed by Jo
12 Ann Baumgartner.

13 MS. YOUNGBLOOD: Good afternoon.

14 My name is Abby Youngblood, and I am the
15 Executive Director of the National Organic
16 Coalition.

17 And I would like to say thank you to the
18 NOSB and for this opportunity for comment, and for
19 your dedication in taking on the Herculean task of
20 reviewing so many materials.

21 I want to focus my comments today on
22 three big-picture issues that impact organic

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1 integrity, nanotechnology, genetic contamination,
2 and, lastly, the nature of the NOSB review process.

3 First, as my colleague Lisa Bunin
4 expressed, we have deep concerns about the NOP's
5 recent Policy Memo on nanomaterials. We had
6 expected a strict prohibition of nanotechnology in
7 organic. And instead, the NOP's policy leaves the
8 door open for these materials to be included
9 through the petition process.

10 We are at a crossroads right now, and
11 we believe that we must ensure that, like sewage
12 sludge, like irradiation, and like genetic
13 engineering, nanomaterials are permanently
14 prohibited. So, we are calling on the NOSB to take
15 action on this issue.

16 Thank you to the Materials Subcommittee
17 for looking at the issue of genetic contamination.
18 We agree that the organic community is already
19 doing its part to prevent contamination.

20 But the core issue here is that stronger
21 actions are urgently needed to ensure that GE
22 patent-holders and GE growers share in the

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1 responsibility. We also need a fair mechanism to
2 compensate organic operations when prevention
3 measures fail.

4 We appreciate that the NOSB continues
5 to take up this issue, but it is not something that
6 can be solved at the NOSB or NOP level. So, we urge
7 you, using the statutory authority granted to you
8 under OFPA, to continue to communicate directly
9 with the Secretary of Agriculture about the threat
10 posed by genetic contamination.

11 Last, I want to comment on the NOSB's
12 review process. In our written comments we
13 explain why we believe that zinc sulfate should be
14 added to the National List and why materials such
15 as chlorine and copper need to stay on the list
16 right now.

17 We recognize that farmers need access
18 to these tools. And yet, just because a material
19 is necessary right now does not mean it should
20 remain on the National List in perpetuity. A
21 robust sunset process gives us the opportunity to
22 continually review these materials, to push the

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1 USDA research agenda, and to make careful
2 annotations that limit negative impacts on human
3 health and the environment.

4 And I refer you to our written comments
5 where we identify some of the urgent research needs
6 and the quest for alternatives to materials like
7 copper, chlorine, and synthetic methionine.

8 Finally, where the NOSB has provided a
9 thorough Technical Review and checklist, thank
10 you. We recognize the amount of work that takes,
11 but in some cases this information is absent. So,
12 for example, phosphate food additives. New
13 scientific studies raise concerns about the link
14 between cardiovascular disease and added
15 phosphates in processed foods, and many organic
16 foods contain these phosphate food additives.

17 So, this type of new information must
18 be examined at each sunset review and all of the
19 OFPA criteria should be addressed. That
20 information must be provided to the public in
21 advance of the first meeting that deals with the
22 sunset review of that material.

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1 As a community, we must move to
2 proactively abandon synthetic and toxic materials
3 when possible. The integrity of the National
4 Organic Program and consumer trust in the organic
5 label rests on this foundation of continuous
6 improvement.

7 Thank you.

8 CHAIR RICHARDSON: Thank you.

9 Questions?

10 (No response.)

11 Great. Thank you very much, Abby.

12 The next speaker is Jo Ann Baumgartner,
13 and after that will be Phil McGrath.

14 MS. BAUMGARTNER: I'm waiting for the
15 slides. Here we go.

16 Hello. I am Jo Ann Baumgartner with
17 the Wild Farm Alliance.

18 Organic agriculture could be the answer
19 to healthier landscapes. Most organic
20 agriculture is better because of its diversity, its
21 distinct crop mix, floral and habitat diversity,
22 careful soil management, and reduced nutrient and

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1 pesticide use.

2 Next.

3 And it is better for climate stability,
4 soil carbon storage, reduced nitrogen losses,
5 better energy use. But we have to get it right
6 because there is so much at stake.

7 We have lost half of the world's
8 wildlife in the last 40 years, and there is more
9 severe declines predicted due to habitat loss,
10 water development, and climate change.

11 So, those organic monocultures that
12 have been sliding under the radar, not supporting
13 diversity or not following the regulations, are not
14 part of the solution and are making the rest of
15 organic look bad. Hopefully, that will change
16 with the NOP's biodiversity guidance that is almost
17 final, thanks to the NOSB's 2009 recommendation,
18 but there is still more to do.

19 That NOSB recommendation also called
20 for training of certifiers, inspectors, and
21 operators. Last week we partnered to present half
22 of a three-hour biodiversity conservation training

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1 to about 40 certification personnel. What was
2 apparent was a need for training every inspector
3 because some reported that there is a steep
4 learning curve in the organizations and they either
5 have not started to plan for getting their
6 inspectors up-to-speed or they might have a plan,
7 but they recognize that many of their inspectors
8 are ill-qualified at this point.

9 They also reported the confusion of
10 organic operators, which, again, speaks to more
11 training. That training should include common
12 issues that have in the past slipped through the
13 cracks. For instance, many certifiers think that
14 food safety trumps organic agriculture, but
15 Congress wrote FSMA, the Food Safety Modernization
16 Act, instructing FDA to come up with regulations
17 that do not conflict with organic regulations and
18 that address natural resource agency mandates.

19 FDA requires monitoring of animal feces
20 and not harvesting that area, but they don't
21 require habitat destruction. Some buyers require
22 measures that conflict with NOP's regulations, but

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1 organic farmers do not have to sell to these buyers.
2 They only have to comply with NOP and FDA mandates.

3 We and many others have urged that
4 incentives to convert high-value natural
5 ecosystems into organic due to the NOP's three-year
6 waiting period for transitioning must be
7 eliminated. And the best way to do that is through
8 guidance. Many of us in the organic community
9 would be happy to clarify with NOP what would work
10 and what wouldn't in that regard. If the NOP
11 mistakenly does not include this in guidance, and
12 they haven't so far in the drafts, the NOSB should
13 take this up on their work plan and make a
14 recommendation for rule change.

15 Recently, I spoke with a northeastern
16 farmers, and he described to me about how he sells
17 blue tomatoes, the blue being copper sulfate.
18 Obviously, this isn't good for organic consumers
19 with health issues.

20 Okay, these species are actually not
21 blue, but I made them that way. But please pay
22 close attention to Consumers Report's comments

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1 citing EPA studies on how allowed application rates
2 can cause acute and chronic concerns in birds,
3 mammals, and aquatic organisms such as fish, crab,
4 shrimp, and oysters.

5 The NOSB should map out current uses of
6 copper sulfate and work with funding agencies like
7 OREI to make research on copper alternatives a high
8 priority. Once there are viable alternatives, the
9 NOSB should prohibit the use.

10 Thank you.

11 CHAIR RICHARDSON: Thank you.

12 Questions? Calvin?

13 MEMBER WALKER: Coexistence, how can
14 biodiversity play a positive role in coexistence?
15 I have a friend who has 1,000 and another one has
16 2,000 acres of soybeans. He tells me that he
17 doesn't like organics, but he would be amenable if
18 somebody who was next to him would approach him
19 about the zones and those sorts of things.

20 I know since I have been on the Board
21 you have been an advocate of biodiversity.
22 Anything permanent as it relates to biodiversity

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1 between an organic farmer and a non-organic farmer
2 that might work?

3 MS. BAUMGARTNER: Yes.

4 MEMBER WALKER: That's like corn.

5 MS. BAUMGARTNER: Yes, corn. Well,
6 are you meaning coexistence of GMOs and what you
7 can use? Well, I think it really depends on the
8 crop as to how far the genetic drift will occur.
9 I have heard -- I am not an expert at it, but I have
10 heard -- like corn pollen can drift a huge area or
11 a space.

12 And so, any kind of hedgerow that you
13 put up, it is probably not going to be sufficient.
14 But maybe with certain crops a hedge or a wind-break
15 might work. I know wind-breaks work well for
16 pesticides. They intercept. There have been
17 lots of studies. And that is what we really need,
18 is more studies to understand how that drift moves
19 and what kind of conservation practices, like
20 wind-breaks, might work.

21 CHAIR RICHARDSON: Yes, Tracy?

22 VICE CHAIR FAVRE: So, one of the work

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1 items under CACS is working on a framework for
2 putting together some requirements for assessing
3 soil conservation practices. I am curious as to
4 whether you think a framework is sufficient for
5 certifiers or whether we need to go further with
6 more detailed instructions of that.

7 MS. BAUMGARTNER: Can you explain the
8 framework a little more?

9 VICE CHAIR FAVRE: Well, rather than
10 prescribe a specific activity, saying this is the
11 framework under which you have to start looking and
12 structuring your assessment. Do you think that
13 goes far enough? Do you think we need more detail?

14 MS. BAUMGARTNER: I would love detail.
15 So, I would think, depending on the framework, but,
16 on the other hand, every farm is so site-specific
17 that it kind of depends. It depends on what they
18 are growing, what the soil type is, yes, what kinds
19 of cover crops they are using or not, or composite.
20 What is their composite made of?

21 Yes, maybe a mix of both, some more
22 detail. I know like with the Natural Resource

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1 Biodiversity Guidance there are three-and-a-half
2 pages of examples. That gives producers a really
3 good idea of the breadth of not everything, but it
4 gives them a good idea of how they can move forward.

5 CHAIR RICHARDSON: Great. Thank you
6 very much.

7 MS. BAUMGARTNER: Thank you.

8 CHAIR RICHARDSON: Our next presenter
9 is Phil McGrath, and after that will be Peggy Miars.

10 MR. McGRATH: Hello. My name is Phil
11 McGrath. I am a farmer from Oxnard, California.
12 I am also a member of the Cornucopia Institute, and
13 I am here as a citizen lobbyist.

14 I have volunteered to help present
15 testimony because I want to ensure the integrity
16 of organic food. The word "organic" has come miles
17 in my lifetime, from being a hippie word to the
18 National Organic Program. It needs teeth. It
19 needs higher standards.

20 People come to my farm to pick berries
21 or pick tomatoes, and I ask all of them why they
22 come there. They all say it is because it is

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1 organic, because it is chemical-free.

2 I would like to comment on materials
3 listed for the plant disease control, particularly
4 copper and sulfur products. We have no need for
5 these on our diverse fruit and vegetable farm. The
6 reason why we don't need them is because our farm
7 tries to embody what organic is meant to be.

8 We grow with a very high level of crop
9 diversity. Because of that, we do not have many
10 pest problems. Insects and diseases are problems
11 for the monocroppers that surround my farm.
12 Instead of spraying materials that harm
13 beneficials, we use crop rotation, resistant
14 varieties, sanitation, proper soil management, and
15 a high crop diversity to prevent disease control.
16 We grow things in season.

17 We also buy beneficial insects such as
18 a one-spotted mite called persimilis that eats the
19 two-spotted mite that eats our strawberries. We
20 border most of our permanent crops with flowers
21 that attract beneficials. We intersperse trap
22 plants in our crops that attract unwanted bugs away

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1 from our cash crops.

2 At our farm we embody the old adage, if
3 you can't beat them, join them, or in our case, if
4 you can't beat them, feed them. In other words,
5 we use the natural world as a guide to keep the pests
6 in balance. Give the pests something to eat, stop
7 killing off the insects that are there to help you,
8 this is what organic was meant to be.

9 Somehow it has been usurped by
10 industrial organics where blocks of the same crops
11 grow on as far as the eye can see. These organic
12 farmers then convince you that the pesticides are
13 essential. They are not. Organic farming is all
14 about diversity.

15 There is a science behind these
16 statements, in addition to my observations as a
17 fifth-generation farmer. Applications of sulfur
18 create an imbalance of soluble nutrients which
19 negatively affects soil microbes and soil health.
20 Applications of lime sulfur can lead to excess of
21 lime, locking up essential micronutrients.

22 Both copper and sulfur affect

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1 non-target soil microorganisms. They hurt
2 biological diversity from both direct application,
3 residue, and spray drift to neighboring areas.
4 Research has shown that lime sulfur and copper
5 kills adult and larvae beneficial predators as well
6 as reduces the feeding rate of those that survive.

7 There are additional environmental
8 concerns surrounding copper contamination in
9 mining. Further, copper products are perhaps the
10 most hazardous materials to my farm workers in
11 organic production.

12 The use of non-selective materials is
13 a major contributor to the pesticide treadmill that
14 organic was meant to avoid. There is no need for
15 these materials if the diversity component --

16 (Signal that time has expired.)

17 -- whoops -- if the diversity component
18 of the Organic Food Production Act is met.

19 Thank you for allowing me to present
20 testimony.

21 CHAIR RICHARDSON: Thank you very
22 much.

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1 MR. McGRATH: Yes.

2 CHAIR RICHARDSON: Questions? Yes,
3 Jennifer?

4 MEMBER TAYLOR: I have a question,
5 please.

6 CHAIR RICHARDSON: Yes.

7 MEMBER TAYLOR: Thank you for your
8 information that you shared.

9 How do you feel that we could
10 incorporate more information about the importance
11 of cultural management systems, cultural
12 management strategies?

13 MR. McGRATH: Yes, more information is
14 needed on that because that is kind of the secret
15 to farming to me. My groundwork is so important
16 and what I do afterwards with cultivation
17 practices. We talk about pesticides and
18 fertilizers and water practices, but the cultural
19 practices truly, truly seem to be not talked about
20 as much.

21 I know that every farm is different, as
22 the past presenter just said. It really varies

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1 from farm to farm. But there are many different
2 types of soils.

3 I guess we are in the age of the
4 internet, and maybe we need more blogs or more
5 whatever they are called to get the information out
6 there.

7 But I don't have an answer. I really
8 don't. But I think it is incredibly important and
9 I think it needs to be talked more about. Sorry.

10 CHAIR RICHARDSON: Great. Thank you
11 very much.

12 MR. McGRATH: Yes.

13 CHAIR RICHARDSON: Thank you.

14 All right. The next speaker is Peggy
15 Miars, and after that will be Garth Kahl.

16 MS. MIARS: Good afternoon.

17 I'm Peggy Miars, Executive Director of
18 OMRI, the Organic Materials Review Institute.

19 Rather than addressing any agenda items
20 today, which I will leave to my colleague Lindsay
21 Fernandez-Salvador to do later, I am making a
22 couple of extremely brief general comments, now

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1 that I have rebooted my computer after it froze.

2 First, welcome to the new NOSB members.

3 I want to offer OMRI as a resource, a neutral
4 resource, if we can be of assistance. We do not
5 advocate for or against specific materials.
6 Rather, as a material review organization, our role
7 is to let you know how your decisions on materials
8 may impact the organic industry.

9 Our Generic Materials List and OMRI
10 Products List are both available to you as
11 resources, as you review materials, including the
12 massive number of sunset materials coming up in the
13 next couple of years. And our website may also be
14 useful to you, especially after we improve our
15 search function later this year.

16 And that is the end of my public service
17 announcement.

18 Next, I want to express my appreciation
19 and support for Miles and the entire NOP staff.
20 You do an admirable job with, frankly, what I think
21 is a paltry budget. You are working with a \$9
22 million budget to oversee a \$39 million industry.

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1 And I am happy to see continued increase
2 staffing at the NOP, even if it means that you're
3 stealing excellent-trained staff from certifiers,
4 as you did in the last round of hiring, right?

5 (Laughter.)

6 So, I believe that the NOP is the most
7 transparent program in the entire federal
8 government, and you welcome public participation
9 more so than any other agency that I am aware of.
10 I don't think that everyone appreciates that fact.

11 It almost like you work for a membership
12 organization and you've got 300 million members
13 that you answer to. I have worked for membership
14 organizations, and I know that it is impossible to
15 please everyone all the time.

16 I do believe that you make the best
17 decisions, given the restraints under which you
18 operate. None of us in the audience or the
19 industry can fully understand the governmental
20 bureaucracy under which you operate. And I
21 believe that each of you exhibits the NOP core
22 values of honesty and integrity.

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1 Thank you.

2 (Applause.)

3 CHAIR RICHARDSON: Thank you, Peggy.

4 Questions? Calvin?

5 MEMBER WALKER: I just have a comment.

6 I would like to say "ditto".

7 My stay on the Board will be very short.

8 I have about eight months left.

9 I would like to say I echo what you say
10 about Miles McEvoy. He is "miles" ahead of other
11 NOP persons that I have known.

12 (Laughter.)

13 I would certainly say that to remove
14 him, you don't know what you will get next. So,
15 let's stay with what we've got.

16 (Applause.)

17 CHAIR RICHARDSON: Another question?
18 Sorry. You, yes, Harold?

19 MEMBER AUSTIN: Hi, Peggy.

20 MS. MIARS: Hello.

21 MEMBER AUSTIN: Nice commentary up
22 there.

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1 As we are going through this very small
2 list of sunset review materials for 2017, I guess
3 your organization really can help us as an
4 indicator. Because we all know that a material
5 that is going to get registered for use isn't going
6 to get registered for use, with the expense that
7 goes into it, unless it is being utilized
8 somewhere, because somebody has got to pay for the
9 cost of the registration, the cost of the material.

10 During this last cycle, a lot of the
11 materials for crops and handling are now coming up.
12 What has OMRI seen over the last couple of years
13 with the materials? Have you seen additional
14 materials being added that you are having to
15 review? Are you seeing less? Kind of give us a
16 gauge on what you have been experiencing?

17 MS. MIARS: Uh-hum. Well, I would say
18 that at OMRI our growth has mirrored or exceeded
19 the growth of the organic industry. We continue
20 to have new products apply every year. In fact,
21 more products apply per month this year than they
22 did last year or the year before. So, it is

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1 constantly increasing.

2 As far as the specific types of
3 products, I would defer to Lindsay on that. She
4 probably knows more about that than I do. But
5 definitely it continues to increase.

6 CHAIR RICHARDSON: Zea?

7 MEMBER SONNABEND: Thank you, Peggy.

8 This is a very broad question that will
9 be on our future agendas. I know OMRI has a
10 procedure involving a decision tree process for
11 evaluating GMOs in inputs. I would just like you
12 to briefly comment on how well that is working for
13 OMRI and if it would be beneficial for the NOSB to
14 take up a similar type of effort in trying to trace
15 how far back GMOs are in our food chain.

16 MS. MIARS: Oh, I would say that
17 question is probably beyond my pay grade and you
18 should talk to Lindsay. Yes, I don't have an
19 answer to that question, Zea.

20 CHAIR RICHARDSON: All right. That's
21 good enough.

22 MEMBER SONNABEND: Thank you.

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1 CHAIR RICHARDSON: Thanks very much,
2 Peggy.

3 Okay, Garth, you're up. And after
4 that, I have Angela, closely followed with Salix
5 Wartes-Kahl.

6 MR. G. KAHL: Okay. Well, thank you.

7 My name is Garth Kahl, and I represent
8 the International Organic Inspectors Association,
9 also known as IOIA.

10 IOIA would like to take this
11 opportunity to thank the members of the NOSB for
12 their ongoing service and hours of personal
13 sacrifice.

14 As inspectors who work on a daily basis
15 with both certifying bodies and certified
16 operators, we are incredibly deeply aware of the
17 issues you wrangle with and how they affect choices
18 and lives of producers, handlers, and those charged
19 with enforcing and monitoring compliance of the
20 regulation. We understand what a really
21 incredibly-tough job you do.

22 I want to comment in brief. You

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1 already have our written comments.

2 I wanted to touch on the discussion
3 document about excluded methods terminology. In
4 brief, we really think this is a good idea. We
5 welcome the decision and recognize the importance
6 of reexamining the definition of excluded methods,
7 particularly taking into account the current
8 definition of cell fusion that excludes cell
9 fusion, which we have come to understand has been
10 used to create a great many horticultural varieties
11 in use by certified operators. And the rule is not
12 consistent with current practice.

13 As a really good opportunity or a good
14 resource, I encourage people to look on eOrganic.
15 There is a really good webinar featuring Zea from
16 last year's Organic Seed Trade Alliance debate or
17 conference, which specifically is entitled
18 "Unpacking the Cell Fusion Debate". It is very
19 informative and it talks about why we need to look
20 at cell fusion again in the context of excluded
21 methods.

22 And we also are in agreement with the

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1 comments of IOIA member Dag Falck that was
2 presented in the document, but we agree with the
3 Subcommittee that the Cartagena Protocol
4 definitions are better internationally accepted
5 and known.

6 So, basically, we believe we need to
7 redefine excluded methods with respect to cell
8 fusion because there are so many varieties of
9 commonly-used horticultural crops that have cell
10 fusion in them.

11 We are also concerned about the
12 prevention strategy and guidance for excluded
13 methods. We acknowledge that this is a serious
14 problem, and we applaud the Committee for taking
15 time to compile and suggest a list of best practices
16 for prevention of GMO contamination.

17 Like anybody else, we do not want to see
18 GMO in organic. But, at the same time, we want to
19 request that any additional measures be
20 implemented or any additional measures that are
21 mandated, and particularly those that mandate some
22 new practice on the part of the organic producer,

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1 these need to take place within the context of NOP's
2 sound and sensible.

3 For example, is it appropriate to place
4 a wholesale prohibition on the use of conventional
5 crop waste or compost or mulch, particularly if
6 there is not a threat of contamination of the
7 organic crop with GM pollen? GM testing, if
8 implemented, must include the provision of
9 reasonable background level.

10 And I'll stop there. We don't want to
11 put additional burden on producers and,
12 conversely, on inspectors.

13 CHAIR RICHARDSON: Thank you, Garth.

14 MR. G. KAHL: Thank you.

15 CHAIR RICHARDSON: Questions for
16 Garth?

17 (No response.)

18 Okay, great. Oh, yes, Zea? Sorry.

19 MEMBER SONNABEND: Garth, you confused
20 me a little bit there at the end. Are any of the
21 prevention strategies that we have put into the
22 discussion document now additional to what you

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1 think is already happening in the field, excepting
2 for the seed testing protocol for non-organic seed?
3 But are any of the other ones that people aren't
4 doing now that you think might be too burdensome?

5 MR. G. KAHL: Well, what came up and
6 what was flagged in our discussion was the
7 potential of GMO crop waste as a potential
8 contaminate. We feel that it could be, this could
9 be a source of background contamination or it could
10 be flagged on a GMO test. We don't feel that this
11 is the time to enforce or to mandate an exclusion
12 of GMO crop waste or potentially GMO materials as
13 an input in organic systems.

14 MEMBER SONNABEND: Okay. So far, that
15 is not in the existing document, but thank you for
16 that input.

17 MR. G. KAHL: Yes. But, otherwise, we
18 really like it. I mean, we are just concerned
19 about implementation.

20 CHAIR RICHARDSON: Thank you, Garth.

21 So, Angela Wartes-Kahl, followed by
22 Salix Wartes-Kahl.

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1 MS. A. WARTES-KAHL: Hi. Thanks so
2 much.

3 My name is Angela Wartes-Kahl, and I'm
4 an organic farmer in Elsie, Oregon. Our farm has
5 been certified since 1993.

6 Members of the Board, thank you for this
7 opportunity to speak, and I want to speak
8 specifically to the sunsetted materials used and
9 prohibited in organic production.

10 I raise a small herd of organic milking
11 goats, sheep, cows, among other things. And I am
12 also very happy to see that the zinc sulfate is
13 considered as an addition to the National List for
14 treatment of hoof rot. It has been a major
15 oversight that zinc sulfate can be used in the
16 mineral mixes, but not in hoof treatments. We have
17 been using copper sulfate, but its healing action
18 is inferior to zinc in its application; plus, the
19 disposal of copper makes it a less-than-optimal
20 product on our farm.

21 I would respectfully ask the members of
22 the Board to remove the proposed annotation for the

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1 use of foot baths only. This would allow at least
2 some of the producers to selectively apply an
3 ointment or salve with zinc sulfate as the active
4 ingredient in severe cases of foot rot.

5 Next, I would like to discuss the use
6 of ferric phosphate in organic vegetable
7 production. This material is up for sunset
8 review. Growers, particularly in the
9 Northwest -- particularly in the Northwest -- have
10 need for this option in their toolkit. Like most
11 certified growers, we attempt to manage slugs and
12 snails through habitat modification, but some
13 years, particularly last fall, which was very warm,
14 it became virtually impossible to produce fall and
15 winter greens without some chemical form of
16 slug/snail control.

17 I understand there are concerns over
18 EDTA being one of the inert ingredients in the
19 formulated products, but please don't pull this
20 material without fully assessing whether or not
21 this inert material is truly toxic to earthworms
22 and whether or not the material can be effectively

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1 formulated without it.

2 If there are concerns about EDTA as an
3 inert ingredient, and there may be, the place to
4 address these is via the broader discussion and
5 regulation of inert pesticide ingredients, not by
6 picking on one very important active ingredient for
7 vegetable crop production and leaving producers
8 with no viable alternative.

9 The next topic I want to speak of
10 concerns the use of synthetic methionine. I have
11 a flock of pasture laying hens who probably don't
12 need methionine added to their feed, but the
13 well-meaning efforts of this Board to prescribe and
14 regulate methionine levels have not worked. They
15 have, instead, led to significant animal welfare
16 issues and even a prevalence of operators using
17 methionine chelating agents in other trace
18 minerals as a means to provide adequate nutrition
19 for their flocks.

20 I believe this Board missed a
21 significant opportunity in industry to open a real
22 dialog about the use of certified organic meat

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1 products in poultry feed. Chickens are omnivores.
2 Any look at Extension and how-to publications on
3 poultry production up through the 1950s will reveal
4 that most of the laying rations included
5 significant amounts of meat meal or other animal
6 protein, and this was with so-called heritage
7 breeds of poultry, who presumably had less
8 stringent nutritional requirements than the laying
9 birds found in today's commercial-scale
10 operations.

11 Consumers need to understand that they
12 basically have three choices to make. No. 1, they
13 can have seasonal eggs from intensively-pastured
14 chickens and pay \$6 to \$7 a dozen for them or, two,
15 they can have eggs year-round at the current price
16 point they have come to expect from chickens that
17 consume some animal products, just as chickens have
18 for hundreds of years. Or, three, they can have
19 eggs year-round at the current price point from
20 chickens that consume only vegetarian feed
21 supplemented with synthetic methionine.

22 I think the evidence abounds that the

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1 current production systems cannot provide
2 consumers with more than one of these options. It
3 is time to allow certified organic animal products
4 into poultry feed for those that don't want
5 synthetic methionine. If consumers want
6 vegetarian-fed eggs, it is time to stop forcing
7 unworkable management systems on producers. Let
8 them use methionine if that is what is required to
9 provide that feed.

10 (Signal that time has expired.)

11 Thank you.

12 CHAIR RICHARDSON: Tracy?

13 VICE CHAIR FAVRE: Well, it is like you
14 crawled inside my head and heard all my thoughts.

15 (Laughter.)

16 MS. A. WARTES-KAHL: I'm your twin,
17 Tracy.

18 VICE CHAIR FAVRE: Thank you.

19 That might be all I have to say.

20 (Laughter.)

21 No. We are looking at the zinc sulfate
22 and have received the public comments in regard to

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1 the topical application instead of or in addition
2 to the foot baths.

3 MS. A. WARTES-KAHL: Right.

4 VICE CHAIR FAVRE: If we had to make a
5 choice between foot baths as the annotation or
6 taking it back to committee and reworking it, we
7 are trying to get a ruling on whether that would
8 be a substantive change or not.

9 MS. A. WARTES-KAHL: Oh, okay.

10 VICE CHAIR FAVRE: Would you rather see
11 it move forward as a foot bath and make that work
12 or would you rather have it go back to committee
13 and, then, reconsider it in the fall?

14 MS. A. WARTES-KAHL: I would rather
15 have it as foot bath because for larger producers,
16 especially sheep operations and such, the way that
17 they are going to run the sheep through a foot bath,
18 that is the most economical way that they are going
19 to be able to apply it. And then, it is a general
20 application to the herd if they have got like a
21 low-level issue, depending on weather conditions.

22 But for our own personal application,

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1 we have a small flock, and we have found that it
2 is easier to do animal-by-animal, but that is by
3 no means what the standard is. And so, I would say
4 that the foot bath would be probably the best way
5 to go with it now.

6 VICE CHAIR FAVRE: Okay. Thank you.

7 MS. A. WARTES-KAHL: Yes.

8 VICE CHAIR FAVRE: And thank you for
9 your comments.

10 MS. A. WARTES-KAHL: Thank you.

11 CHAIR RICHARDSON: Francis?

12 MEMBER THICKE: Yes, thank you.

13 Also, I was going to ask about the zinc
14 sulfate. The thing is that, if we could have both,
15 wouldn't some producers be likely just to treat it
16 topically instead of running it through a foot
17 bath? Because that foot bath, all that material
18 has to go back on the land over time.

19 MS. A. WARTES-KAHL: Right.

20 MEMBER THICKE: And that is a growing
21 problem.

22 And the second question following that

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1 is that, has you or anyone used hydrated lime, dry
2 hydrated lime? I just spoke to Hugh Karreman, a
3 veterinarian, and he said that he recommends that
4 instead. Of course, that wouldn't require
5 disposing of material. Are you familiar with
6 anybody using that?

7 MS. A. WARTES-KAHL: I have not heard
8 anybody using hydrated lime. But, you know, it is
9 state-by-state and region-by-region. It is very
10 different as to what people use for their flocks
11 because the environmental conditions are so
12 drastically different.

13 Yes, disposal of hydrated lime would be
14 an issue for us for sure. And then, it is also not
15 an allowed material, I mean in that application.
16 So, you would have to change something. We could
17 get a vegetarian letter and maybe that would be
18 certified by certifier-approved. I mean, that is
19 the problem with having --

20 MEMBER THICKE: Do you mean the
21 hydrated lime?

22 MS. A. WARTES-KAHL: Hydrated lime for

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1 feet, yes.

2 MEMBER THICKE: It's on the National
3 List.

4 MS. A. WARTES-KAHL: For hoof, it is
5 not, though.

6 MEMBER THICKE: Well, it is under the
7 same category that we put the zinc sulfate topical.

8 MS. A. WARTES-KAHL: Oh, I see what you
9 mean. Okay.

10 MEMBER THICKE: So, it is not
11 annotated.

12 MS. A. WARTES-KAHL: I got you.

13 MEMBER THICKE: Maybe somebody could
14 clarify that for me.

15 MS. A. WARTES-KAHL: I see what you
16 mean, yes. No, I have not used it.

17 MEMBER THICKE: So, I wasn't clear
18 about your answer to Tracy. You said you would
19 rather have it as a foot bath instead of just as
20 a topical? Or if you could have both --

21 MS. A. WARTES-KAHL: If I had both, I
22 would take both.

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1 MEMBER THICKE: But would you be
2 willing to wait until next meeting to do that?

3 MS. A. WARTES-KAHL: No.

4 (Laughter.)

5 MEMBER THICKE: Okay.

6 MS. A. WARTES-KAHL: I'm not willing to
7 wait. I'm sorry.

8 CHAIR RICHARDSON: She wants her cake
9 and wants to eat it, too.

10 MS. A. WARTES-KAHL: That's right.

11 (Laughter.)

12 CHAIR RICHARDSON: All right. Can we
13 let you off the hook and put Salix on it?

14 MS. A. WARTES-KAHL: I am going to
15 lower this for the eight-year-old.

16 CHAIR RICHARDSON: Yes, okay.

17 So, the next speaker I assume is your
18 daughter.

19 MS. A. WARTES-KAHL: Yes.

20 CHAIR RICHARDSON: And then, after
21 that will be Kenta Masters.

22 MS. S. WARTES-KAHL: Hello. My name

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1 is Salix Wartes-Kahl, and I'm from Elsie, Oregon.

2 Two years ago, my pet goat Annie had an
3 emergency C-section where she was given
4 antibiotics. She has been raised organic her
5 entire life except for one week where she was given
6 emergency antibiotics. Because of that, she is
7 not able to come back into our organic milking goat
8 herd.

9 And I do not think it is fair because,
10 if you bought a non-organic herd of cattle that had
11 not been born organic, after a year you would be
12 able to sell their milk as organic, but not a goat
13 who has been raised organic her entire life.

14 Thank you.

15 Questions?

16 (Applause.)

17 CHAIR RICHARDSON: Questions for
18 Salix? Yes, Calvin?

19 MEMBER WALKER: Just a comment. I
20 agree with you.

21 MS. S. WARTES-KAHL: Thank you.

22 CHAIR RICHARDSON: Thank you very

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1 much, Salix.

2 The next speaker, Kanta Masters,
3 followed by Dennis Holz.

4 MS. MASTERS: Hello. My name is Kanta
5 Masters, and I'm a consumer from Encinitas,
6 California. I'm a member of the Cornucopia
7 Institute, and I am here today as a citizen
8 lobbyist.

9 I have volunteered to assist in
10 presenting testimony because I choose to ensure,
11 when I purchase organic food, it is truly organic.

12 I am nearly 70 and I still experience
13 myself youthfully. I attribute my joy and
14 enthusiasm to my organic diet and my meditation
15 practice. I am a vegan, and my mouth waters when
16 I behold a robust radish or a fresh-picked cherry
17 tomato at my farmers' market. This does not happen
18 with non-organic produce because the taste
19 delivered is lifeless, flat, and dull.

20 I am here to promote and preserve the
21 best organic standards, so each of us may have the
22 opportunity to live long, the freedom to choose the

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1 best, and the health and well-being to feel as
2 joyous as possible.

3 I would like to comment on the 2016
4 sunset of ferric phosphate as an allowed synthetic
5 on the National List. Ferric phosphate is used as
6 a slug and snail bait.

7 The Cornucopia Institute recommends
8 the removal of ferric phosphate from the National
9 List based on independent research that
10 demonstrates its use as slug and snail bait is only
11 effective with the addition of a chelating agent
12 such as EDTA. A chelating agent is required in
13 order for ferric phosphate to be absorbed into the
14 skin of slugs and snails.

15 EDTA, present in all slug and snail
16 baits in the United States, is toxic to soil
17 microorganisms and non-target species, including
18 earthworms and plants, and can contribute to
19 groundwater contamination. It is persistent in
20 the environment and has concerns for human health
21 and calcium absorption. Its addition to the
22 National List is unlikely.

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1 In 2007, the NOSB's Crops Subcommittee
2 voted to reject the petition to include sodium
3 ferric hydroxy EDTA on the National List as a slug
4 or snail bait because of the potential for EDTA to
5 be harmful to the environment. Yet, currently,
6 all the products containing ferric phosphate used
7 in organic production contain EDTA. How are these
8 products allowed in organic production? They
9 shouldn't be.

10 In 2009, ferric phosphate was
11 petitioned to be removed from the National List
12 under the argument that it is ineffective without
13 EDTA. The Crops Subcommittee voted to keep ferric
14 phosphate on the National List under the view that
15 the generic active ingredient needs to be
16 considered separately from any other ingredients.

17 It feels like we are running in circles
18 here. There is no scientific evidence that the
19 generic active ingredient ferric phosphate is
20 effective without the addition of a chelating
21 agent. Chelating agents are slow to degrade and
22 are known to have negative effects on soil,

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1 microbial communities, as well as lower yields in
2 some crops. Chelating agents also have the
3 potential to pollute groundwater by leaching
4 metals from soils.

5 Having a material on the National List
6 that is only effective and available commercially
7 with a supposedly inert substance that does not
8 meet the requirements of OFPA only creates
9 confusion.

10 Please vote against the relisting of
11 ferric phosphate to send a clear message to farmers
12 that all ferric phosphate formulas contain EDTA
13 which has not been approved for use in organic
14 production. Ferric phosphate is not effective
15 without chelating agents that have known negative
16 impacts to human health and the environment.

17 Thank you for allowing me to present
18 testimony. If you have questions about this
19 testimony, I encourage you to speak with one of
20 Cornucopia's staff members present at this
21 meeting.

22 Thank you.

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1 CHAIR RICHARDSON: Thank you very
2 much.

3 The next speaker is -- let's see, where
4 am I up to? -- Dennis Holz, and then, Steve Sprinkle
5 on deck.

6 MR. HOLZ: Good afternoon.

7 My name Dennis Holz, and I'm a consumer.
8 I'm from Encinitas, California, and I am a member
9 of Cornucopia Institute and here today as a citizen
10 lobbyist.

11 I would like to comment on the 2016
12 sunset of hydrogen chloride as an allowed synthetic
13 on the National List. Hydrogen chloride is used
14 for the removal of lint from cottonseed to
15 facilitate mechanical planting.

16 The Cornucopia Institute strongly
17 recommends that a new Technical Review be completed
18 before hydrogen chloride can be considered for
19 relisting. The most recent TR from 2003, 13 years
20 ago or 12 years ago, does not discuss the latest
21 research into mechanical delinting by the USDA ARS
22 researcher Greg Holt. The TR also doesn't discuss

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1 the possibility to switching to a starch-coated
2 seed, which is currently available for cotton.

3 Starch-based cottonseed coatings are
4 currently used conventionally. They prevent
5 seed-borne diseases in cotton and improve the
6 germination rate over the acid delinting process.

7 A patented process called EasiFlo,
8 developed by Cotton Incorporated, is a gelatinized
9 cornstarch coating that permits machine-handling
10 of cottonseed and may be a better alternative to
11 HCL delinting.

12 In addition, clay-based coatings
13 enable mechanical planting, provide fungal
14 protection for the seeds, improving yields.

15 The feasibility of various coated
16 cottonseed as an effective alternative to acid
17 delinting for organic seed production has not been
18 explored.

19 Also in 2012, Dr. Holt patented a
20 rotating-drum concept for mechanical delinting.
21 His team has now produced a large prototype capable
22 of delinting 150 pounds of cottonseed per hour.

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1 A new TR needs to address what it would
2 take to bring the mechanical delinting from these
3 final research stages into commercial production.
4 There are also delinting machines currently on the
5 market through the LT Kincer Company that did not
6 use hydrogen chloride. These machines use what is
7 referred to as a saw mechanical delinting, and they
8 also have delinters that use diluted sulfuric acid.

9 If these safer alternatives are not
10 viable, then more extensive documentation of their
11 inadequacies must be documented in a TR. There may
12 not ever be an economic incentive for these
13 alternatives to be used by seed companies unless
14 we remove hydrogen chloride from the list.

15 After speaking with Kelly Pepper of the
16 Texas Organic Cotton Marketing Cooperative,
17 Cornucopia staff understands that all the
18 currently commercially-available organic
19 cottonseed in the United States is delinted by
20 All-Tex Seed Company in Levelland, Texas. All
21 Seed uses hydrogen chloride in their delinting
22 process. So, it is the only mode available.

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1 It is possible that we are looking at
2 a scenario where delisting hydrogen chloride might
3 be the final incentive that is needed to bring the
4 mechanical delinting process or the starch-coated
5 process to the marketplace for organic cottonseed.

6 If the mechanical delinting
7 alternatives are not satisfactory techniques for
8 cottonseed delinting, the reasons should be
9 explained in a current Technical Review. Without
10 a thoroughly-researched, up-to-date Technical
11 Review, more than 12 years old, it is difficult to
12 make these determinations. How can any of us
13 properly evaluate these substances without updated
14 crucial information?

15 Thank you for allowing me to present
16 testimony.

17 CHAIR RICHARDSON: Thank you.

18 Questions?

19 (No response.)

20 Thank you very much.

21 MR. HOLZ: Uh-hum.

22 CHAIR RICHARDSON: The next speaker is

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1 Steve Sprinkle, and after that Stephen Walker.

2 MR. SPRINKLE: Hello. My name is
3 Steve Sprinkle. I'm from Ojai, California. I
4 have a 12-acre organic farm, and I have a restaurant
5 and a grocery store with 46 employees. I am the
6 former Board President of Cornucopia, and right now
7 I serve on the Board of Directors of the Ecological
8 Farming Association, but the words that I say here
9 don't necessary represent EFA, although I'm sure
10 that Cornucopia won't mind if I tag along with them.

11 I wanted to essentially render some
12 comments in summary with regard to what we have
13 heard here today because, though we do have a \$32
14 billion industry and there's an awful lot of reason
15 to expect further growth and acceptance of organic,
16 I think we have also heard from Consumers Union and
17 from Trudy from the Cooperative Association, also,
18 that there is also a reason to be concerned with
19 regard to the legitimacy of the label and to what
20 it means to be organic.

21 As a retailer and a restaurant owner,
22 I think the idea that someone has 46 employees in

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1 a restaurant means I have quite a few customers as
2 well. So, I have a lot of contact with customers,
3 and many, many of them are concerned about the
4 status and the future of the organic label and the
5 organic farming community and whether or not it is
6 going to remain legitimate.

7 I also wear another hat where all
8 throughout this country, although my name is
9 Sprinkle, I am also known as Commandante Raindrop.
10 I represent 22,524 renegade, rebellious organic
11 farmers, all under the age of 30, who scoff and
12 laugh at me when I mention the word
13 "certification". "What are you talking about? I
14 wouldn't have anything to do with that."

15 You see, those 22,524 rebellious
16 farmers are happy with their rebellion. You know,
17 rebellion is not bad. Maybe you should try a
18 little bit of it once in a while.

19 These rebellious farmers, they are also
20 at the cutting edge of all of those consumers.
21 They are the ones who are posting these kind of
22 wackadoodle signs that say they are natural or

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1 sustainable or "I grew it," or something like that,
2 some poetic statement at a farmers' market.

3 There are nine organic farmers in Ojai,
4 and five of them are these scofflaws, these
5 rebellious young kids that I taught how to farm.
6 That is the one thing I couldn't teach them. I
7 couldn't teach them the value of certification.
8 And I should have known; I'm a certifier. I used
9 to be a certification agent and I was an inspector,
10 and I am a big fan of certification.

11 Way back when, 30 years ago, we ran the
12 community when we were young, when we were 30 years
13 old. We all ran to certification. We loved the
14 idea that we would be certified and we could all
15 ban together, and we had these immense, large,
16 cooperative organizations that we are all members
17 of and that we could participate in.

18 But this new generation, the ones that
19 are at the cutting edge, running into all of these
20 consumers in all these farmers' markets and CSAs
21 and buying clubs, they are disaffected and they may
22 also be sowing the seeds of some of this

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1 disaffection.

2 And so, in summary, I am warning you
3 that we do have to go back to the origins of the
4 organic farming moving and try to regain some of
5 that legitimacy and see at any cost, at any moment,
6 what is the cost of trying to measure things with
7 regard to economy of scale rather than the spirit
8 of the organic standard and the founding statute.

9 Thanks so much for your time.

10 CHAIR RICHARDSON: Thank you very
11 much.

12 Questions?

13 (No response.)

14 No? Thank you.

15 The next speaker is Stephen Walker, and
16 after that will be Lynn Coody.

17 MR. S. WALKER: Good afternoon.

18 I'm Steve Walker, and I'm the
19 Compliance Manager with MOSA. We certify about
20 1600 organic operations, primarily in the Upper
21 Midwest.

22 I want to draw attention to key points

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1 in the four comments we wrote for this meeting, and
2 I would also like to talk a little bit about the
3 mood on the street.

4 First, sunset review. Historically,
5 we have felt we should remain impartial on
6 materials discussions since our job is to regulate,
7 and materials debates can divide our diverse
8 stakeholders. But, more recently, we have also
9 come to realize that our work with many organic
10 operators gives us the kind of information sought
11 for sunset review. And it seems incumbent upon us
12 to inform your discussion.

13 Contrary to the portrayal of our work
14 in Cornucopia's comments recap, I want to emphasize
15 that we are simply reporting, not supporting,
16 National List materials continuation or removal.
17 We provided what information we could on over 100
18 sunset materials, as gleaned from our database of
19 over 5600 materials we have reviewed, and as
20 reported by our fine staff. Going forward, we hope
21 database improvements enable better reporting
22 linked to specific client info.

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1 When I earned my liberal arts degree,
2 I never foresaw the day that I would be giving
3 testimony on ancillary substances and
4 microorganisms.

5 We appreciate the ongoing efforts to
6 encourage organic, when available, for more
7 materials. However, incentive and enforcement
8 will improve if the organic preference applies to
9 the listed material, not just for the agricultural
10 ancillary substances. The organic supplier gains
11 a market advantage and has certifier oversight.
12 Just requiring organic ag ancillaries encourages
13 workarounds and hampers enforcement.

14 For methionine, we have provided sample
15 ration plans which enable usage calculation over
16 the life of the bird. A lifetime calculation adds
17 to recordkeeping challenges, but we believe this
18 change would improve poultry health compared to the
19 limits in the current standard, and we are
20 confident in our clients' abilities to maintain
21 auditable records.

22 Regarding farm inputs contamination,

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1 we encourage careful prioritizing compared to
2 other needed work. It is a lot of new territory
3 to cover, and we would caution against starting
4 with a widely-variable, complex input like dairy
5 manure.

6 We also suggest the use of current
7 Technical Review criteria which address concerns
8 similar to those in the discussion document, and
9 we suggest that research considers input
10 similarities, so potential contaminants are
11 handled consistently.

12 Now to the word from the street. I am
13 concerned by more reports of organic consumers
14 choosing other label claims over organic. Once
15 again, here we have a room filled with diverse views
16 linked by passion for and questioning of what is
17 best for our label.

18 I think the typical organic consumer
19 has grown up with a healthy indoctrination of
20 questioning authority. So, when our debates hit
21 the headlines, consumers are quick to doubt the
22 very good authority of our label. Our debates are

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1 complex and nuanced. They are not designed for
2 headlines.

3 But I would like to put out another call
4 for unity. We simply must exhibit more emotional
5 intelligence, more respect for each other.

6 We have hard work to do, and we need our
7 diversity at the table, but some of us are too ready
8 for battle. Defensiveness hampers inventiveness.

9 At these meetings especially we can get
10 hurt by myopic vision, as we wrestle with
11 particular agenda items. In fact, all of our boats
12 float on consumer confidence in a strong organic
13 standard.

14 Quiet work, two-way conversation, and
15 seizing opportunities to tell our good story makes
16 us stronger.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 Questions? Zea? And then, Calvin,
20 and then, Harold.

21 MEMBER SONNABEND: Thank you, Steve,
22 and thank you for making that decision that it was

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1 worthwhile to turn in details about the materials
2 use for your clients, or at least materials in OSP.
3 It is very, very useful to us to just see how
4 widespread some of these ingredients and input
5 materials are out there in the field.

6 As you know, the producers themselves
7 are hard-pressed to fit into our system of
8 twice-yearly meetings with three-week comment
9 periods. And so, it is really helpful to have the
10 certifiers, and this extends to all the other
11 certifiers who I might not be able to thank
12 personally. But the information coming in from
13 you about what is used by your clients is very, very
14 useful.

15 One of our hardest jobs here on the
16 NOSB -- and this is from me speaking as someone who
17 has been doing lots of materials review for many
18 years before the NOSB -- but the assessment that
19 is needed for 205.606 about commercial
20 availability of alternatives of organic products
21 is really the hardest to get a handle on.

22 The sources of information on this do

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1 not come to us through the TR process for the
2 most -- I mean, there are certain aspects that do,
3 but mostly not -- and do not always come from anyone
4 else except a certifier if they can tell us if they
5 have been able to source some of these or they are
6 seeing clients who can source organic sources of
7 these 606 things.

8 So, I do see that it would be nice if,
9 for instance, the retailers in the room would look
10 at the products on their shelves and assess how many
11 salad dressings contained each gums and how many
12 of the different other products were available
13 without some of these inputs in it. Because, short
14 of us wandering around the aisles of the health food
15 store all day long for weeks, we don't have other
16 access.

17 So, do you feel that, particularly
18 regarding 606 materials, that something that you
19 can do in the future is think about how much you
20 can divulge about alternative sources of supply?

21 MR. S. WALKER: I think it is a really
22 good idea, and I think that there is a need for more

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1 resources of lists of available organic supplies
2 for materials on 606. Right now, we just know of
3 a couple of lists, maybe not even.

4 MEMBER SONNABEND: Uh-hum.

5 MR. S. WALKER: But I think the
6 Accredited Certifiers Association -- maybe
7 somebody can correct me if I'm wrong -- but I think
8 we have tried to put together a list when we have
9 certified something that is on 606 to populate that
10 list. But I don't know; I guess sometimes we are
11 busy certifying and don't think about the next step
12 of throwing it up on a public list like that.

13 MEMBER SONNABEND: Right.

14 MR. S. WALKER: But resources like that
15 are really helpful when we find that folks are using
16 materials on 606 and we ask them to at least check
17 those public resources for alternatives.

18 MEMBER SONNABEND: Uh-hum. All
19 right. Thanks.

20 MR. S. WALKER: Yes.

21 CHAIR RICHARDSON: Calvin?

22 MEMBER WALKER: Yes, I represent

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1 consumers on this Board, and I don't think I heard
2 what I heard. Were you saying that consumers have
3 no benefit?

4 MR. S. WALKER: I'm sorry, consumers
5 what?

6 MEMBER WALKER: You were saying that
7 consumers are causing a problem for the organic
8 community? I want you to explain that.

9 MR. S. WALKER: Oh, that's not what I
10 said. I hope that's not what I said.

11 MEMBER WALKER: Okay.

12 MR. S. WALKER: I'll check the
13 transcript.

14 MEMBER WALKER: Could you explain?

15 MR. S. WALKER: Trudy from PCC touched
16 on it some a little while ago. A couple of months
17 ago, I was at a meeting in Berkeley talking about
18 organic meat supply and why it is hard to find. And
19 in prep for that meeting, we did a lot of research
20 with, well, folks we certify and retailers and
21 others, talking about what some of the challenges
22 are in that sector. Clearly, there and in other

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1 sectors of the market there is just a lot of label
2 confusion and organic consumers going to things
3 like local, antibiotic-free, grass-fed because
4 they don't perceive the stacked benefits that are
5 offered by the organic label. And it is a
6 challenge.

7 I guess to some extent, when folks call
8 us up and say, "Well, I've got organic livestock,
9 but I am not using an organic slaughter facility.
10 How can I label the product?", well, we will tell
11 them what the exemptions and exclusions are and
12 such, but I think that we also need to jump on and
13 start telling them what the stacked benefits of our
14 label are. It is up to all of us here to promote
15 because it floats all boats.

16 CHAIR RICHARDSON: Harold?

17 MEMBER AUSTIN: Thanks.

18 Thanks for your call for unity within
19 the organic community as well. I appreciate that
20 comment, and I think we all should.

21 Thank you also for the list that you
22 guys were able to compile for us pertaining to the

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1 sunset materials. It is a very valuable tool.

2 My question is, during the last few
3 years with those entities that you certify, those
4 organic operations, and the materials on the
5 National List that are currently under review, what
6 have you seen change? I mean, have you seen the
7 numbers of materials on the OSPs go up or the sheer
8 number of OSPs in your grower base or your
9 certification base expand? What have you seen
10 during this last sunset cycle?

11 MR. S. WALKER: It is hard for me to
12 speak to that. I have kind of myself gotten away
13 from a lot of the file review more recently.

14 Now here's where I wish I could call a
15 friend because -- (laughter) -- Jackie DeMinter had
16 signed up for this speaking slot and bought the
17 plane ticket and everything. And she was heavily
18 involved in a lot of our prep of the more technical
19 comments, but she did very clearly state that she
20 is available by phone, by email. Okay.

21 CHAIR RICHARDSON: Thank you very
22 much.

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1 MR. S. WALKER: Thank you.

2 CHAIR RICHARDSON: The next speaker is
3 Lynn Coody, and she will be followed by Judy
4 Frankel.

5 (Pause.)

6 Well, while it is booting up, I will
7 just say thank you very much for your excellent
8 written comments. I just want you to know that the
9 detail that you provided us with was just terrific
10 and much appreciated by everybody.

11 MS. COODY: Well, thanks, Jean. I was
12 trying to provide it here today, too, but maybe
13 there are some technical difficulties.

14 I will just go ahead, so we
15 don't -- okay, do you want to flip? She says flip
16 and let the next person go.

17 CHAIR RICHARDSON: Okay.

18 MS. COODY: And I will help her see if
19 we can get it together.

20 CHAIR RICHARDSON: Okay.

21 MS. COODY: I sent it ahead of time,
22 see.

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1 CHAIR RICHARDSON: The next person is
2 Judy Frankel.

3 Judy, if you could talk, just to give
4 Lynn time to get the computer rebooted? Thank you.

5 MS. FRANKEL: Sure. Hi. My name is
6 Judy Frankel, and I'm the author of In Search of
7 the Next POTUS: One Woman's Quest to Fix
8 Washington, a True Story.

9 I am also a Master Gardener in
10 California. I am a mother of a special needs child
11 and a consumer with a desire for organic food.

12 I not only seek out the organic label,
13 I grow on my property up to 90 percent of the fresh
14 fruit and vegetables my daughter and I eat.

15 I am going to talk about what the
16 organic labels means to me, why I see it out, and
17 how it should have integrity.

18 Just yesterday I was shopping at
19 Sprouts and the grocer was loading up corn on one
20 of the tables. I asked him, "Is this organic?"
21 And he said, "I can't be sure." So, I didn't buy
22 it.

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1 I grew up on a farm in Pennsylvania
2 where we could stop at any roadside stand and we
3 didn't even have to think twice that the corn we
4 were eating was just fine.

5 Why do we even have an organic label?
6 It is because we expect a certain standard that no
7 longer is the norm.

8 I support labeling GMOs or having their
9 organic label mean that there are no GMOs in the
10 food I've chosen. And we can argue about what it
11 really means when we say "organic," but I am going
12 to outline for you what I think about when I look
13 for organic.

14 One of the chief reasons that GMOs were
15 invented was to make it easier for farmers to do
16 their jobs. When Roundup-ready corn and
17 Roundup-ready soy were introduced, it was truly
18 amazing because it meant farmers could now spray
19 a weedkiller all over their crops and the weeds
20 would die, but the crop would not. And the
21 industry promised us that it was safe, that it was
22 thoroughly tested, and we can trust them.

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1 Which brings me to the chief reason why
2 I buy organic food. I know for a fact that Roundup
3 has not been thoroughly tested. In fact, I looked
4 it up on Monsanto's own website. They clearly
5 state that there have not been long-term human
6 studies on chronic ingestion of low levels of
7 Roundup.

8 Roundup is made from a combination of
9 glyphosate, which has been tested to some degree,
10 and surfactants that help the glyphosate absorb
11 into plant tissues, which have not been tested
12 because, being an additive, it is exempt from the
13 Toxic Substances Control Act.

14 The problem with Roundup not being
15 tested is that we don't know what it is doing to
16 our health. And it is convenient that cancer,
17 Alzheimer's, Parkinson's often build up over long
18 periods. This way, even with mounting
19 correlational and causal factor, we can delink
20 glyphosates ingestion from these diseases.

21 And with many confounding factors, such
22 as exposure to other environmental toxins, it makes

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1 the possible permutations of controlled studies
2 truly mindboggling. How long did it take for
3 Philip Morris to finally admit on their packaging
4 that smoking causes cancer? Food and
5 environmental toxins are astoundingly more complex
6 than smoking.

7 So, we created an organic label, but we
8 aren't testing the city and state compost for toxic
9 compounds. We are cavalier with our chemicals.
10 It seems to me that we are doing a lousy job of
11 protecting the farmers from GMO pollen and toxic
12 substances drift and from the even more insidious
13 creep of the profit motive.

14 We live in a soup. Water seeks the
15 lowest level. It moves and seeps, taking whatever
16 it contacts with it. Proof of this is in the huge
17 dead zone at the end of the Mississippi, where all
18 the nitrogen fertilizer made from petroleum ends
19 up in the Gulf.

20 So, while you are looking at each
21 individual ingredient, we are losing the larger
22 battle. Each farm does not live in a vacuum. We

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1 are not doing a great job of protecting consumers
2 from cheaply-made, unhealthy ingredients that are
3 creeping in via the 606 materials and a million
4 other little blows.

5 What I fear most is --

6 (Signal that time has expired.)

7 Sorry. Okay.

8 CHAIR RICHARDSON: Thank you.

9 Questions? Nick?

10 MEMBER MARAVELL: What do you fear
11 most?

12 (Laughter.)

13 MS. FRANKEL: Thank you very much.

14 It is the Trans-Pacific Partnership.

15 Okay?

16 CHAIR RICHARDSON: Okay. Any
17 questions? Zea?

18 MEMBER SONNABEND: You know, we hear,
19 and will hear today, a lot of other testimony from
20 other people saying they can't grow this without
21 these inputs; they can't produce organic foods
22 without ingredients that are not organic, you know,

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1 that are not agricultural.

2 It is pretty clear that, if we restrict
3 everything to the extent that every consumer might
4 like, we would have far less products available for
5 people to buy, because there would be a lot less
6 acres being able to produce organically.

7 So, how would you balance that
8 juxtaposition of trying to keep a supply of organic
9 food for everyone to buy, but having a stringent
10 enough standard for people to have confidence in
11 it?

12 MS. FRANKEL: It's a good question, but
13 I know that, for example, with IPM, Integrated Pest
14 Management, we use the least-toxic thing first.
15 We have to exhaust all the least-toxic methods. We
16 have to try everything possible that is the least
17 harmful. And I think that the organic method does
18 that to some extent, but we want to make that
19 least-toxic method available.

20 CHAIR RICHARDSON: Great. Thank you
21 very much for your comments.

22 Then, Lynn, is it working?

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1 MS. COODY: Yes.

2 CHAIR RICHARDSON: Okay. The next
3 speaker is Lynn Coody, followed by Jackie Sleeper.

4 MS. COODY: Now we're all set. Okay.
5 It is going to be hard to read, but you don't really
6 have to read it. It is conceptual.

7 (Laughter.)

8 Okay. My name is Lynn Coody, and I am
9 presenting comments for the Organic Produce
10 Wholesalers Coalition today, which is based in
11 Eugene, Oregon.

12 OPWC is comprised of nine businesses
13 that distribute fresh organic produce to customers
14 located across the United States and
15 internationally. Many of our businesses were
16 early participants in the organic community, and
17 we have continued to play an active role in shaping
18 the infrastructure of the organic trade.

19 OPWC agrees with the recommendations of
20 the Crops Subcommittee on the three petitioned
21 materials before the Subcommittee. We do not
22 think they should be added to the National List,

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1 and we explain our thoughts about each of these
2 materials in our written comments.

3 In contrast, OPWC does support
4 relisting many of the 2017 sunset materials for
5 crops, based on their necessity for production of
6 organic fresh fruits and vegetables. We used two
7 methods to gather information about the current use
8 of the sunset materials within our sector.

9 The first is a survey of produce
10 wholesalers that also captured comments from some
11 of the fruit and vegetable farmers that supply
12 these distributors. And secondly, a necessity
13 analysis of a few representative sunset materials
14 which is designed to identify the specific
15 agronomic needs that these materials can address.
16 And this is an example of this up on the screen.

17 The survey, which presented a list of
18 the sunset materials, asked wholesalers and
19 farmers, "Which materials are necessary to your
20 operation?" We received comments about a wide
21 range of materials as well as explanations about
22 why these materials are needed in growing various

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1 types of fresh produce.

2 The output of our necessity analysis is
3 a chart that correlates the uses of a material with
4 the crops on which it may be used. So, on this
5 example, the crops are across the top and the
6 diseases are down the side. And this is an example
7 for analyzing the uses of copper hydroxide as a
8 disease control material.

9 In our view, results that show many uses
10 of a material on many crops indicate a high level
11 of need to relist the material. Such results show
12 that the material is needed to provide an option
13 to address a particular problem when management
14 practices and non-synthetic inputs have been
15 insufficient to prevent or control crop pests,
16 weeds, and diseases, as provided for in NOP
17 205.206(e).

18 There are many unpredictable elements
19 and interactions that impact farms in every season.
20 So, farmers need tools that allow options for
21 adjusting their production plans in order to
22 preserve their crop.

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1 The 2017 sunset materials represent the
2 long-accepted tools that provide such options
3 while also meeting other OFPA materials evaluation
4 criteria related to human health and environmental
5 health. The full results of our efforts to collect
6 information from our sector of the trade are
7 presented in appendices in our written comments,
8 and they are the results of both the survey and
9 these necessity analyses.

10 The outcome of our work showed that many
11 of the 2017 sunset materials are fundamentally
12 important to production of fresh organic produce.
13 This makes sense because most of the materials in
14 these groups came onto the National List when the
15 NOP regulations were first implemented in 2002.
16 These materials were listed then because they
17 enjoyed broad acceptance within the organic
18 standards used by state and private certification
19 programs in the decades of development of organic
20 farming systems prior to the trade's regulation by
21 USDA.

22 OPWC concluded that there are many

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1 potential impacts of sunset review on our member
2 businesses. As handlers of a wide range of fresh
3 fruits and vegetables grown by certified producers
4 under a variety of conditions, we are well aware
5 that our growers face many and varied challenges.

6 We found that farmers considered the
7 majority of the 2017 sunset materials to be
8 critically-important components of the management
9 options needed when weather, pest populations, or
10 other factors created challenges for the success
11 of the agricultural management practices on which
12 we routinely rely.

13 (Signal that time has expired.)

14 Done.

15 (Laughter.)

16 CHAIR RICHARDSON: Thank you, Lynn.

17 Questions? Harold? And then, Zea.

18 MEMBER AUSTIN: Lynn, thank you.

19 Thank you for interjecting into your presentation
20 just now and the written comments a little bit of
21 the historic value of how we got here with these
22 materials. The written comment that you submitted

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1 was probably, in my three-and-a-half years serving
2 on this Board, probably one of the finest documents
3 that I have seen. And I thank you for the time and
4 energy and effort that went into that.

5 Could you explain to us a little bit
6 about that written document, about necessity
7 versus essentiality?

8 MS. COODY: Yes. Thank you very much
9 for the kind words.

10 We did include kind of a conceptual
11 analysis of some of the materials evaluation
12 criteria that are used for crop and livestock
13 materials in our written comments. And I invite
14 anyone to go see that on the web, if this is a little
15 hard to understand right now.

16 But we took a careful look at both OFPA
17 and the rule and found that, actually, OFPA, it has,
18 of course, three main criteria for evaluating
19 materials, one related to human health, one related
20 to environmental, and the other being whether it
21 is necessary for production and handling.

22 So, assuming that many of these

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1 materials have been evaluated, this is like their
2 fourth time through this whole system. So, unless
3 there is really new material coming in on the other
4 two criteria, the one that is most allied for
5 looking at during sunset is this issue of is it
6 necessary.

7 Oddly, the NOSB has been using the term
8 "essential" and "essentiality" for crop and
9 livestock materials, but I believe that you will
10 come to the same conclusion that we have, that,
11 actually, OFPA requires that you use the term
12 "necessary" when looking at production materials.

13 So, we looked this up in a lot of
14 dictionaries and different sources about words on
15 the internet and found that the word "essential"
16 basically leads you to the conclusion that you may
17 have one material for each use. And the word
18 "necessary" is one that is more pragmatic and
19 allows for multiple solutions to one problem.

20 Which gets back to something that Nate
21 said for crops and livestock. It is really
22 important to have a range of options, so that you

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1 don't have problems with buildup of resistance of
2 pests and diseases to the materials that you are
3 using.

4 So, we would ask the NOSB to take
5 another look at the way, the actual criteria that
6 you are using when you are doing your sunset review,
7 as we did explain this in detail in our written
8 comments. And it may be easier for folks to really
9 read that first and, then, reflect on a little bit
10 of what I am saying here today. So, I know you have
11 had a chance to read it, and I hope other people
12 will do that as well.

13 MEMBER SONNABEND: Thank you, and I
14 also very much appreciated the comments.

15 I have sort of a two-pronged question
16 or maybe it is really two questions.

17 (Laughter.)

18 MS. COODY: All right.

19 MEMBER SONNABEND: We are hearing some
20 of the comments, particularly for those opposed to
21 relisting materials for crops, that they don't need
22 it to grow something in their location. And so,

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1 therefore, there is no reason why anyone else
2 should need it.

3 So, I am wondering to what extent you
4 take in regional considerations of the fact that
5 some areas are just able to produce crops with fewer
6 inputs, particularly regarding pest controls and
7 things like that, than other regions, and whether
8 a competitive advantage between regions is a factor
9 that we really should use in our deliberations of
10 necessity or not.

11 MS. COODY: Uh-hum.

12 MEMBER SONNABEND: So, that is one
13 question. Of course, you and I both recall former
14 Board members who would say, if you can't grow it
15 without any inputs, then you shouldn't be growing
16 it, wherever you are. And I think we are a little
17 beyond that point, but there still are those
18 factors.

19 And then, the second thing is, if you
20 could maybe elaborate a little bit about how
21 you -- I know you have only worked on crops so far,
22 but, theoretically, we could do something similar

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1 with essentiality for handling ingredients. And
2 I am wondering how you would see that would work,
3 whether essentiality would transfer over to an
4 analysis like this.

5 MS. COODY: Okay, let's see if I can
6 remember all that.

7 So, the first question related to
8 regional differences and whether we should just
9 tell me to forget growing their crop if they can't
10 do it without any inputs. So, yes, there are
11 definitely regional differences. In my home State
12 of Oregon we have a really wet environment, and we
13 have a really dry environment right in the same
14 State. We grow quite different crops in those
15 different regions. The west side has a lot of
16 horticulture; the east side has a lot of grazing
17 and grain. So, it has kind of sorted itself out
18 there.

19 But this is a national and
20 international program. So, in my view, we have to
21 provide options that allow for production of a
22 reasonable amount of crops, of good quality and

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1 quantity, in a wide range of regions.

2 There are going to be some areas in
3 which certain crops cannot be grown. For example,
4 we lost the use of antibiotics last year. There
5 are some areas of California, I'm afraid,
6 especially and some areas of my own State in Oregon
7 where we are going to have trouble growing pears,
8 I believe, in the next few years.

9 So, that will be a test case for what
10 happens when we don't allow materials for which
11 there is an "X" in that box where we know there is
12 a crop that is vulnerable to a disease or an insect
13 and we don't yet have adequate research to
14 understand what the alternatives are. Because,
15 after all, each one of those "X's" represents a
16 fairly-unique opportunity for research and
17 development of alternatives. That is why, when
18 you see lots of "X's," it makes you think that, gee,
19 this material will be fairly hard to replace versus
20 another that has less "X's".

21 Personally, I think that the emphasis
22 on, if you can't grow it without any materials, we

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1 could do that and we would be back to some of the
2 early days of having apples that Joni Mitchell
3 would only eat -- (laughter) -- and we would have
4 very few of those. So, that's all I will say about
5 that.

6 (Laughter.)

7 As far as handling ingredients, we did
8 try in our written comments to do one assessment
9 of a necessity analysis of a handling class of
10 materials of disinfectants and sanitizers, because
11 that is something that our members use. We only
12 handle fresh fruits and vegetables, so we only are
13 really dealing with the post-harvest and
14 sanitizing ingredients.

15 So, we did try one of those, and I do
16 believe that there are ways that you can do analysis
17 of essentiality for the materials used for
18 handling. I would have to give it some thought and
19 work at a whiteboard a little while to figure out
20 what we could do about 606 and also ingredients for
21 handling. But I wouldn't say it is impossible at
22 this time. I can do a lot with a whiteboard.

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1 CHAIR RICHARDSON: I am going to have
2 to sort of move us along here.

3 MS. COODY: Okay, I'm done.

4 CHAIR RICHARDSON: We are now
5 half-an-hour behind. And so, I think that we have
6 to forego the break. If you need to run outside
7 and come back in again, please do so, because we
8 do need to keep moving along or we will be here until
9 after dark.

10 So, our next speaker is Jackie Sleeper,
11 and she will be followed by Nicole Dehne.

12 MS. SLEEPER: Okay. Good afternoon.

13 My name is Jackie Sleeper, and I am the
14 Farm Program Technical Specialist for Oregon
15 Tilth.

16 Thank you, NOSB Members, for your
17 service and the opportunity to share our comments.

18 Today I will be addressing the
19 prevention strategy guidance for excluded methods
20 discussion document as well as the proposed
21 amendment to the methionine annotation.

22 GMO contamination of seed and products

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1 is a top concern in the Oregon industry. Due to
2 the way GMOs spread through the environment, we
3 face huge challenges around understanding and
4 eliminating contamination of organic crops.

5 Oregon Tilth believes the current
6 federal regulatory framework for
7 genetically-engineered crops falls short in
8 protecting farmers, processors, and consumers.
9 And we believe that all conversations about GMO
10 contamination avoidance must include the need for
11 shared responsibility by all agricultural
12 stakeholders to protect the organic sector.

13 Organic farmers deserve the right of
14 non-contamination. They deserve recourse for GMO
15 contamination losses. And GMO contamination
16 prevention strategies in order to be truly
17 effective, cannot be a one-way street.

18 We encourage the NOSB to continue to
19 urge USDA to instruct those who develop and use GMO
20 crops to adopt proactive strategies for containing
21 their crop genetics which pose a risk to their
22 organic and non-GMO neighbors.

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1 Oregon Tilth supports the list of
2 recommended prevention strategies in the
3 discussion document and made recommendations for
4 several additions to this list in our written
5 comments. We also support better guidance and
6 training for certifiers from the NOP on GMO testing
7 procedures and appropriate responses to positive
8 test results.

9 Oregon Tilth is also concerned about
10 the implementation of quantitative threshold for
11 GMO contamination in organic production. While
12 clarity in standards and expectations for
13 enforcement action is paramount to a successful and
14 consistent organic program, we urge caution when
15 considering the quantitative thresholds for GMO
16 contamination of seed used in organic production.

17 The lack of public data to establish
18 baseline levels of unintentional GMO contamination
19 and the lack of any kind of safety nets to aid
20 organic operations that experience losses due to
21 GMO contamination are causes for significant
22 concern.

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1 There are unique challenges associated
2 with GMO contamination, and this conversation
3 should not revolve around a solution based
4 primarily on the NOP's Pesticide Residue Response
5 Model.

6 We also wish to fully support and
7 promote the organic seed industry, but requiring
8 testing and GMO contamination thresholds for only
9 non-organic seed creates a double-standard,
10 ignores the risk for unintentional GMO
11 contamination in organic seed, and could reduce the
12 options for variety and quality of seed available
13 to growers. We feel these issues must be
14 adequately addressed before quantitative GMO
15 thresholds become a tenable tool for organic
16 complaints.

17 To briefly address the methionine
18 annotation revision, Oregon Tilth has requested
19 input from our poultry operations on this proposed
20 revision to share with the Board. What we heard
21 from our clients was that, when the step-down
22 occurred in 2012, they experienced significant

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1 welfare problems as a result, including feather
2 pecking and aggressive behavior in flocks.

3 We anticipate this revision will reduce
4 these issues, but still only provide for
5 marginally-adequate nutrition, which provides a
6 strong incentive to continue working towards
7 commercially-available sources of non-synthetic
8 methionine.

9 They also did not express any concern
10 over the additional recordkeeping requirements.

11 From a certifier perspective, we looked
12 at how we would verify compliance with the proposed
13 revisions. The major change for us is that,
14 instead of reviewing and approving individual
15 rations, we would need to review ration sets as a
16 whole to ensure they maintain compliance over the
17 lifetime of the flock.

18 In order to do this efficiently, we
19 developed a simple calculator spreadsheet tool
20 which our clients, inspectors, and staff can use
21 to verify the methionine levels in a ration set,
22 that the ration sets average out to a compliant

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1 level. And this was submitted with our comments
2 as well.

3 In short, based on the feedback we
4 received from our clients and our ability to verify
5 compliance with the requirements, we encourage
6 NOSB to approve this proposal.

7 Thank you.

8 CHAIR RICHARDSON: Thank you.

9 Questions? Calvin?

10 MEMBER WALKER: Thank you, Jackie.
11 You all did a very good job in the guidance on how
12 do you do averaging.

13 My question would be, you also
14 requested that NOP develop some guidance around it.

15 MS. SLEEPER: Uh-hum.

16 MEMBER WALKER: Could you explain
17 that? Because I thought what you all outlined was
18 a good first step.

19 MS. SLEEPER: Thank you. We worked
20 hard on that.

21 I think that NOP guidance is a really
22 critical tool for ensuring that certifiers and

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1 operations are consistent across the board. We
2 thought that our way is great, but there might be
3 other options out there that would be equally
4 effective. And I think it would be great for those
5 to be considered as well and, then, adopted into
6 a comprehensive guidance.

7 CHAIR RICHARDSON: Thank you.

8 Nicole Dehne is up next, followed by Hal
9 Kreher.

10 MS. DEHNE: Okay. Good afternoon.

11 Thank you for the opportunity to
12 comment to the Board and for all of your hard work.

13 My name is Nicole Dehne, and I
14 coordinate NOFA Vermont's Organic Certification
15 Program, which is called Vermont Organic Farmers,
16 LLC. We are a USDA-accredited certifier. We
17 represent 579, close to 600 -- we're not there
18 yet -- certified organic farmers and processors.

19 So, I appreciate the opportunity today
20 to comment on a few materials that are critical to
21 our certified growers.

22 Ferric phosphate is one of these. So,

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1 this is a critically-important material for
2 organic strawberry growers in Vermont and in years
3 where we have higher snail and slug pressure for
4 other crops, like leafy greens, as well.

5 Currently, VOF is unaware of any
6 realistic commercial alternatives. Cups of beer,
7 for example, might be fun, but not applicable for
8 commercial growers -- other than maybe habitat
9 modification, like removing mulch, but that is not
10 advisable for strawberry growers.

11 For fixed coppers, copper fungicides
12 are also a critical disease-prevention tool for
13 organic vegetable and fruit growers in Vermont.
14 These farmers, they grow a diversity of vegetables,
15 not just tomatoes or potatoes, for example.
16 Organic growers in Vermont who use these products
17 do so only when necessary to address diseases like
18 late blight in tomatoes or potatoes or fire blight
19 and scab in apples.

20 So, VOF strongly recommends annual soil
21 testing from organic crop producers, and copper is
22 one of the materials evaluating in the standard

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1 fertility test. So, evaluating these tests allows
2 us to monitor accumulation of copper in the soil.

3 We also wanted to support the petition
4 for the use of zinc sulfate to be used for hoof
5 treatments in foot baths and in topical sprays.
6 The current regulations obviously only allow
7 copper sulfate as a foot bath, and this material
8 is used regularly by our dairy farmers in Vermont.
9 A limitation, of course, is that you can't use
10 copper sulfate on sheep, as copper can be toxic.

11 So, we agree with the petitioner that,
12 if zinc sulfate was an option for all organic
13 livestock producers, it could be used in
14 conjunction with copper to help mitigate the
15 occurrence of accumulation of these materials in
16 the soil. In addition, our producers have said,
17 if both of these materials were allowed, they would
18 use a combination of both to improve efficacy.

19 So, for GMOs, there is strong agreement
20 in the organic community that there is a critical
21 need to address GMO contamination at all levels of
22 organic production and manufacturing. And we

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1 greatly appreciate the NOSB's work on this subject
2 and to encourage you to continue with this
3 important work.

4 Generally, we would like to see more
5 guidance from the NOSB and NOP on this subject.
6 So, specifically, we support the following
7 recommendations posed by the GMO Subcommittee,
8 which would be the chart for excluded method terms
9 that would attempt to distinguish between
10 traditional and transgenic breeding techniques for
11 ACAs. We support this chart as an NOP guidance
12 document, as long as this document was based on NOSB
13 recommendations which would allow for
14 opportunities for public comment. And guidance
15 and training for ACAs on GMO testing. The
16 development and implementation of this work should
17 be given high priority by the NOSB and the NOP.

18 CHAIR RICHARDSON: Thank you, Nicole.
19 Questions?

20 (No response.)

21 Oh, we're going to catch up some time
22 now.

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1 Thank you, Nicole.

2 The next speaker is Hal Kreher. The
3 person on deck is Aimee Simpson.

4 MR. KREHER: Thank you for the
5 opportunity to come and speak today.

6 I'm Hal Kreher. I have an organic egg
7 farm near Buffalo, New York.

8 And I want to thank you for all your
9 volunteer work on the NOSB. I'm on a couple of
10 boards myself, and none of them require the kind
11 of commitment that the NOSB does. So, I can
12 appreciate that.

13 Regarding methionine, I am here to talk
14 about methionine again. I was very impressed with
15 the write-up that came from the group. It did a
16 great job explaining the history of methionine use
17 in organic and the different steps we have been
18 through, the discussions that have taken place.

19 I was grateful for the acknowledgment
20 for the work done by the Methionine Task Force,
21 which is a group of producers who put money into
22 researching the alternatives. One of the things

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1 they did research was something called
2 high-methionine corn. I put brackets around it
3 because, although it was higher in methionine, it
4 was higher in protein in general. So, it really
5 didn't offer any kind of benefit, is what we found,
6 or what the Methionine Task Force found.

7 And I thought the write-up did a great
8 job explaining how many of the suggested
9 alternatives really aren't viable. So, we still
10 need to keep looking for a solution to this; I agree
11 with that.

12 When we went to the step-down levels,
13 this caused problems with some of our flocks, as
14 I am sure you have heard, mainly feather-picking
15 where the chickens pick the feathers off the
16 chickens next to them, and you ended up with
17 chickens that just looked very, very poor.

18 By utilizing averaging, we can use the
19 methionine when it is needed, such as when the
20 chicks are just getting started and they are just
21 little and they hardly eat anything. They really
22 need a high-nutrition food at that time. Or when

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1 they are just starting to lay and they have all
2 these new requirements on their body, and they are
3 not quite used to it. Methionine is essential to
4 the health of the birds and the integrity of their
5 immune system.

6 I would also like to make some comments
7 about the Contaminant Input Plan, obviously
8 something that is needed when we heard the
9 testimony earlier about the compost and the
10 problems that it can cause.

11 I also have a conventional egg farm.
12 We have been composting our manure for about 20
13 years and selling it, composting it and selling it
14 for 20 years to organic farmers. It is how we got
15 into organic farming ourselves, was through our
16 connection with other organic farmers. So, we are
17 kind of one of the success stories of spreading
18 organic into conventional producers.

19 Our product has been reviewed by OMRI,
20 by our Vermont Organic Farmers. It is a great
21 product. There is literally hundreds of farmers
22 in New York, Vermont, Massachusetts, Virginia, and

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1 Ohio that use our products.

2 So, I would just ask that you be careful
3 what you publish on that, so that alarm is not
4 needlessly raised for an issue if it is not really
5 an issue. So, you know, be careful with that. But
6 it is something that needs some work.

7 And that's it. Thank you.

8 Any questions?

9 CHAIR RICHARDSON: Thank you.

10 Questions? Calvin?

11 MEMBER WALKER: Hal, thanks for your
12 comments.

13 Your operation, what type of feeding
14 operations do you have? Is it mechanical or
15 automated?

16 MR. KREHER: Well, yes, we make our own
17 feed. So, we have a nutritionist who advises us
18 weekly on what sort of blend to make for our
19 chickens. We blend our own feed and we have
20 mechanical systems to feed the chickens.

21 Egg production is a data-intensive
22 business. We keep tons of records. So, keeping

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1 records of the use of the feed, the methionine for
2 that particular recipe, total use, so you could
3 figure out an average per ton over the lifetime of
4 the bird, would be fairly simple with a
5 spreadsheet.

6 You know, you would have to start with
7 a plan, so that you don't get out of whack, and then,
8 make it so that you can't recover from that.

9 CHAIR RICHARDSON: Tracy?

10 VICE CHAIR FAVRE: Thanks for your
11 comments.

12 I don't know if you were in the room when
13 Angela made her comments about the three choices
14 on the eggs. I would like to hear your thoughts
15 about that briefly, but I would also like to hear
16 about whether or not you feel that consumers would
17 accept feed ration for chickens, for poultry in
18 general, that included organic meat scraps.

19 MR. KREHER: I thought she was right on
20 with her comments with the three options.

21 Organic meat scraps, where are you
22 going to get them? I don't know if there's that

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1 much organic meat scraps available for the number
2 of organic poultry that are in the country. I
3 don't think the organic meat, I don't think it would
4 be available.

5 CHAIR RICHARDSON: Yes, Ashley?

6 MEMBER SWAFFAR: Hal, if the averaging
7 went through, can you kind of give us a range of
8 the least amount of methionine in a diet probably
9 towards the end of life versus the highest amount
10 you would see, kind of the range on your diets?

11 MR. KREHER: Well, as I said, when they
12 are a chick, they eat very little. So, that feed
13 might have maybe three-and-a-half pounds per ton
14 in it, but they eat very little of it. And then,
15 later on, you could make up for that with a ration
16 that maybe had one-and-a-half pounds per ton that
17 they eat a lot of. Because when they are a chick,
18 the first week they eat about two pounds per 100
19 chickens. And then, when they are in lay, they are
20 eating 25 pounds per 100 chickens, as you know.

21 CHAIR RICHARDSON: Tracy?

22 VICE CHAIR FAVRE: Do you believe, with

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1 the averaging, that you might actually be able to
2 get below two pounds average over the life, because
3 of the ability to adjust it to where you need it?

4 MR. KREHER: Perhaps, yes.

5 CHAIR RICHARDSON: Okay. Thank you
6 very much.

7 The next speaker is Aimee Simpson. And
8 following that is Lindsay Fernandez-Salvador.

9 MS. SIMPSON: Good afternoon.

10 I'm Aimee Simpson, Policy Counsel and
11 Consultant for Consumer Reports, Consumers Union.

12 The Organic Foods Production Act
13 establishes as one of its fundamental standards for
14 organic production a prohibition on the production
15 and handling of agricultural products using
16 synthetic chemicals unless OFPA provides for an
17 exception. One of the main exceptions provided
18 for in OFPA to this no-synthetics-in-organic
19 standard is the mandate to create the National
20 List, which consists of substances that would
21 otherwise be prohibited in organic.

22 Limited exceptions to the rule and

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1 heightened review of these exceptions are integral
2 to consumer expectations concerning organic.
3 This is supported by the Consumer Reports' National
4 Research Center April 2014 Survey on Organic Food
5 Labels, finding that 71 percent of consumers polled
6 want approval for as few artificial ingredients in
7 organic as possible and 84 percent think that the
8 use of artificial ingredients in organic products
9 should be discontinued if not reviewed after five
10 years.

11 Thus, it is not only the fundamental
12 no-synthetics organic standard that consumers
13 depend on each time they reach for that
14 green-and-white circle, but also the heightened
15 scrutiny of exceptions to the no-synthetic organic
16 standard.

17 OFPA drafters understood this consumer
18 expectation and integrated it into the organic
19 framework, primarily in the form of the National
20 List. A substance can be included on the National
21 List only if it meets the standards and procedures
22 set forth in OFPA under Section 6517.

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1 OFPA National List standards include
2 mandatory evaluation criteria. The criteria
3 require, as we have heard, a substance that would
4 not be harmful to human health or the environment,
5 is necessary to the production or handling of the
6 agricultural product because of the unavailability
7 of wholly natural substitute products, and is
8 consistent with organic farming and handling. The
9 "and" means that all three of these criteria must
10 be satisfied for all substances on the National
11 List.

12 While often the NOSB, who must develop
13 its proposed National List or amendments according
14 to all provisions within Section 6517, including
15 the National List criteria, adequately applies and
16 analyzes these criteria, there are unfortunate
17 instances where all National List criteria are not
18 given proper weight and consideration.

19 Section 205.606 of the OFPA regulations
20 is one of these areas. Section 205.606 is a
21 subsection of the National List and provides an
22 additional evaluation criterion of evaluating

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1 commercial availability. Now regulations can
2 provide additional National List criteria and
3 considerations, but not alternatives to OFPA
4 National List criteria. This means that the added
5 commercial availability criterion does not trump
6 the three mandatory National List criteria
7 established under OFPA.

8 Courts have mandated this
9 interpretation. In Harvey v. Veneman, the First
10 Circuit clarified that 205.606 may not be
11 interpreted in a way that contravenes the National
12 List requirements of OFPA and remanded the case to
13 the District Court for entry of a declaratory
14 judgment that 205.606 does not establish a blanket
15 exemption to the National List requirements for
16 non-organic agricultural products that are not
17 commercially available.

18 OFPA and the courts have been clear
19 concerning National List criteria. Yet, the
20 practice of reviewing products for inclusion on the
21 National List under 205.606 have focused almost
22 exclusively on evaluating commercial

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1 availability.

2 Because of this, the heightened
3 scrutiny of exceptions to the organic rule has been
4 weakened, and we have seen inclusion of substances
5 like inulin on Section 205.606, with little to any
6 application of basic OFPA criteria. This needs to
7 change.

8 Consumer Reports believes it is
9 important to emphasize that the OFPA procedures for
10 establishing the National List explicitly require
11 NOSB review and recommendation for every material,
12 and the NOSB, in carrying out the mandatory duty,
13 must do it in accordance with all of the National
14 List criteria and procedures. We encourage you to
15 move forward in your duties with these legal
16 standards in mind.

17 Thank you.

18 CHAIR RICHARDSON: Thank you.

19 Questions? Calvin?

20 MEMBER WALKER: I'm not an attorney,
21 but I have a lot of friends that are attorneys.

22 MS. SIMPSON: I'm sorry.

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1 (Laughter.)

2 MEMBER WALKER: And my question has
3 been on commercial availability. Since being on
4 the Board, there is such a need. So, any solutions
5 to how we deal with this issue, methionine, other
6 materials? The products are not quite there. So,
7 how do we deal with that?

8 MS. SIMPSON: Well, it is interesting
9 that you raise methionine as an example, actually.
10 First, I would say commercial availability is
11 actually the only, and on 606 materials, is the only
12 time that that specific criteria is supposed to be
13 analyzed.

14 So, if we go back to -- I'm sorry, let
15 me find it. So, these are three criteria. If you
16 notice, the No. 2 is "necessary to the production
17 or handling of the agricultural product because of
18 the unavailability of wholly natural
19 substitute...." It doesn't say because of the
20 "commercial unavailability".

21 So, in our opinion, when you are looking
22 at things like methionine, you need to look at all

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1 three of these. No one doubts that methionine is
2 an essential nutrient or amino acid that you need,
3 but it is not necessary to organic production
4 because there is naturally-occurring methionine.

5 And, yes, we understand that there are
6 challenges as far as the quantities, but, then, we
7 would say, well, then, we need to look at the third
8 requirement there, which is, is it consistent with
9 organic farming? And maybe organic chicken
10 farming can't be and shouldn't be, tried to be put
11 into the model of conventional farming of
12 large-scale chicken production. And I do
13 understand that puts pressure on supplies and such,
14 but those are the balancings that you are supposed
15 to be looking at and applying, in our opinion, to
16 that evaluation, yes.

17 MEMBER WALKER: As it relates to
18 methionine, methionine failed two of the four
19 criterias.

20 MS. SIMPSON: We would agree. We
21 would argue yes.

22 MEMBER WALKER: How do we go forward as

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1 a community to try to cap this, put this issue to
2 bed?

3 MS. SIMPSON: I mean, it is our opinion
4 that, one thing, we need the welfare standards that
5 really put organic chicken in a different category
6 than conventional production of chicken.

7 But, second, we need the pressure
8 of -- unfortunately, yes, it is a tool -- but a
9 removal of synthetic methionine, so that the
10 naturally-occurring methionine and procedures for
11 bringing that forward would be put in place in
12 organic. And that is what consumers expect.

13 CHAIR RICHARDSON: Thank you.

14 MS. SIMPSON: Thank you.

15 CHAIR RICHARDSON: The next speaker is
16 Lindsay Fernandez-Salvador, followed by Anne
17 Mossnes.

18 MS. FERNANDEZ-SALVADOR: Okay. Good
19 afternoon.

20 I'm Lindsay Fernandez-Salvador. I'm
21 the Technical Director of OMRI. I am commenting
22 today on a few different topics, including

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1 Technical Reviews, contamination of inputs, and
2 ancillary substances.

3 OMRI writes Technical Reviews or
4 Reports on contract with the NOP. I personally
5 write many of them and edit all of them that we
6 write. I take responsibility for the quality and
7 accuracy of the content. Some people have voiced
8 concern about the secrecy of who has written which
9 report, based on possible conflicts of interest.
10 I would like to reassure the NOSB's minds about the
11 lack of conflict of interest that OMRI has and the
12 process we have to continuously verify possible
13 conflicts of interest among our staff.

14 We have Technical Advisors that provide
15 a secondary independent review of what our staff
16 has written. In short, I assure you that the
17 Technical Reports written by OMRI are sound and our
18 staff are free from conflict of interest.

19 On contamination of inputs, I am also
20 responsible for researching our standards for
21 contamination of inputs at OMRI. This is hard
22 work. It takes a lot of expertise and it takes

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1 money.

2 Because of our experience, we recommend
3 that this subject matter get a comprehensive
4 Technical Report, or something similar, that the
5 NOSB can review and give guidance from there.
6 Rather than asking the public to provide the
7 technical information as the foundation of your
8 recommendation, ask the public, instead, to
9 comment on your guidance based on independent,
10 properly-researched information.

11 On ancillary substances, we should
12 consider the legal implications of requiring
13 organic substrates for microorganisms and enzymes,
14 especially in relationship to uncertified
15 operations.

16 We also ask that you question whether
17 your recommendation to require organic ancillary
18 substances is sound and sensible. While we don't
19 agree or disagree with the recommendation, we do
20 know how burdensome this paperwork is and would
21 like you to look at this recommendation from a
22 sound-and-sensible point of view.

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1 Finally, please address whether
2 ancillary substances will be discussed for the
3 number of active sanitizer and cleaner
4 ingredients, as they all contain some form of
5 ancillary substances to be effective.

6 Thank you.

7 CHAIR RICHARDSON: Thank you, Lindsay.
8 Questions? Zea?

9 MEMBER SONNABEND: Hi, Lindsay.

10 Maybe you were in the room for the
11 question I asked Peggy, which she said she couldn't
12 answer.

13 MS. FERNANDEZ-SALVADOR: Yes.

14 MEMBER SONNABEND: And so, could you
15 just briefly comment on the GMO determination
16 process that OMRI uses and whether it works well
17 for OMRI and the NOSB should consider such a thing?

18 MS. FERNANDEZ-SALVADOR: Yes. OMRI
19 has four decision trees to determine whether or not
20 a GMO substance should be evaluated as an actual
21 GMO substance when used in an input. We have an
22 overarching one. And then, if you get through that

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1 overarching GMO decision tree, then we have one
2 specific to crops, livestock, and processing.

3 It works fairly well for the most part.
4 One of the main concerns now from our staff using
5 it is, going forward, new and novel characteristics
6 that the decision tree wasn't necessarily written
7 for at the time.

8 That being said, I personally think it
9 is the best step to transparency and consistency
10 in that kind of decisionmaking. So, certainly we
11 would be happy to see the NOSB consider it as part
12 of their processes, and we would be happy to train
13 you on it more, because it is rather complex and
14 nuanced.

15 CHAIR RICHARDSON: Thank you.

16 Questions?

17 (No response.)

18 Thank you very much.

19 The next speaker is Anne Mossnes,
20 followed by Julia Barton.

21 MS. MOSSNES: Hello. My name is Anne
22 Mossnes. I'm here as a citizen, although I am

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1 sending information back to the fishing industry
2 throughout the country -- I am writing an
3 article -- and certainly to the Alaska fishing
4 industry.

5 Since headlines keep announcing that
6 organic certification of farmed aquatic animals is
7 imminent, I am here again, and I appreciate the
8 chance to talk with you, since I also live in one
9 of the two states in the country that allows salmon
10 farming in our public waters.

11 So, we have learned a lot. We know that
12 the net pens are incapable of confining fish. More
13 than 613,000 non-native Atlantic salmon have
14 escaped in four years' time into our waters. This
15 is an industry that says that they have methods of
16 keeping fish within their enclosures.

17 We know that these enclosures, though,
18 are also incapable of confining the fish waste.
19 One of our scientists calculated that in Washington
20 State the salmon farms allow more than 11 million
21 pounds of total suspended solids to flush annually
22 into our waters. And this is at the same time that

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1 citizens and businesses are going to great lengths
2 trying to clean up our waters and trying to restore
3 our native species.

4 So, we have learned that there is no
5 biosecurity measures that could be put in place.
6 We have had viral hemorrhagic septicemia in our
7 salmon pens. That flushes directly into the
8 marine environment.

9 Our salmon farms are owned by a private
10 equity firm based in San Francisco and Boston, and
11 it looks like they are going to be up for sale,
12 probably owned or purchased by a Canadian
13 aquaculture company. So, the accountability is
14 farther away from our region.

15 And yet, the National Oceanic and
16 Atmospheric Administration is still heavily
17 promoting expansion of offshore aquaculture, and
18 they are putting a lot of money into futuristic gear
19 design, into feed research. We have had the
20 soybean manufacturers come to the Northwest and say
21 that they are very excited about providing feed for
22 this growing industry.

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1 Another thing we know is that the city
2 of Victoria in Canada pumps its raw sewage right
3 into Puget Sound. And yet, NOAA is promoting a
4 facility that would grow 10 million pounds of
5 salmon and steelhead in that same body of water.
6 Now can you imagine that that body has that sewage
7 in it and that company wants organic certification?
8 There is a lot of local knowledge that we have in
9 these regions where this industry already exists.

10 The other industry that we have is
11 shellfish growing, and it is now a big virility meal
12 in Asia, if you know what a geoduck looks like. But
13 that shellfish industry bulldozes beaches,
14 destroys the forage fish habitat, which is causing
15 a decline in our native species again.

16 So, we have cumulative impacts from the
17 aquaculture industry. And only a couple of weeks
18 ago did a court decide, a Superior Court, a County
19 Court decided that no longer can the industry be
20 judged simply on small entities, but cumulative
21 impacts have to be assessed. And that is really
22 extraordinary because this industry always says,

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1 "Well, we're just one operation and we're
2 learning." But no longer can they say that, at
3 least we hope in Washington.

4 But I also commercially fished for
5 nearly three decades. And so, I am concerned about
6 the impacts on those small coastal communities and
7 those family businesses. Before the fishery
8 industry expanded, my license in Bristol Bay was
9 valued at \$300,000. It dropped down to \$20,000
10 eight years later because of markets flooded with
11 cheap farmed fish.

12 So, we need to have these fish
13 accurately labeled. If they contain colorants,
14 that has to be on the label. If you think that they
15 should be certified as organic, I don't think it
16 should be in the marine environment, and other
17 people agree. The head of the UK Soil Association
18 said that he was resigning because salmon farming
19 in cages has nothing at all to do with organic
20 principles.

21 And federally --

22 (Signal that time has expired.)

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1 CHAIR RICHARDSON: Thank you.

2 Questions?

3 (No response.)

4 Thank you very much, indeed.

5 MS. MOSSNES: Thank you.

6 CHAIR RICHARDSON: The next speaker is
7 Julia Barton, followed by Jay Feldman.

8 MS. BARTON: Good afternoon.

9 My name is Julia Barton. I am sharing
10 comments on copper, methionine, and zinc sulfate
11 on behalf of the Ohio Ecological Food and Farm
12 Association.

13 We are an organic certifier. We
14 certify 838 operations in 10 Midwestern states.
15 We are also a membership organization of about 4300
16 farmers and others who work to build a sustainable
17 food system.

18 We thank you sincerely for your
19 service.

20 Copper. OEFFA strongly supports the
21 continued listing of fixed coppers and copper
22 sulfate on the National List. OEFFA producers

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1 utilize many cultural practices to support plant
2 health and prevent diseases. While these
3 practices and products are helpful, they are
4 insufficient to manage disease problems such as
5 phytophthora.

6 OEFFA producers work to make sure that
7 copper does not accumulate in the soil by using
8 specially-designed sprayers and techniques as well
9 as crop rotations, soil testing, and alternating
10 with hydrogen peroxide. Copper is a controversial
11 input in organic production due to the negative
12 effects it has on soil, aquatic ecosystems, and
13 farm worker health. For these reasons, we want to
14 encourage further research into other disease
15 management options. However, for now, copper
16 remains a necessary tool for OEFFA producers.

17 Methionine. OEFFA supports the
18 Livestock Committee proposal regarding
19 DL-methionine. OEFFA producers are primarily
20 raising birds in poultry barns with access to soil
21 and pasture. No major health issues have been
22 observed at the current methionine ration.

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1 Despite this fact, nutritionists are
2 recommending additional methionine beyond the
3 amount currently allowed in the rule. Producers
4 are adding more soybean meal to organic rations,
5 which can then lead to wet litter, reduced indoor
6 air quality, and ultimately decrease flock health.

7 OEFFA producers choose soybean meal
8 over other non-synthetic forms of methionine, such
9 as earthworms or soldier flies, for various
10 reasons, such as consistency of supply and
11 potential contamination. Other non-synthetic
12 protein sources are prohibited by NOP rules.

13 OEFFA producers indicate they could
14 continue to produce organic poultry using the
15 current methionine restriction, but they would
16 prefer the average-over-the-life ration. As a
17 certifier, OEFFA is concerned about how the
18 verification of such records would play out on the
19 ground. Such a change would require clear
20 guidance and ACA cooperation to ensure
21 consistency.

22 OEFFA eagerly anticipates improved

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1 poultry standards as part of the forthcoming
2 proposed rule on animal welfare, and we hope that
3 the link between synthetic methionine and pastured
4 space systems are considered and really taken into
5 account in these changes.

6 We emphasize the need for continued
7 research for viable natural methionine
8 alternatives, and we are committed to seeing a
9 phaseout of synthetic methionine over time.

10 Zinc sulfate. OEFFA supports the
11 addition of zinc sulfate to the National List.
12 OEFFA clients are already utilizing several
13 cultural practices to support foot health in their
14 systems, including rotational grazing, dry housing
15 and laneways, confining animals in very wet
16 conditions, and hoof trimming as needed.

17 Despite these practices, foot issues do
18 arise, usually in one to three animals at a time
19 rather than in the whole herd. More issues seem
20 to arise in those herds engaged in
21 comparatively-less grazing while still meeting the
22 organic grazing requirements.

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1 Currently, OEFFA producers are using
2 varied remedies to treat foot issues, including
3 copper sulfate, hydrogen peroxide, and homemade
4 pastes. Producers find pastes difficult to
5 administer because of the need to isolate the
6 animal, clean the foot, apply the paste, and wrap
7 the foot.

8 Because foot issues occur only in a few
9 animals, OEFFA producers indicated both a need and
10 a strong preference to use zinc sulfate directly
11 on the affected hooves, rather than as a foot bath.
12 An individual spray-on treatment can be applied in
13 an efficient, stress-free manner right there in the
14 parlor without the need to wrap the hoof.

15 (Signal that time has expired.)

16 CHAIR RICHARDSON: All right. Thank
17 you very much.

18 MS. BARTON: Thank you.

19 CHAIR RICHARDSON: Are there
20 questions? Harold?

21 MEMBER AUSTIN: As a certifier, you
22 talked about the need, continued need, for the

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1 coppers to deal with the various diseases that your
2 entities that you are certifying, your customer
3 base is dealing with. As part of the annual review
4 process for their certification, is soil analysis
5 or plant analysis part of that annual review?

6 MS. BARTON: So, yes, when people are
7 using copper, we are looking at sort of the pyramid
8 of use that I think most certifiers are looking at
9 in terms of verifying compliance with the rule.
10 So, we are looking to see that other practices are
11 in place first. We removed that part from our oral
12 comments because of time constraints, but they are
13 in our written comments.

14 CHAIR RICHARDSON: Colehour?

15 MEMBER BONDERA: Thank you.

16 Thank you, Julia, for your comments.

17 I just want to explore very briefly what
18 you commented on regarding methionine because you
19 made a few statements that -- they weren't
20 contradictory to one another, but, like you said,
21 the people that you are representing are fine the
22 way things are, but they would like -- you support

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1 some level of a change. But, then, you also said
2 support research to replace. And I am just
3 wondering if you have some reflections -- as has
4 been discussed, this has been going on for quite
5 some time now. This isn't a new subject or the
6 first time we have discussed this, especially,
7 actually, with the averaging component, which is
8 not a new subject at all.

9 And I am just wondering how and what you
10 would estimate would be changing. How? Just
11 because somebody hypothetically supports
12 research, I am just trying to wrap my brain around
13 where we would see what change, and further
14 comments on if things are okay now, why change?

15 Thank you.

16 MS. BARTON: Yes. Thank you.

17 I guess I would like to go back to the
18 way that Jean opened the meeting, which I really
19 appreciated, talking about both the need for a
20 multidisciplinary approach to problems and the
21 need to ask the right questions.

22 So, at OEFFA, we consider the issue of

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1 methionine not to be an isolated one. We see it,
2 as we view the whole organic system, to be one that
3 is contextual within the system of production that
4 is being used.

5 And I think a number of people have
6 pointed to challenges with regard to different
7 types of systems and meeting the organic poultry
8 standards.

9 Also, we had a really rigorous
10 conversation yesterday at the pre-NOSB meeting
11 that NOC hosted about poultry and really
12 understanding where we would like to see poultry
13 be. I think that issue, I think that it is
14 difficult to discuss methionine without discussing
15 the entire system. So, if our comments seemed
16 contradictory, perhaps it is because we are
17 struggling ourselves with the siloing of these
18 issues, which we think is maybe less than
19 productive.

20 CHAIR RICHARDSON: Thank you very
21 much.

22 Do you want to say something, Calvin?

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1 MEMBER WALKER: Julia, I thank you for
2 your public comment.

3 MS. BARTON: Thank you.

4 MEMBER WALKER: And I also personally
5 thank you for responding to some questions that I
6 had asked a couple of weeks ago.

7 As a follow-up to Colehour, you know,
8 we are trying to find an answer because no one wants
9 to take synthetic methionine away from producers.
10 It will be in our organic poultry production for
11 some time, I'm sure. But the question that
12 Colehour had mentioned -- and you're right, you did
13 say that the step-down as it currently exists is
14 working with minimum problems. I thought that was
15 very nice. But you also went on to say that they
16 prefer to have some additional amount.

17 MS. BARTON: That's what they said,
18 yes.

19 MEMBER WALKER: And you did respond by
20 saying that you hadn't had an opportunity to get
21 that from them. But the question I asked was --

22 MS. BARTON: Yes.

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1 MEMBER WALKER: -- how much more would
2 they prefer?

3 MS. BARTON: They did not propose a
4 specific ration on the conference call we held.
5 So, we are new to participating in this process
6 organizationally, and we really appreciate that
7 opportunity. So, we were reaching out to friends
8 and colleagues and asking about ways in which they
9 gathered information from their clients and
10 producers. We ended up going with sort of a hybrid
11 route where we sent surveys, both paper to our Amish
12 clientele and digital to those folks who use
13 computers, as well as holding a series of
14 conference calls.

15 We had more folks on the methionine call
16 than on any other. So, it was a very hot topic for
17 our producers. While only a few really spoke up,
18 we did our best to clarify that the group shared
19 those concerns and those same sentiments.

20 So, the message from our clients is that
21 which we submitted and stated today. They did say
22 that they are doing fine with what they have got.

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1 They didn't seem to have the health issues in their
2 flocks which we have heard other people state that
3 they are seeing. However, they did say that they
4 would really prefer that over the life average
5 because of the front-loading that they would like
6 to do with the methionine leading up to peak
7 production.

8 MEMBER WALKER: And I think it was also
9 good -- as an animal scientist, I am a breeder, but
10 not a nutritionist -- but I think it was nice when
11 Oregon Tilth, CCOF, and your group have stated that
12 some type of guidance, if the proposal of the
13 majority passed, some type of guidance will be
14 needed.

15 We have 146 birds at Southern
16 University, to put that plug in, Miles, for the
17 University. I asked the manager, if we had such,
18 would we change to different rations for the
19 different stages of life. He said it would be very
20 labor-intensive because they would have to go in.
21 Let's say that the next phase started tomorrow.
22 They would have to go in, take all that feed out,

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1 and put in the next ration, and those sorts of
2 things.

3 So, there is some work to be done if this
4 proposal passed in terms of how you validate and
5 enforce the averaging because you've got several
6 stages. How do you verify? You can have a sheet
7 of paper, but is that what you are feeding for this
8 stage? And you have to take a sample and take it
9 to a lab and analyze it to see.

10 Thank you.

11 MS. BARTON: Thank you.

12 CHAIR RICHARDSON: Thank you, Julia.

13 Jay Feldman is up next, followed by Bill
14 Wolf.

15 (Playing Joni Mitchell.)

16 (Laughter.)

17 MR. FELDMAN: Okay, guys, since
18 leaving the Board, I have become the backup band
19 for Joni Mitchell.

20 (Laughter.)

21 Anyway, the reason this is important is
22 because we are struggling now with not DDT,

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1 obviously, but neonicotinoids. We need organic to
2 thrive. We need organic to survive.

3 I am Jay Feldman, Executive Director of
4 Beyond Pesticides.

5 Thank you, everyone, for your service.

6 It's great to be back.

7 The first slide, materials review in
8 the context of an organic community. Obviously,
9 we have heard a lot today about the organic
10 community and bridging consumer concerns,
11 environmental protection, and necessary farming
12 practices. We want to consider all the views of
13 the NOSB stakeholder groups. We want to consider
14 the industry as one member of the community and we
15 want to value the community as important to the
16 value of the organic label.

17 But what does that have to do with this
18 meeting? I would like to propose that a two-thirds
19 majority to allow petitions or relist materials
20 represents a commitment to the organic community.
21 Before voting on sunset, poll the board to
22 determine the overall position of the community

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1 represented by you, the NOSB members, in your
2 stakeholder groups. And then, vote to delist a
3 material if you cannot get a two-thirds vote to
4 support relisting.

5 Why stakeholders in categories? To
6 ensure that the views of all segments of the
7 community are rigorously articulated and
8 considered in the discussion and ultimately the
9 decision. How does that relate to this meeting?
10 As an appointee in your stakeholder group, please
11 articulate that perspective to the public in your
12 deliberations, so the community knows that each
13 individual stakeholder group is being fully and
14 fairly represented.

15 Why organic criteria? Because there
16 is a framework that embeds core values and
17 principles into this process, we heard earlier,
18 including compatibility, no adverse effects, and
19 necessary or essentiality to production.

20 For this meeting, explain to the public
21 the evaluation that was used in each category in
22 this first meeting. TRs are essential to

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1 identifying new scientific understanding of public
2 review and input.

3 Why sunset? The same high bar for
4 entry into organic in the petition process and the
5 sunset process incentivizes research and
6 investment in non-synthetic materials. Community
7 support is needed to get a material on the National
8 List. With an expiration date annotation, that
9 same support is needed to keep the material on the
10 list. For this meeting, adopt expiration dates on
11 petitions as a regular practice to maintain high
12 standards.

13 Guidance on materials. Don't rely on
14 NOP guidance, Calvin, to clarify Board intent and
15 ensure compliance with OFPA. NOP has its own
16 priorities, as we heard earlier. So, it may not
17 follow the Board's request for guidance based on
18 concerns articulated by the Board. We have seen
19 this in nanotechnology, biodegradable mulch.

20 Use annotations to provide guidance on
21 material use. At this meeting, NOSB should not
22 rely on prospective USDA guidance to clarify Board

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1 intent on material use in meeting OFPA criteria.
2 The guidance cannot take the place of annotation.

3 Inert ingredients, a great
4 presentation earlier. Inert ingredients can be
5 hazardous, as you know. Prioritize efforts to
6 remove hazardous inert ingredients. Replace them
7 with alternative materials.

8 Contaminants and farm inputs. To
9 protect farmers, consumers, and the organic label,
10 expedite the forward movement on contaminated farm
11 inputs review, as defined by the organic community.
12 It is critical.

13 As stakeholders, the NOSB is the
14 sounding board that lets the community know that
15 it takes important issues seriously. For this
16 meeting, move a review of contaminants forward
17 expeditiously.

18 People and workers on the farm. Okay.
19 So --

20 (Signal that time has expired.)

21 Thank you.

22 CHAIR RICHARDSON: Thank you, Jay.

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1 Jennifer?

2 MEMBER TAYLOR: Could you finish? Are
3 you almost finished or could you finish?

4 MR. FELDMAN: Well, I could. I mean,
5 all I was going to say is that the NOSB has
6 historically understood the interdependence
7 between soil biology and people. And so, we urge
8 you, say with copper as an example, in relisting
9 copper, please take into consideration the network
10 that we have of inspectors and use those inspectors
11 to enforce federal law. We can't depend on EPA to
12 uphold the high standards of the organic community.
13 And so, we urge you to do that.

14 MEMBER TAYLOR: Thank you.

15 MEMBER WALKER: As a comment, since you
16 called my name, I was caught my surprise. I was
17 sleeping for sure.

18 (Laughter.)

19 MR. FELDMAN: I know you were.

20 MEMBER WALKER: I wasn't
21 comprehending.

22 I would duly like to say that, as a Board

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1 member, I do rely on NOP for their guidance. But,
2 at the same time, what I try to do with materials
3 that I'm dealing with, I try to look at past Boards.

4 I spent the last week looking at some
5 of the issues we are dealing with and I looked at
6 previous Boards, the transcripts, and trying to see
7 what they have intended for some of the things
8 because I think, as a Board, certainly should look
9 at that as we look at materials, to look at previous
10 Boards as far as the word "intent" because that is
11 important. Because many times they spent a lot of
12 time on matters, and there is no need for us to go
13 over and rehash a lot of things that they have
14 spent, you know, years in trying to get done at this
15 point.

16 That was just a comment.

17 CHAIR RICHARDSON: Thank you.

18 Thank you, Jay.

19 MR. FELDMAN: Thanks.

20 CHAIR RICHARDSON: The next speaker is
21 Bill Wolf, and the following one will be Jim
22 Gerritsen.

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1 MR. WOLF: Before I begin, I want to
2 give a gift that Zea doesn't know about yet. It's
3 her birthday, and this gift is actually back to the
4 Board and to Zea as Chair of the -- if you can pass
5 that along, I would appreciate it. Thank you.

6 Okay. I have my four minutes. So, I
7 had better speak quickly.

8 Madam Chair, Board, NOP staff, Miles,
9 I really appreciate all your work. It is quite
10 extraordinary.

11 As Chair of the NOSB -- oh, dear, I went
12 and gave my earthworms to Michelle and she hasn't
13 put my PowerPoint up yet.

14 (Laughter.)

15 Sorry about that. I was hoping you
16 would just pass them along. Yes.

17 Can I get my minutes back? Is there a
18 way to get my minutes back? Oh, gosh, that's all
19 right. I know, I'm sorry. It was totally unfair.

20 Basically, there are a dozen earthworms
21 in that bucket that have a long and arduous history.
22 Those are descendants of the NOSB earthworms that

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1 were presented 20 years ago at an NOSB meeting in
2 northern California. And Bobby Anderson, as Chair
3 of the NOSB at the time, at the end of the meeting
4 said, "Oh, my gosh, what do I do with these?"
5 because they had been brought to the meeting as a
6 transfer of authority and responsibility from the
7 organic community, to ask you all to care for the
8 worms and, basically, to say, okay, earthworms are
9 a good representation of the decisionmaking
10 process of the National List.

11 It is kind of how we thought about
12 making decisions back in the seventies and
13 eighties, and thinking about what earthworms and
14 ladybugs and lacewings liked and preferred was a
15 way to select materials, synthetic, non-synthetic,
16 practices, et cetera. So, we essentially tried to
17 think like an earthworm, and they were the
18 principles behind the decisions about organic
19 regulations.

20 These worms are descendants. Bob
21 asked someone to caregive for them at the time, and
22 Mark Lipson offered to take them to his farm in

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1 northern California. Mark dug some of these worms
2 up for us, and these are their descendants.

3 So, I just brought them here kind of as
4 a reminder of the roots, so to speak, of some of
5 the principles behind the National List. It's not
6 all science. It's philosophy as well.

7 And these descendants really represent
8 this challenging duty and responsibility because
9 organic stewardship involves encouraging these
10 guys and trying to create an opportunity for there
11 to be 2 million earthworms per acre. That
12 translates to 10 earthworms per cubic foot in the
13 top six inches of soil.

14 So, they are little fertilizer
15 factories. They are sensitive to environmental
16 pressures. They are sensitive to salts, to
17 chemical fertilizers, to highly-water-soluble
18 chemicals. So, that is part of the challenge of
19 selecting what's allowed.

20 But I do want to say that over the last
21 few years I think we have begun to think of the
22 National List as we have to limit it, and we didn't

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1 view it that way then. We didn't think in terms
2 of limiting the tools. We wanted to see tools that
3 comply and met the standards, so that there would
4 be a good toolbox.

5 Continuous improvement involves that,
6 and there's a broad number of places in the regs
7 that talk about continuous improvement. Rather
8 than dwell on those specifics, I would like to give
9 a couple of examples.

10 In the case of soil fertility, you all
11 approved biodegradable mulch as a continuous
12 improvement tool. I think that was a great move.
13 However, I want to emphasize that it is better than
14 polyethylene that many farmers --

15 (Signal that time has expired.)

16 Oh, my God. Okay.

17 (Laughter.)

18 So, we need faster solutions. I will
19 have to stop with Oliver the Earthworm and let you
20 ask me questions, if you would.

21 CHAIR RICHARDSON: Thank you, Bill.

22 Questions? Zea?

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1 MEMBER SONNABEND: Thank you, Bill,
2 although your caretaker spilled the beans and asked
3 me to bring them down with me.

4 (Laughter.)

5 And I have no idea how I am going to get
6 them home in this very heavy container in my very
7 full suitcase.

8 MR. WOLF: If that's taken as a
9 question, I would be glad to help. There are
10 several options.

11 MEMBER SONNABEND: Okay.

12 You know, I am kind of feeling that, as
13 the scientist member of the Board, maybe I should
14 divide this pail of earthworms in half and throw
15 some Sluggo into one half of them and see what
16 happens.

17 (Laughter.)

18 Aha. Although it would not be a true
19 experiment if we didn't have replicates that had
20 just ferric phosphate and just EDTA by themselves.

21 But, anyway, I do appreciate it, and I
22 think earthworms are on all of our minds most of

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1 the time. We do get bogged down so much in the
2 details of these deliberations that it is very hard
3 to focus on continuous improvement when we are
4 re-reviewing the same things over time. But we can
5 only try for the best.

6 So, it wasn't really a question, but if
7 you have any response, that's fine.

8 MR. WOLF: Well, in terms of the
9 continuous improvement concept, the problem
10 sometimes is that we dwell on the details and not
11 the bigger opportunity. So, in the case of a
12 number of materials, we tend to like not think about
13 what we are replacing, and that is where the
14 opportunity is, whether it is biodegradable mulch
15 and the need for you guys now to come back and make
16 a recommendation of some kind, so that, in fact,
17 it can be available, or whether it is moving the
18 inerts issue very rapidly, so that there are
19 innovations that are coming along that can become
20 available. That's the opportunity.

21 CHAIR RICHARDSON: Thank you.

22 MR. WOLF: Thank you.

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1 CHAIR RICHARDSON: Thank you very
2 much, Bill. That was really good. We appreciate
3 it.

4 MR. WOLF: Thank you.

5 CHAIR RICHARDSON: The next speaker is
6 Jim Gerritsen, and on deck we will have Alan Lewis.

7 MR. GERRITSEN: Okay. Good
8 afternoon.

9 I'm Jim Gerritsen. I'm an organic
10 farmer from northern Maine. We have been farming
11 organically on Wood Prairie Farm for 39 years. We
12 have been MOFGA-certified organic for 33 years.

13 I'm also really here as the President
14 of the trade group for the organic seed industry,
15 OSGATA, Organic Seed Growers and Trade. We
16 represent certified organic farmers and certified
17 organic seed companies, all of whom have this in
18 common: our livelihoods rely upon maintaining
19 organic integrity. It's important to us. It is
20 important to everyone within the certified organic
21 community.

22 Seed is the foundation of crop

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1 agriculture. That is pretty widely recognized.
2 Under that context, the OSGATA membership some
3 years ago passed a policy which I want to read to
4 you. It is entitled, "The OSGATA Policy on Organic
5 Seed Contaminated by Genetically-Engineered
6 Seed".

7 And it reads, "GE contamination of
8 organic seed constitutes irreparable harm to the
9 organic seed industry and undermines the integrity
10 of organic seed. Any detectable level is
11 unacceptable."

12 What this boils down to is that we feel,
13 we recommend that there be 10,000 kernel PCR tests
14 done of every organic seed lot that is at risk for
15 GE contamination. We have written a handbook,
16 "Protecting Organic Seed Integrity," and I will
17 have copies of that here at the meeting on the
18 table, hopefully tomorrow. We introduced it and
19 passed it out at the NOSB meeting in Louisville.

20 But that comes from, it is a
21 peer-reviewed handbook aimed at farmers in lay
22 language, trying to help farmers protect

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1 themselves from this major threat of GE
2 contamination.

3 For those of us within the organic seed
4 deal, contamination means extinguishment of the
5 value of organic seed. It is very important.

6 So, the important concept there is
7 that, if you plant contaminated, GE-contaminated
8 organic seed, you can be guaranteed that the
9 harvest that you get in the fall is going to be a
10 contaminated harvest. Our belief is we should be
11 starting with clean seed. If it is organic seed,
12 it should be tested. If it is conventional seed
13 used under the commercial-availability exemption,
14 that should also meet the same high standard.

15 I guess the main theme that I want to
16 get across today is the concept that I think
17 integrity is everything to organic, and I think
18 integrity in terms of your jobs as NOSB members,
19 integrity demands that there be independence. I
20 think the NOSB needs to be an equal partner with
21 the USDA.

22 This demands that the USDA needs to

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1 honor and respect the efforts of the NOSB. When
2 the NOSB comes up with a decision, USDA needs to
3 put it into effect.

4 On the hydroponics issue, for example,
5 the clear indication moving forward is organic is
6 a soil-based system. You know, with 12 or 13
7 thousand certified organic farmers in this
8 country, that is what we look at. We are all
9 soil-based farmers. The two dozen operations that
10 are hydroponics, most of us had no idea that there
11 were certifiers certifying them. And that is a
12 small minority. What is clear to us is that
13 organic is a soil-based system and it needs to be
14 adhered to.

15 Now all of us are on committees; all of
16 us are on boards. And there's a dynamic which is
17 established, and it is not easy. In terms of
18 working with USDA, sometimes you are going to have
19 to be stern. Like with the animal welfare
20 standards, if USDA year after year after year is
21 not coming up with what the NOSB requested, send
22 them a reminder. You need to represent the

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1 interests of the organic community, and sometimes
2 that means, you know, going over and helping the
3 USDA understand that they're not getting the job
4 done.

5 Okay. All right. Okay, thank you.

6 I would be happy to answer any
7 questions.

8 CHAIR RICHARDSON: Thank you.

9 Francis? And then, Zea.

10 MEMBER THICKE: Thank you, Jim.

11 When you say a 10,000-kernel sample,
12 you're a zero detect in a 10,000-kernel sample?

13 MR. GERRITSEN: Yes, that is the
14 capability of PCR technology. And in the NOC
15 pre-meeting yesterday, reference was made to doing
16 a 3,000-kernel sample. And there is a much, much
17 higher reliability factor in a 10,000-kernel
18 sample.

19 MEMBER THICKE: Okay.

20 MR. GERRITSEN: And our idea is that we
21 should be using the technology to the greatest
22 length, so that we don't have a false-negative and

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1 plant seed that actually is contaminated, but we
2 had an inadequate test that led us astray.

3 MEMBER THICKE: So, what do we do with
4 a lot of seeds? Like corn won't meet that today.
5 How do we get there?

6 MR. GERRITSEN: Yes, it's a problem.
7 Probably production is going to have to be limited
8 to areas where there is not this threat of
9 contamination.

10 But what I expected to get into further
11 into my talk, which four minutes came quicker than
12 my talk did, is that I believe that NOSB has to kind
13 of expand its horizons. You have got to be working
14 with USDA and EPA and other federal agencies and
15 beyond to assure protection for organic farmers.
16 The contamination is not an organic farmer's fault.
17 It should not be our mission to have all the burden
18 upon us.

19 So, for example, I would suggest the
20 NOP -- and I have suggested to Zea and her ad hoc
21 committee -- that we need to protect organic
22 farmers by stressing to USDA, who is the regulatory

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1 authority who has released biotech seeds, that the
2 biotech, the owner of the flawed polluting
3 technology, the biotech industry, they need to be
4 restrained from their causing of harm to the
5 commons.

6 Right now, it falls solely upon the
7 organic farmers to do the testing, to create the
8 buffers, and all that. And that is not fair and
9 it is not sustainable over the long-term.

10 So, I don't want to come off as
11 superficial on this, but in the short-term there
12 are going to be areas that cannot grow seed, seed
13 corn or sugar beets where they are growing GE sugar
14 beets, anything in the beta family, because of
15 that.

16 Long-term I think that it is a
17 reasonable request that the organic community be
18 protected. We have the right, as farmers, we have
19 the right to grow crops the way we see fit on our
20 farms free of invasion of transgenic trespass or
21 chemical trespass.

22 CHAIR RICHARDSON: Zea?

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1 MEMBER SONNABEND: Thank you, Jim.

2 Sorry to change the subject on you, but
3 I know you are known for growing potatoes. And I
4 would like to know how you keep your potatoes from
5 sprouting and do you feel the need for this
6 petitioned product called 3-decen-2-one as a
7 sprout inhibitor?

8 MR. GERRITSEN: Personally, I do not.
9 We do not use any sprout inhibitor.

10 I think a fair discussion of this brings
11 in the concept of physiological age of potatoes.
12 So, if you grow potatoes under stress or in a hot
13 climate, you will have a relatively-old potato at
14 harvest. And then, if you don't quickly cool down
15 after harvest and maintain at a cool temperature,
16 in our case 38 degrees, you are going to have
17 accelerated physiological aging, and that is what
18 leads to the sprouting. Those potatoes, the blue
19 potatoes with the 2-inch sprouts on it, those were
20 physiologically-old sprouts. They should have
21 been marketed earlier in the season.

22 You know, we have been handling

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1 potatoes for 8,000 years and we haven't needed
2 chemical sprout suppressors for that. I think an
3 alternative is wise management and marketing in
4 time when the potatoes are physiologically young
5 enough to where they don't have the tendency to
6 sprout, which is, you know, within two to three
7 months. Right after harvest you have very little
8 trouble as they are going through dormancy. And
9 then, through higher-level management and proper
10 temperature control, you can maintain that potato
11 in high condition.

12 You know, we market potatoes 10 months
13 a year with one harvest in October, going from
14 September through July again marketing potatoes.
15 So, it can be done. You know, we have got a cold
16 climate in northern Maine, too. That helps us.

17 MEMBER SONNABEND: Thank you.

18 CHAIR RICHARDSON: Thank you, Jim.

19 The next speaker is Alan Lewis, and
20 following that is Elyse Babtkis.

21 MR. A. LEWIS: Thank you, everyone.

22 Alan Lewis.

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1 Really, Board Members, thank you for
2 your service. When I applied last year, Miles
3 said, "Hey, it is one day a week and a couple of
4 tele-meetings, so don't worry about it." Or "one
5 day a month" -- I'm sorry -- "and a couple of
6 meetings."

7 Alan Lewis from Natural Grocers. I
8 manage and write the OSPs for 95 processing and
9 handling certificates in our stores, plus a
10 100,000-square-foot food packaging facility.

11 So, 204 years ago, a group of
12 unemployed, hungry, and angry organic farmers
13 gathered at night to attack a textile factory in
14 central England. They were frustrated that within
15 their lifetimes they had lost their livelihoods.
16 Parliament, their government, had awarded the
17 nation's forest and ag lands to the aristocracy to
18 cut them down to grow monoculture corn.
19 Small-holder farming was eliminated. Cottage
20 industries were made obsolete. Because steam
21 technology led to factories that only required a
22 few low-paid attendants, not a knowledgeable

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1 community that could raise its own healthy food.

2 Thus began our current age,
3 overproduction of calories, permanent
4 malnourished underclass, and corporate-controlled
5 agriculture. And the air was thick with coal soot,
6 and the rivers ran black with industrial waste.

7 That mob of organic farmers in 1811 was
8 facing pretty much the same questions that we face
9 here today, and I would bet we are their direct
10 descendants.

11 How do we evaluate new technologies?
12 What externalized cost of production are we willing
13 to allow? Why does a government for the people
14 seem to promulgate food policies that often work
15 against our health, animal welfare, economic
16 justice, and environmental safety? Not much has
17 really changed, has it, in our industrial age?

18 What is technologically possible,
19 especially in chemical production and genetic
20 manipulation, continues to expand. And
21 ironically, those companies are often based in
22 those same abandoned textile mills.

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1 At least now, we mobs of organic farmers
2 now have the National Organic Standards Board as
3 a recognized public forum for substantive debate,
4 and at least now, few of us are arrested, some of
5 us, but a few of us are arrested by the state militia
6 because we are taking a stand on principle.

7 The fact is that climate change, crisis
8 in human health outcomes, environmental toxicity,
9 and concerns for human and animal welfare are
10 moving for production to safer and more sustainable
11 methods. Regenerative methods are the only
12 solution to widespread scarcity of resources.

13 We are now looking back on 20 years of
14 NOSB policy. In 2035, we will be looking back on
15 40 years of NOSB work product. So far, for the most
16 part, we found a workable and defensible consensus
17 on organic policy that has allowed organic to
18 survive.

19 And now comes along hydroponics and
20 aquaculture, high-technology, large-scale,
21 big-business concerns, ironically, often again
22 established in those same textile mills. However,

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1 neither of these are organic agriculture, and I say
2 this based on one simple test: what my customers
3 think.

4 The green and brown scratches, those
5 plowshares on the organic USDA logo have a meaning.
6 They don't mean roots in a liquid medium
7 illuminated by indoor lights and stacked 20-feet
8 high. I cannot sell that as organic.

9 However, I am sympathetic to these
10 producers. I would like local leafy greens grown
11 in closely-solar-powered environments near my
12 house, rather than trucking them across from
13 California.

14 (Signal that time has expired.)

15 Thank you.

16 CHAIR RICHARDSON: Thank you.

17 Questions?

18 (No response.)

19 Thank you very much.

20 Oh, sorry, Paula.

21 MEMBER DANIELS: I actually don't have
22 a question so much as a comment. And I have been

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1 refraining from doing that sort of thing because
2 we have a lot of speakers. But I am not sure when
3 I will have the chance to say this again.

4 So, I just want to say that I hope that
5 we can keep our minds open to the possibility of
6 other forms of production. Part of why I say that
7 is, you know, Calvin has mentioned a few times that
8 he represents consumers. I'm a consumer, and I'm
9 here, though, in an environmental position and I
10 wouldn't say that I necessarily represent all
11 environmentalists, nor do I represent all Native
12 Hawaiians.

13 What we bring are our experiences.
14 Some of the experience I have is of having to work
15 in a very large city with a lot of poverty and a
16 lot of people that have very little access to
17 healthy food retail. And it is not always an
18 option to have access to soil-based organic
19 production. There are other types of food
20 production that coming online and becoming more
21 viable for people in very densely-populated,
22 lower-income communities, and they deserve access

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1 to healthy food. And why not have it be organic,
2 right? Why not have it be something that is
3 produced in a way that meets climate resilience,
4 that has a number of other attributes?

5 So, I don't want to take this time to
6 grandstand, but I think that there is a lot of
7 opportunity for more discussion here on this point.
8 I do hear your point. I am understand it and I am
9 not trying to raise a debate now. I just don't know
10 when I will have a chance to say it again this
11 meeting.

12 And I hope that what we can do is have
13 some tolerance for looking at diversity in our food
14 production system and thinking through what might
15 be an approach to it.

16 That's all I want to say.

17 MR. A. LEWIS: Madam Chair, would you
18 yield me 20 seconds?

19 CHAIR RICHARDSON: I will, indeed.

20 MR. A. LEWIS: Thank you very much.

21 Unfortunately, like most of the
22 speakers, we run out when we're about to beat the

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1 drum. And I would be in total agreement with you,
2 and I just couldn't make that point.

3 But we need these systems and we will
4 need these systems. They will be part of
5 regenerative agriculture in the future.

6 If, as a community, we decide to embrace
7 them, closed-system regenerative aquaculture on
8 land and the hydroponics in urban areas, that is
9 going to happen and I think we should embrace it.
10 Embracing it under the current rubric, the current
11 brand, the current logo, isn't possible at this
12 time. So, that is how I would frame the issue and
13 how to address it.

14 We need a USDA organic that's got blue
15 waves on it, not green plowshares. We need to make
16 the differentiation with our consumer base, so that
17 we don't undermine accidentally the soil-based
18 organic agriculture.

19 Is that more in your vein? Okay.

20 CHAIR RICHARDSON: Great. Thank you
21 very much.

22 MR. A. LEWIS: Thank you.

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1 CHAIR RICHARDSON: The next speaker is
2 Elyse Babtkis, and the next person will be Orlin
3 Knutson.

4 MS. BABTKIS: Good afternoon.

5 My name is Elyse Babtkis. I'm a
6 Southern California consumer, an attorney by
7 profession, no apologies, and an organic foods
8 proponent for 45 years. I am also speaking as a
9 citizen lobbyist for the Cornucopia Institute.

10 Consumers like myself purchase organic
11 natural foods to avoid synthetic or added chemicals
12 in our foods. We willingly pay the premium for
13 organic products because we expect to take home
14 food that is clean and unadulterated.

15 I am ever disturbed to learn that
16 organic foods all too often contain approved
17 chemical additives. In particular, I would like
18 to address two of those troublesome additives,
19 L-malic acid and bacteriophages.

20 The food industry uses L-malic acid to
21 acidify an ever-growing number of food products,
22 including beverages such as iced teas, fruit

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1 juices, wines, low-cal soft and sports drinks, as
2 well as candies, desserts, and frozen specialties.
3 The additive enhances the sour palate.

4 A double-fermentation process creates
5 L-malic acid. Unfortunately, we know little about
6 that process. What we do know or what we can infer
7 raises serious concerns.

8 While the exact process creating the
9 acid remains ill-defined, we do know that sugar in
10 one form or another is needed. We can reasonably
11 conclude from recent scientific articles that
12 L-malic acid is being produced from corn byproducts
13 likely derived from genetically-modified corn.
14 An organic label should not be a cover for a
15 genetically-engineered food product or for a
16 product of which we know little of its chemical
17 creation process.

18 Non-synthetic as well as organic
19 alternatives already exist for adjusting the pH of
20 foods and beverages, including vinegar, lemon
21 juice, lactic acid, and citric acid.

22 No technical review has ever been

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1 performed on L-malic acid. Until we know more
2 about the fermentation behind L-malic acid and
3 stringent controls exist for feedstock, I urge you
4 to remove L-malic acid from the National List.
5 Safe organic alternatives exist.

6 Next, the Cornucopia Institute and I
7 urge you to delist bacteriophages. Remember the
8 movie where aliens released bacteriophages to
9 concur the world? My husband said "baloney" to
10 that scenario. But not so fast.

11 There we go. Bacteriophages are
12 phages or viruses that attack and kill the
13 potentially deadly Listeria strain of bacteria.
14 Deli meats often contain phages to reduce Listeria
15 bacteria in the meat. While phages kill harmful
16 bacteria, they, unfortunately, kill beneficial
17 bacteria in the human gut as well. In the process
18 of killing harmful bacteria, phages cause the bad
19 bacteria to create and release poisons called
20 endotoxins. In short, your baloney sandwich
21 resembles an epic battle scene that a film crew
22 shoots in your stomach.

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1 Phages act differently than organic
2 microorganisms used for fermentation or
3 probiotics. They can be loose cannons doing good
4 and bad. The current use of bacteriophages
5 requires a separate delisted classification from
6 organic microorganisms for these reasons.

7 To conclude, I return to where I
8 started. Consumers like myself and those who
9 support Cornucopia place enormous trust in organic
10 labeling. The organic label should not be a place
11 for hidden agendas, unregulated production
12 processes, or the potential to expose us to harmful
13 manufactured substances.

14 L-malic acid and bacteriophages do not
15 belong on the National List.

16 (Signal that time has expired.)

17 Thank you.

18 CHAIR RICHARDSON: Thank you. Well,
19 you know, you get the gold star. I mean, I think
20 you actually stopped exactly at the time. Well
21 done. Well done.

22 MS. BABTKIS: Thank you. Thank you.

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1 CHAIR RICHARDSON: Questions?
2 Comments?

3 (No response.)

4 Thank you very much.

5 The next speaker is Orlin Knutson,
6 followed by James Isaacs.

7 MR. KNUTSON: Hello. My name is Orlin
8 Knutson. I'm an organic producer of apples,
9 cherries, peaches, and nectarines in Mattawa,
10 Washington, and have been growing organically for
11 27 years.

12 And I spent over a decade on the
13 Washington State Organic Advisory Board during the
14 nineties and during the developmental years of our
15 State certification before the NOP.

16 So many of the materials under review
17 on the renewal process are critically important to
18 the tree fruit industry in Washington State.

19 And I would like to thank the NOSB in
20 advance for your careful deliberation and
21 consideration for renewing these materials that
22 will allow the organic industry to grow and thrive.

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1 Following is kind of a
2 boots-on-the-ground list of materials that are
3 important to me and my operation and to our industry
4 in Washington in general:

5 Elemental lime sulfur, or elemental
6 sulfur rather. Sulfur sprays have been the
7 foundational pillar of our powdery mildew program
8 on all of our tree fruits. We rely on weekly
9 applications from early April to the middle of June
10 for this important disease control, and there are
11 few other alternatives that are as cost-effective
12 or work as well.

13 Lime sulfur is the only effective
14 ovicide when combined with horticultural oils to
15 peel overwintering eggs of mites and aphids. In
16 the early growing season, it is also a
17 critically-important tool to control fire blight,
18 powdery mildew, and peach leaf curl. It is one of
19 the few tools we have left to fight fire blight
20 since the loss of antibiotics like MicroShield.

21 And horticultural oils.
22 Horticultural oils are extremely important as a

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1 delayed dormant control of overwintering eggs of
2 mites, aphids, and San Jose scale. Also, summer
3 applications of light horticultural oils are an
4 effective treatment for red mite, and very few
5 alternatives exist.

6 Pheromones. Before the advent of
7 pheromone control mating disruption for codling
8 moth, we were spraying biological pesticides every
9 five to seven days. And I was on the verge of
10 abandoning my efforts to grow apples organically
11 when the approval of pheromone-mating disruption
12 changed everything in the early nineties.

13 I am convinced that there would be very
14 little production of organic apples without this
15 control without boatloads of biopesticides
16 applied. There is really no effective
17 alternative.

18 Copper sulfate and fixed coppers.
19 Copper is a critical tool for control of bacterial
20 canker in cherries and coryneum blight in peaches
21 and nectarines. It is also emerging as one
22 effective link in the control chain of fire blight

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1 in apples. There is no effective alternative
2 material to replace it.

3 In micronutrients, soluble boron and
4 zinc sulfate are very important to the tree fruit
5 production in eastern Washington. Our soils are
6 endemically-deficient in these nutrients. After
7 30 years of organic soil-building and composting,
8 I have been unable to effectively move the needle
9 on these micronutrients in my soil.

10 Finally, on the handling side, the use
11 of peracetic acid and ozone are very important in
12 the control of the pathogens that go along with the
13 Food Safety Modernization Act and the concern of
14 all consumers to get a pathogen-free product, free
15 of Listeria and other concerns. It is our
16 responsibility to provide that to the consumer.

17 (Signal that time has expired.)

18 So, I would urge that these are all
19 approved and renewed.

20 CHAIR RICHARDSON: Thank you.

21 Questions? Harold?

22 MEMBER AUSTIN: Orlin, thank you for

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1 taking the time to come down. I know the season
2 is a little bit ahead of time in the Northwest. So,
3 this is a pretty critical time for you to be away
4 from your farm.

5 You've got a long history in organic
6 agriculture in the Northwest; I mean one of the
7 premiere founding operations up there. Part of
8 what we have heard today on the crop production is
9 the concerns about what we are doing to the
10 beneficials when these materials are allowed to be
11 used in organic crop production and, then, also,
12 the potential buildup in the soils. Could you
13 address both of those issues on what you see in your
14 personal experience on your farms?

15 MR. KNUTSON: Well, in my personal
16 experience, I feel that initially, you know, a lot
17 of these materials are historically prevalent in
18 the organic industry before certification programs
19 can to light. And we have jettisoned a lot of the
20 really bad ones. I mean, the nicotine is gone.
21 The rotenone is gone, the Orion 50, some of these
22 products that we used initially that were much more

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1 toxic than beneficial. So, I feel that our
2 beneficial balance is holistically in line and as
3 good now as it has ever been.

4 MEMBER AUSTIN: The other part of that,
5 during your annual renewal of your certification,
6 what about soil analysis or plant analysis to look
7 for the mineral buildups and stuff?

8 MR. KNUTSON: Well, yes, we do annual
9 soil tests, and we haven't seen any appreciable
10 accumulation of copper or any other toxic heavy
11 metals.

12 CHAIR RICHARDSON: Thank you.

13 MR. KNUTSON: Okay. Thank you.

14 CHAIR RICHARDSON: The next speaker is
15 James Isaacs, and following that will be Victoria
16 Wexley.

17 And again, just a reminder that we are
18 getting further behind.

19 DR. ISAACS: Good afternoon.

20 I'm Dr. James Isaacs. I'm a practicing
21 veterinarian. I have my degree from the
22 University of California, School of Veterinary

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1 Medicine, Davis. I'm a member of Cornucopia
2 Institute as well.

3 And I think it is kind of fitting that,
4 after that last testimony, that I am talking about
5 zinc sulfate. Just what I was going to say here
6 is that zinc and copper and cadmium and lead and
7 mercury all have one thing in common, and that is
8 they are metals.

9 And they will persist environmentally
10 and in the biome for a great deal of time. Once
11 they are there, mobilizing them is going to be a
12 challenge and a half. It has been know that some
13 of the zinc sulfate accumulations they put from
14 this foot rot -- that's what they are talking about
15 today -- can persist in puddles for 200 years,
16 estimated by their degradation. So, that was just
17 a comment on using it just freehandedly on crops.

18 You know, the labeling of EPA, zinc
19 sulfate is pesticide used in crop production. And
20 on its pesticide label it reads, "This pesticide
21 is toxic to fish and aquatic invertebrates. Do not
22 discharge effluent containing this product into

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1 lakes, streams, ponds, estuaries, oceans, or
2 public waters unless this product is specifically
3 identified and addressed in a National Pollutant
4 Discharge Elimination System Permit."

5 So, in agriculture the zinc sulfates
6 are now used in foot baths to treat and prevent foot
7 rot. Copper sulfate is already approved in
8 organic production. And both of these things are
9 highly toxic materials that end up in the water
10 supply because they are thrown in manure spreaders.
11 They are sprayed on fields. When there is rain,
12 there is runoff. They end up in rivers and
13 streams, and that is where the vulnerability
14 begins.

15 These are the most commonly-used
16 materials in foot baths in livestock. And I would
17 say, also, that their widespread use has an
18 underlying problem. That is that these animals
19 are not being raised in the way intended in organic
20 standards.

21 You don't need to have severe disease
22 in their feet if they are not standing in mud and

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1 manure. If they are out grazing on grassland, they
2 are dry surfaces or their dairies, then the need
3 to treat with these chemicals -- by the way, each
4 foot bath, as a veterinarian, I know treats about
5 70 pass-throughs. These are big, giant troughs,
6 to be big enough for a huge steer to stand in all
7 four feet. So, after 70 trods through that, it is
8 full of poop and mud and all sorts of accumulations.
9 It is just a sludge, and it has to be emptied
10 somewhere. So, you can imagine, if you have 1,000
11 head of cattle or more, the amount of waste that
12 is going to end up in the environment just from
13 letting these guys walk through it.

14 So, I am telling you, a study done on
15 organic dairy farms using copper and zinc sulfate
16 found that copper and zinc levels were accumulated
17 at high levels in fields. The foot baths were
18 discarded in manure lagoons. When the liquid
19 manure was spread on the fields, the copper levels
20 were 50 times higher than normal. So, long-term
21 applications of this could lead to toxic levels of
22 both copper and zinc, and they persist quite a long

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1 time.

2 At this time, Cornucopia takes a
3 neutral position and believes that more study is
4 needed on the use of zinc sulfate and perhaps copper
5 sulfate should be reevaluated as allowed. And my
6 professional opinion is that neither of these
7 substances should be allowed in organic production
8 in any way. They are toxic and there are safer
9 alternatives, including more hygienic standards
10 for people who are raising sheep, goats, and
11 cattle, including dairy.

12 Thank you for my testimony. I believe
13 the organic livestock production could be done
14 safely. And as a doctor of veterinary medicine,
15 I have been involved firsthand on this.

16 (Signal that time has expired.)

17 CHAIR RICHARDSON: Thank you.

18 Questions?

19 DR. ISAACS: Questions?

20 (No response.)

21 CHAIR RICHARDSON: Thank you very
22 much.

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1 DR. ISAACS: Okay.

2 CHAIR RICHARDSON: The next speaker is
3 Jane Sooby -- sorry -- Victoria Wexley, and after
4 that will be Jane Sooby.

5 DR. WEXLEY: Hello. My name is Dr.
6 Victoria Wexley, and I am a specialist in pain
7 management in Los Angeles, California. I'm a
8 member of Cornucopia Institute, and I'm here today
9 as a citizen lobbyist.

10 I have volunteered to help present
11 testimony because I want to ensure the integrity
12 of organic food. I care very much about this
13 topic, not only because of the negative impact of
14 conventional farming on the environment/animal
15 welfare, but it is very important in general human
16 health. It also has a big role in management of
17 certain pain disorders when a specific diet needs
18 to be prescribed or recommended.

19 I would like to comment on the 2016
20 sunset of egg white lysozyme. The substance is
21 purified enzyme material isolated from egg white.
22 It is used in the cheese industry to prevent late

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1 blowing and may be used to stabilize wines by
2 controlling lactic-acid bacteria.

3 Although egg white lysozyme is
4 classified as non-synthetic, that determination is
5 questionable due to the use of the solvents in its
6 manufacture. The European Food Safety Authority
7 permits the usage of egg white lysozyme in organic
8 foods with labeling requirements because egg white
9 lysozyme in cheese and wine products can trigger
10 allergic reactions in egg-sensitive individuals.

11 The FDA status for the substance
12 presumed that egg white lysozyme would be named as
13 an ingredient on the food packaging due to allergen
14 concern. However, no legal requirements exist in
15 labeling egg white lysozyme on food products in the
16 U.S.

17 Cornucopia could not locate a single
18 manufacturer utilizing organic eggs for production
19 of this enzyme. Therefore, the likely source of
20 the egg whites is non-organic eggs from caged
21 chickens.

22 Not all the environmental impacts and

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1 animal welfare issues linked to conventional egg
2 production are addressed in the Technical Review.
3 Yet, they must be taken into account.

4 Egg white lysozyme is known as a natural
5 food preservative and antimicrobial. Cornucopia
6 surveyed all the certified organic cheesemakers
7 and wine producers in the U.S. and ascertained
8 current use. The results pointed out that one of
9 the key alternatives appears to be impeccable
10 sanitation, and I think this is the practice that
11 should be encouraged.

12 Fourteen cheesemakers responded to the
13 surveys, nine of which are using this material. Of
14 the 19 organic winemakers that responded, 14 said
15 they never used it and five said they sometimes use
16 the substance.

17 Egg white lysozyme was added to the
18 National List in 2006 without having a Technical
19 Review done. The 2011 technical evaluation
20 reports on the enzyme, which included the egg white
21 lysozyme, implies that it is unlikely that organic
22 eggs are used as a source. The report is also

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1 silent on impact of conventional production on air,
2 water, and soil quality. Additionally, the report
3 fails to mention product labeling for the potential
4 allergic reactions by egg-sensitive individuals.
5 The full report is clearly inadequate.

6 Given the issues surrounding the
7 completeness of the 2011 Technical Review,
8 questions about classification as a non-synthetic,
9 allergen concerns, egg sources are questionable,
10 and essentiality to organic production, the
11 Cornucopia Institute opposes relisting egg white
12 lysozyme.

13 Thank you for allowing me to present my
14 testimony.

15 CHAIR RICHARDSON: Thank you.

16 Questions?

17 (No response.)

18 Thank you very much.

19 Is Jane Sooby here? Don't see her?

20 No?

21 Okay. The next person up, then, is
22 Cheryl Leutien. And after that will be Teresa

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1 Chan.

2 MS. LEUTIEN: Hello. My name is
3 Cheryl Leutien. I'm from Los Angeles, California.
4 I'm a consumer and a parent and lover of all things
5 organic. I'm a member of the Cornucopia
6 Institute, and I'm here today as a citizen
7 lobbyist.

8 I have a background as a geologist, a
9 soils geologist, an environmental law attorney.
10 I'm also a spiritual practitioner, and I'm a
11 parent.

12 I hold in deep reverence the soil and
13 water that nourish the food that nourishes all of
14 us. I braved the long hours of L.A. traffic this
15 morning so that I could be here to present this
16 testimony because I feel so passionately about
17 ensuring that the label "organically grown"
18 continues to have real meaning for us parents, for
19 us shoppers and consumers, so that we know that the
20 food we buy is as safe and nutritious for our bodies
21 as it is for our children, as it is for the farmers,
22 as it is for the pollinators; indeed, as it is for

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1 all the web of life.

2 I comment today on the 2017 sunset of
3 non-synthetic waxes, carnauba wax and wood rosin,
4 as well as the orange shellac unbleached. These
5 waxes are used as or are components of fruit and
6 vegetable coatings. Their purpose is mainly to
7 enhance cosmetic appearance, giving that glossy,
8 shiny glow to cucumbers or apples, and increasing
9 the shelf life of the coated produce.

10 The Cornucopia Institute remains
11 neutral as to the relisting of these substances as
12 organic produce coatings on the National List.
13 There are, however, several issues of concern
14 regarding the practice of coating fruits and
15 vegetables.

16 One is that these coatings are
17 generally formulated with a mixture of ancillary
18 substances, many of which are not approved for use
19 in organic production and handling. Some of these
20 are likely derived from GMO sources, such as oleic
21 acid. Others can be synthetics and may include
22 emulsifiers, plasticizers, anti-foam agents,

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1 surfactants, preservatives, fungicides,
2 insecticides and, commonly, morpholine, a known
3 precursor of -- bear with
4 me -- N-nitrosomorpholine, a carcinogen.

5 Which of those materials sounds
6 appetizing to organic consumers? For my part, I
7 would say none.

8 Considering that these waxes are on the
9 National -- oh, morpholine is not allowed as an
10 ingredient in wax coating even for conventional
11 produce in the European Union, but it is allowed
12 in the U.S. for wax coatings on organic produce.

13 Considering that these waxes are on the
14 National List without any annotations restricting
15 what ancillary substances can be utilized, any of
16 these chemicals could be on the organic fruits or
17 vegetables purchased by a consumer who believes
18 that the organic seal will ensure that the food is
19 free of synthetic chemicals.

20 Let me ask you, are these ancillary
21 materials compatible with organic practices? I
22 find it hard to believe that they could be. So,

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1 why should these substances, prohibited for use in
2 organic systems, be allowed in the coatings of
3 organic produce?

4 The other issue questions whether the
5 use of such coatings is compatible with organic
6 principles. Specifically, consumers of organic
7 foods do not expect organic produce to be waxed or
8 coated. However, for large-scale production and
9 national distribution, these coatings have great
10 utility.

11 At a minimum, produce should be labeled
12 if it is coated, empowering us consumers with
13 better knowledge and decisionmaking ability.
14 This might give locally-produced and distributed
15 uncoated fruits and vegetables the competitive
16 advantage they deserve.

17 In conclusion, the Cornucopia
18 Institute remains neutral as to the relisting of
19 non-synthetic waxes and orange shellac.
20 Cornucopia would support the relisting of these
21 substances with annotations added.

22 Despite the fact that the NOP has

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1 unilaterally and inappropriately banned
2 annotations at sunset, the Cornucopia Institute
3 believes it is critical to add annotations
4 requiring: one, the labeling of coated produce
5 with the components of the coating listed and, two,
6 that only ancillary substances from either organic
7 sources or approved for organic use be allowed in
8 non-synthetic waxes.

9 (Signal that time has expired.)

10 Thank you.

11 CHAIR RICHARDSON: Thank you very
12 much.

13 Any questions?

14 (No response.)

15 Thank you.

16 The next speaker is Teresa Chan,
17 followed by Rick Green.

18 MS. CHAN: Hi. My name is Teresa Chan,
19 and I'm the Senior Manager in Regulatory Affairs
20 at Solazyme. We are the petitioners for whole
21 algal flour.

22 I ask the NOSB to add whole algal flour

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1 to the National List. I want to address the
2 concerns of the Subcommittee and some of the
3 misconceptions and inaccuracies from the public
4 comments.

5 Whole algal flour is grass. Although
6 there may be industry groups who are against the
7 grass process, having a no-questions letter is a
8 requirement for submitting new petitions to the
9 Board. Also, FDA did not object to the name algal
10 flour. It is standard language in FDA's
11 no-question letters to say how they refer to the
12 product in their letter is not a form of endorsement
13 or recommendation. FDA has not commented on nor
14 objected to the name algal flour or whole algal
15 flour.

16 Also, as stated in the proposal, all CBI
17 information was disclosed in last year's public
18 comments, and the Subcommittee completed their
19 review of whole algal flour.

20 Nowhere in our petition, amendment, or
21 written comments do we ever say that organic cream,
22 milk, eggs, and/or butter are, quote/unquote,

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1 "unhealthy". What we do say is that unhealthy fats
2 can be reduced by the use of whole algal flour. It
3 can be a healthy alternative to reducing unhealthy
4 fats like saturated and transfats which can also
5 come from vegetables.

6 Some comments pointed out that there
7 are plant-based foods and gums already available.
8 However, none of those products have the same
9 functionality. Plant-based foods do not have the
10 same fat profile or content, and gums do not provide
11 the functionality of reducing calories, fat, and
12 cholesterol.

13 The Subcommittee answered Category 2,
14 Question 7, on whether or not the product was
15 essential with a yes and a no, which is a bit
16 confusing, but wrote that it can be considered
17 essential and can provide a non-allergen/vegan
18 alternative to organic consumers needing an
19 alternative choice.

20 Whole algal flour is not an alternative
21 to dairy or eggs for vegans or the allergic. We
22 are not replacing ingredients that vegans and food

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1 allergy sufferers are eating. Those consumers are
2 not buying organic products with milk or eggs in
3 them to begin with. Whole algal flour is essential
4 to vegans, vegetarians, and those who want more
5 organic choices focused on health and wellness.

6 The Subcommittee also mentioned that
7 whole algal flour is inconsistent with basic
8 organic principles because it was, quote/unquote,
9 "replacing organic materials currently being
10 used". Commenters mistook the statement to say
11 that whole algal flour does not follow organic
12 principles, such as being grown in the soil or the
13 use of farming techniques.

14 However, the Subcommittee answered the
15 Category 3, Question 1, "Is the substance
16 consistent with organic handling?" with a yes.
17 Whole algal flour is consistent with organic
18 handling, as it is made in the same way as other
19 fermentation products already listed. The algae
20 are not GMO and no irradiation, sewage, sludge, or
21 solvents are used in the production.

22 So, the real question is, what can this

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1 material provide the organic community if it were
2 listed? It could provide vegans, vegetarians, and
3 those with food allergies the option to buy organic
4 products that they could not before. It can
5 provide all organic customers with lower-calorie,
6 fat, and cholesterol products, yet with the same
7 taste and texture as full-fat products. Organic
8 customers should have choice, and to deny them
9 those choices goes against the fundamental
10 principles of the Organic Program.

11 Now, contrary to popular belief because
12 I work for a food company, I am an organic consumer,
13 too, and I want to have the choice to eat organic
14 products that are healthier, with less fat and
15 cholesterol, without sacrificing on taste and
16 texture.

17 Organic consumers deserve to have
18 choice, and I ask the Subcommittee to reconsider
19 their position and to list whole algal flour.

20 Thank you.

21 CHAIR RICHARDSON: Thank you very
22 much.

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1 Questions? Harold?

2 MEMBER AUSTIN: Thank you.

3 I think with all the information that
4 we had received from yourself and the other
5 speakers in the fall, they answered a lot of the
6 concerns, and the additional information that you
7 provided. I think as you broke down our checklist,
8 you pretty well keyed on the deliberation issues
9 within the Subcommittee and the difficulty that we
10 were faced with as we look at this.

11 It is the essentiality. It is, do we
12 have materials that are already being used, but,
13 yet, do we have a material that could possibly take
14 the place of some of those materials to meet the
15 needs?

16 As a consumer, how would you explain
17 that to the Subcommittee and the Board when we try
18 to tackle the question around essentiality and what
19 a material like this would mean, then, to you and
20 other consumers that are looking for that type of
21 a material to be able to be used in organic
22 handling?

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1 MS. CHAN: So, I think for vegans and
2 vegetarians, right, it is a product where they can
3 have their alternatives taste like what a full-fat
4 type of product would be, right, things that are
5 indulgent and taste better, right, than what they
6 are used to now, with the added benefit that having
7 a little bit of this ingredient in these
8 alternative products would reduce calories and
9 cholesterol and fat, being an overall healthier
10 product than it was before without the use of this
11 ingredient.

12 CHAIR RICHARDSON: Questions? Tom?

13 MEMBER CHAPMAN: So, following up to
14 some of the concerns Harold brought up, I do think
15 the Subcommittee is definitely trying to grasp the
16 potential for replacing organic ingredients with
17 a non-organic ingredient. There is a category of
18 labeling, the made-with-organic labeling, that
19 allows for already the use of non-organic
20 agricultural ingredients without a justification
21 for it. What are your thoughts around potentially
22 listing whole algal flour, but limiting it to a

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1 made-with-organic category claim?

2 MS. CHAN: You mean the
3 less-than-70-percent?

4 MEMBER CHAPMAN: It is the 70/95 made
5 with organic ingredients, and you can list the
6 organic ingredients and/or food groups.

7 MS. CHAN: Isn't that what being on the
8 list is, that it would be limited to 5 percent?

9 MEMBER CHAPMAN: The
10 made-with-organic claim -- I don't want to get
11 into -- the made-with-organic claim allows up to
12 30 percent use of agricultural ingredients and
13 National List listed items.

14 MS. CHAN: Our customers want to see
15 our ingredient on the National List. So, if it is
16 not on the National List, you know, I guess they
17 could use the made-with-organic, but they are the
18 ones who asked us to petition this. So, for them,
19 they want to be able to use the 95 percent.

20 Does that answer your question?

21 MEMBER CHAPMAN: Sure. Thank you.

22 CHAIR RICHARDSON: Thank you very

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1 much.

2 The next speaker is Rick Green, and
3 then, on deck will be Robert Hudson.

4 MR. GREEN: Okay. Hello, everyone.

5 I would first like to thank the Board
6 for the opportunity to speak, and I would also like
7 to thank the new Board members for their sense of
8 adventure. Good luck. We appreciate it.

9 So, last time I was here, I kind of had
10 a homework assignment. I think members of the
11 Board said, "Well, what do the customers say? We
12 would like to hear from the customers themselves."

13 So, we kind of went out and said, "Okay,
14 Customers, go comment." And we got a few comments
15 in on the board I saw, and a lot of them were from
16 individuals say, "I'm allergic" or "I'm vegan, and
17 I would like to have a choice." These are the
18 people that we are trying to represent.

19 Now there were a lot of comments that
20 came out against listing, but those are from groups
21 who don't want anything added to the list. So,
22 that is not that surprising.

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1 They say they represent some consumers,
2 but who represents the consumers who want it
3 listed? Well, the only people who can are the
4 Board.

5 You asked for their input. They gave
6 their input saying, "We'd like this." So, the
7 question is, will the Board allow those customers
8 to decide for themselves what products they want?
9 If we don't put it on the list, then the people who
10 didn't want it listed, well, they're not going to
11 be consuming anything like that anyway. They're
12 going to do the 100-percent organic category. So,
13 you've now kept these people who wanted this
14 opportunity out of organic.

15 If you do list it, again, it won't
16 affect the people who aren't going to consume those
17 products anyway, but it will give those people a
18 choice, a choice they don't currently have. And
19 I think that is the important part.

20 The customers asked us to come and get
21 this listed. They want to see these products.
22 They don't have that choice now.

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1 One of our products that this is used
2 in is a coffee creamer and a number of different
3 flavors. That product is non-dairy, non-GMO,
4 vegan, but it is not organic because it can't be.
5 You know, will it become organic? Well, that is
6 up to the people making it. But at this point that
7 isn't even an option.

8 So, the question is, if people like that
9 product better, are they going to reach for that
10 product or are they going to reach for the organic
11 one? Consumers are notorious for being flexible
12 when it comes to what they like. So, if they say,
13 "Well, I would really prefer organic, but, wow,
14 this one tastes a lot better. I'm just going to
15 take this one instead," and so, the whole algal
16 flour is taking the place of -- when you have like
17 a soy milk, a rice milk, it is not taking the place
18 of dairy. The people aren't drinking that anyway.

19 I know that algae milk sounds really
20 appetizing. Yum. But that is not what you really
21 have, right? You have a soy milk, a rice milk, an
22 almond milk, a coconut milk, whatever it might be,

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1 and this helps make that taste more like a dairy
2 product that the people can't have.

3 I have to live with this because, if we
4 go to Starbucks and they don't have soy, we can't
5 buy coffee there. We have to go and find someplace
6 else that has soy. So, it is not that we decide
7 to have dairy instead.

8 So, I ask the Board to reconsider the
9 comments of those individuals -- it was Martha,
10 Rudolph, Dennis, Peter, Kyle. These were the
11 people who responded to your call and said, "We
12 would like to have this opportunity as organic
13 consumers to choose what we want to buy."

14 So, I am asking for them. I am asking
15 you to give them that choice.

16 That's it. Thank you.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 Questions? Paula?

20 MEMBER DANIELS: I guess I want to ask
21 the same question that Tom asked. As I am looking
22 at the listing, as I understand it, you are

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1 petitioning it under 205.606. And I'm curious
2 about that myself. Maybe you might have an answer,
3 also, why it is under 606 versus 605.

4 MR. GREEN: Well, actually, I think
5 originally it was 605 is a non-synthetic.

6 MEMBER AUSTIN: Yes, Paula, our motion
7 that will be presented will actually be for 605(a),
8 non-agricultural, non-organic substances.

9 MEMBER DANIELS: Right. So, related
10 to that, some of the opposition, as I understand
11 it, to having it be approved here is the process
12 by which the whole algal flour is derived is not
13 clear. So, it is a non-organic process. Have
14 you --

15 MR. GREEN: Well, okay. First of all,
16 it is not a certified organic product. It is a
17 non-synthetic on the 605 list. But the process is
18 really simple. It is algae grown in fermentation
19 and then dried it. That's it. There is no
20 solvents, no weird chemicals, or anything. It is
21 dried algae. I would have liked to have called it
22 that for the FDA, but they said that was too generic

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1 because it captures like the kelp, nori, and these
2 other things. So, we weren't able to do that. But
3 whole algal flour is really just dried algae.

4 MEMBER DANIELS: Okay. Thank you.

5 CHAIR RICHARDSON: Harold?

6 MEMBER AUSTIN: Rick, thanks.

7 You did answer the task that we set
8 forth for you last fall. And I would say that those
9 individuals, those consumers that you talked to
10 were some of the first ones that sent in their
11 public comment. So, I applaud them for that.

12 I think the point that you are making
13 is well-founded. We will have more deliberation
14 on it tomorrow.

15 But I just wanted to thank you. We sent
16 you a task, and I wanted to recognize publicly and
17 in the record that you guys did exactly what we
18 asked you to go do. Thank you.

19 MR. GREEN: My wife will be so pleased
20 that someone verified that I actually did my
21 homework.

22 (Laughter.)

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1 CHAIR RICHARDSON: Thank you very
2 much, Rick.

3 MR. GREEN: One last comment. For
4 those of you who are new to La Jolla, you are a
5 couple of miles from some of the most amazing scenic
6 coastline. So, if you can get away, you really
7 need to get down to La Jolla Cove and see that. I
8 do not work for the tourism board.

9 (Laughter.)

10 CHAIR RICHARDSON: Thank you very
11 much.

12 The next speaker is Robert Hudson, and
13 after that, it will be Keith Schildt.

14 MR. HUDSON: Good afternoon.

15 My name is Andy Hudson, and I am with
16 Westbridge Agricultural Products.

17 I would like to thank the Board for
18 giving me the opportunity to speak this afternoon.

19 I am going to talk this afternoon about
20 SUPPRESS herbicide. It is a new herbicide which
21 was just recently registered. Westbridge is the
22 manufacturer of this. And I know that the

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1 registration has come up while you were looking at
2 the alternatives for the soap-based herbicides.
3 And because of the lateness of this registration,
4 we just wanted to bring it to your attention.

5 The product timeline for SUPPRESS is
6 that it was federally-registered and exempt from
7 tolerances on September of 2014. It was also
8 registered, then, in California in February 2015.
9 And it is labeled for all food and non-food crops
10 with a zero PHI, a Pre-Harvest Interval.

11 The EPA approved for organic
12 production. It is a registered broad-spectrum,
13 contact herbicide for post-emergent,
14 non-selective weed control. It doesn't really hit
15 any specific classes of weeds. It hits pretty much
16 any plants that it is sprayed on.

17 It is a proprietary formulation. It is
18 low-foaming, non-volatile, emulsifiable
19 concentrate. It has been approved by the Organic
20 Material Review Institute, and it has been approved
21 for all agricultural food and non-food crops.

22 Its mode of action is that it will

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1 disrupt the cuticle and the epidermal layers,
2 causing plant desiccation and, therefore,
3 burndown. It is active against monocotyledons and
4 dicotyledons.

5 It is non-specific. So, it will burn
6 any plant that it comes in contact with, including
7 crop plants. So, that is why you need to make sure
8 you control the drift and use the right equipment.
9 The last point mentions this. Spray drift does
10 need to be minimized.

11 This is just a picture of actually a
12 couple of days after application. It is 6 percent
13 banding in a stone fruit trial.

14 The non-spray options currently for
15 weed control are mowing and flailing, which are not
16 real efficient. They take a lot of time, and they
17 basically just knock everything down.

18 Flaming costs a lot of money because you
19 have got to go out and individually flame the
20 plants. It is also at this time of year or in the
21 last couple of years and obvious fire hazard if you
22 are in California and you are trying to flame your

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1 weeds.

2 And then, you also have hoeing and hand
3 removal for getting rid of weeds, but that is
4 expensive because of labor and there is a lack of
5 labor a lot of times.

6 Some of the organic spray options for
7 weed control in crops are plant essential oils,
8 which a lot of them just aren't real efficacious.
9 They can also cause damage to overlying vegetation,
10 like from volatilization; d-limonene, which can be
11 less efficacious, can also be fairly costly. And
12 there are other materials like your vinegars and
13 your citric acids, and so forth, but those just
14 don't really do a lot. They are less efficacious.

15 We have had four-plus years of
16 successful evaluations with SUPPRESS and getting
17 it registered, over four years with university and
18 grower trials. Classes are broadly grasses and
19 sedges and order probably, if you wanted to be
20 realistic about it.

21 This is just a real quick like the weed
22 control graph, if you will, for weed control in

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1 barley. It was applied once and, then, for six
2 weeks ratings were taken, and these are the
3 cumulative results.

4 The green bar to the left was SUPPRESS,
5 and the orange bar was a chemical control, and the
6 red bar, all the way over to the right, was the
7 untreated check.

8 (Signal that time has expired.)

9 Thank you.

10 CHAIR RICHARDSON: Thank you.

11 Questions? Yes, Francis?

12 MEMBER THICKE: Is this a soap?

13 MR. HUDSON: No.

14 MEMBER THICKE: Can you tell us what it
15 is?

16 MR. HUDSON: The active is fatty acids.
17 So, it is not alkaline.

18 CHAIR RICHARDSON: Great. Thank you
19 very much.

20 MR. HUDSON: Thank you.

21 CHAIR RICHARDSON: The next speaker is
22 Keith Schildt, and after that is Sue Ostling.

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1 MR. SCHILDT: Hi. Good afternoon.

2 My name is Keith Schildt, and I'm
3 Professor of Public Administration at the
4 University of La Verne, where I am also Chair of
5 the Department of Public and Health
6 Administration.

7 I'm from Santa Ana, California. And
8 like some other folks here today, I am a member of
9 the Cornucopia Institute, and I am here today as
10 a citizen lobbyist.

11 As someone who teaches food policy, is
12 actively involved in the slow food and slow meat
13 movement, and the father of an 18-year-old son, I
14 volunteered to help provide testimony because I
15 want to help ensure the integrity of the organic
16 food that my family and others eat, the legitimacy
17 of the process by which these standards are done,
18 and lend my voice for this action.

19 I would like to comment on the 2016
20 sunset of peracetic acid. This synthetic,
21 non-organic substance is used as a sanitizer on
22 food contact surfaces as well as in wash and rinse

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1 water. It was added to the list in 2006.

2 Compared to other commonly-used
3 sanitizers, peracetic acid may be more compatible
4 with organic handling than the use of halogen-based
5 sanitizers and disinfectants like chlorine,
6 iodine, or ammonia-based products. Further,
7 peracetic acid biodegrades into harmless
8 substances, unlike chlorinated materials.

9 Hydrogen peroxide, vinegar, and citric
10 acid can also be used as alternatives to peracetic
11 acid for certain uses. However, research has
12 demonstrated that peracetic acid is more effective
13 than these alternatives in many situations.

14 Importantly, other research shows that
15 it is advisable to alternate disinfectants to avoid
16 the buildup of resistant pathogens. Thus, having
17 several alternative disinfecting products on hand
18 is essential for public safety and health.

19 Because peracetic acid appears to
20 satisfy all three criteria of the Organic Foods
21 Production Act, the Cornucopia Institute
22 recommends relisting this substance.

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1 Thank you for allowing me this
2 testimony.

3 CHAIR RICHARDSON: Thank you very
4 much.

5 Questions?

6 (No response.)

7 Thank you.

8 The next speaker is Sue Ostling, and
9 after that is Aaron Avila.

10 MS. OSTLING: Hello. My name is Susan
11 Ostling. I'm a consumer from North Tustin,
12 California. I'm a member of the Cornucopia
13 Institute, and I'm here today as a citizen
14 lobbyist.

15 I volunteered to help present testimony
16 because I want to ensure the integrity of organic
17 food. Like millions of other consumers, I depend
18 on transparency in the food I purchase, and I rely
19 on government standards to provide accountability.

20 I am concerned that organic standards
21 are being revised by corporate lobbyists, to the
22 detriment of our health and the long-term

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1 sustainability of our food system.

2 I would like to comment on the
3 aquaculture discussion document. The NOSB
4 Livestock Subcommittee aquaculture materials
5 review update report, released in February 2015,
6 mentioned that no one from industry or general
7 public came to the spring 2014 meeting or provided
8 oral testimony, which made it difficult for the
9 NOSB to understand the potential market demand for
10 any of the materials petitioned.

11 However, this is simply not the case.
12 If this discussion document is supposed to serve
13 as a review of the history of aquaculture
14 regulations, it would seem that including the
15 testimony of the 10 stakeholders that spoke out on
16 aquaculture issues would be important. Six work
17 for nonprofit public interest groups; two work for
18 organic certifiers, and two were unaffiliated
19 citizens who traveled all the way to San Antonio
20 to speak on this important subject. That is both
21 industry and the general public making their voices
22 heard.

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1 From both written comments and oral
2 testimonies, the overwhelming response to the idea
3 of organic aquaculture is that individual
4 materials should not be approved without the
5 standards in place and that open-ocean aquaculture
6 is not consistent with organic principles and
7 should not be considered as part of the standard.
8 There are many who believe that closed-loop,
9 land-based systems may be possible using organic
10 principles, but more research and more models are
11 needed to prove that system.

12 During the spring 2014 meeting, all of
13 the aquaculture materials, both crops and
14 livestock, were sent back to committee at the
15 request of the full Board. The Livestock
16 Subcommittee is now handling all the materials,
17 even though some materials are for plant-based
18 aquaculture and not animals. This was done to
19 reduce redundancy because many of these materials
20 will be used for both types of systems and some
21 production models grow both plants and animals in
22 the same system.

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1 There continue to be many unanswered
2 questions about these materials that need to be
3 addressed prior to the full Board voting on them.
4 Some of these include:

5 Are there different requirements for
6 closed systems than net pens? What are the trace
7 materials that are needed? What is the impact of
8 chlorine on culture water? What is the
9 availability of tocopherols made without synthetic
10 solvents, such as rosemary oil?

11 What are the micronutrient needs of
12 hydroponic versus aquaculture plants? How do
13 multitropic systems affect the need for routine
14 application of micronutrients? Is synthetic
15 lignin sulfonate needed as a micronutrient?

16 How does stocking density affect the
17 need for vaccines? What are the consequences of
18 vaccinated animals escaping into the ocean? What
19 are management techniques that would reduce the
20 need for vaccinations?

21 As of October 2014, all aquaculture
22 materials are currently tabled within the

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1 Livestock Subcommittee, with the intention to
2 reevaluate them as soon as the proposed rule for
3 organic aquaculture standards is available. When
4 will the NOP push standards voted on/approved at
5 NOSB meetings in 2008 and 2009? What is the status
6 in that pipeline? Will the NOP once again, as they
7 have done with hydroponics and nanotechnology,
8 grossly disrespect the work of the NOSB and organic
9 stakeholders who have taken part in the process by
10 ignoring the recommendations and adopting a more
11 industry-friendly approach?

12 Thank you for allowing me to present
13 testimony. If you have questions, I encourage you
14 to speak to one of Cornucopia's policy staff
15 present at this meeting.

16 CHAIR RICHARDSON: Thank you.

17 The next speaker is Aaron Avila, and
18 after that, it will be Jake Lewin.

19 MR. AVILA: Good afternoon.

20 My name is Aaron Avila. I work for G.S.
21 Long Company. Founded in 1980, G.S. Long is a
22 family-owned agricultural consulting supply

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1 company located in the Yakima Valley of Washington
2 State. We consult in all aspects of organic and
3 conventional production, specializing in tree
4 fruit, hops, and wine grapes, as well as berries.

5 I have worked directly with growers,
6 both large and small, for well over 20 years and
7 currently consult on over 6,000 acres of certified
8 organic farms. And there's quite a large number
9 of farms in transition beginning this year as well.

10 I also serve on the Washington
11 Department of Agriculture's Organic Food Programs
12 Organic Advisory Board, a position I have held for
13 over 10 years now, currently as Vice Chair.

14 I have submitted full written comments
15 for your review, which in the interest of time I
16 won't be offering verbal comments on here today.

17 I would also like to state that,
18 although I believe that at least the majority of
19 our growing base would agree with them, these
20 opinions are my own.

21 I would like to begin with stating that
22 I understand and support the sunset process.

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1 However, unless there are clear, undisputable
2 facts that prove a negative human health or
3 negative impact on the environment, that the
4 removal of any product that is currently allowed
5 for use in organic production and handling should
6 be discouraged.

7 To the Handling Subcommittee, I would
8 like to offer comment on peracetic acid as a
9 sanitization tool in post-harvest handling.
10 Peracetic acid is commonly used to reduce the risk
11 of pathogens survival in transfer. Public demand
12 of food safe systems is ever increasing. And
13 according to NOSB's fall 2014 meeting notes, there
14 was no new evidence provided about any unacceptable
15 adverse impacts on human health or the environment.

16 There is no substitute for cleaning and
17 sanitization. And as it benefits both the
18 industry and consumers alike, I support its
19 continued use in organic production.

20 To the Crops Subcommittee, I would like
21 to comment on EPA List 4 inerts. As I understand
22 it, the Crops Subcommittee has commissioned a

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1 review of these to be performed by the Design for
2 the Environment Program, which I learned today is
3 now Safer Choice.

4 These findings will have a big impact
5 on manufacturers, producers, and even consumers,
6 and it seems prudent to allow for this review
7 process to be finalized before taking a position
8 or making a decision.

9 Additionally, should the review
10 findings support the sunset of List 4 inerts, two
11 years is not nearly enough time for product
12 manufacturers to make required formulation
13 changes, if it is even possible. Any required
14 formulation changes will likely call for new
15 registration, both at EPA and state, and even
16 organic, new environmental impact studies,
17 possibly new efficacy studies, and time to educate
18 producers.

19 So, again, I do support the continued
20 allowance of List 4 inerts, at least until such time
21 as a decision can be made through collaboration
22 with Design for the Environment is planned.

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1 However, if it is determined that a sunset need to
2 be implemented, I ask that in order for
3 manufacturers and producers to comply with the
4 necessary changes, that it be made over at least
5 a five-year period.

6 Regarding our equivalency agreements,
7 I would like to raise this question: assuming that
8 at least some of these ingredients and crop inputs,
9 List 4 and other, are also used in the EU or
10 elsewhere, I am concerned about how under our
11 equivalency agreement that we could be more
12 restrictive on crop inputs here without holding
13 others accountable as well.

14 For example, the product formulation
15 containing compounds found on EPA List 4 are
16 acceptable as crop inputs in the European Union and
17 organic crops produced there are acceptable and can
18 be accredited and sold here under the USDA NOP seal.
19 How is this in any way equal?

20 Additionally, there seem to be some
21 additional market restrictions under our
22 equivalency agreement that some of our producers

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1 are finding meaning that their product is being
2 turned away that has been approved for use under
3 the equivalency agreement; specifically, EU. So,
4 again, I don't see how that is in any way equal.

5 So, in closing, as you know, your
6 recommendations will have a direct effect on the
7 ability of our producers to continue to provide
8 certified organic product to the consumer. The
9 notion that ideals are somehow tied to scale is
10 false, and these products benefit both large and
11 small growers alike and, of course, in doing so,
12 also support the success and continued growth of
13 our industry as a whole.

14 Thank you for the opportunity to
15 comment.

16 (Signal that time has expired.)

17 CHAIR RICHARDSON: Thank you. Oh, all
18 right, you get the gold.

19 (Laughter and applause.)

20 Very good.

21 Questions? Zea?

22 MEMBER SONNABEND: Thank you.

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1 We received a comment from the
2 Washington State Hort Society, and I'm not sure if
3 they are here to address it. So, I am going to try
4 asking you.

5 They indicated that almost all of the
6 Washington-State-produced apples were waxed with
7 the compliant waxes, fruit coatings. I know that
8 is not a California thing. We don't wax most
9 apples. So, do you know if that is true?

10 MR. AVILA: I don't. I'm sorry, Zea.
11 I do know that there a large quantity of apples are
12 waxed, but how it relates, you know,
13 proportionately, organically, I couldn't tell you.

14 CHAIR RICHARDSON: And Jake had to
15 leave early. So, I don't think he is speaking.

16 MEMBER AUSTIN: Zea, to clarify that
17 point, that young man is no longer working for them.
18 And the waxes are not 100-percent used in all
19 organic apple production. Very little is actually
20 used in the Northwest.

21 CHAIR RICHARDSON: Thank you.

22 Any other questions? Yes, Harold?

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1 MEMBER AUSTIN: Aaron, thanks for
2 coming down and testifying for us today and issuing
3 your oral comment, along with the written ones that
4 you submitted.

5 The materials on the list on your
6 written comments that you submitted, do any of
7 those materials -- and they were lime sulfur,
8 sulfur, horticultural oils, pheromones -- if those
9 were to be removed from the customer base that your
10 company works with and, also, WSDA certifies, what
11 impact would that have?

12 MR. AVILA: Thank you.

13 It would be huge. You know, farming in
14 general is a pretty risky business. When people
15 are taking that additional challenge to commit to
16 organic production, that is even a riskier
17 proposal.

18 You take away some of these key tools,
19 particularly, Harold, as you know, mating
20 disruption, really a cornerstone of the organic
21 industry as we know it in tree fruit, were that to
22 go away, it just wouldn't be; it just wouldn't be

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1 anything like it is today. We wouldn't be here
2 talking about it anymore. There would be no
3 representation from the Pacific Northwest in
4 organic tree fruit.

5 CHAIR RICHARDSON: Thank you.

6 MR. AVILA: Thank you.

7 CHAIR RICHARDSON: The next speaker
8 has had to leave early. So now, we will move on
9 to Dain Craver, and following Dain, it will be Colin
10 Archipley.

11 MR. CRAVER: Hey, I don't want to sound
12 like Charlie Brown's teacher right now. I can see
13 the faces. I've been on a board. I was on the
14 Organic Board with Miles up in Washington State.
15 I know how hard you guys work on it. We couldn't
16 do it without you.

17 Just listening to everybody here, a
18 couple of big things I have heard today is integrity
19 is very important, and I believe that. I have been
20 an organic grower for 24 years, and I consult with
21 about 1,000 acres for the last 10 years. And we
22 have watched this change coming on.

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1 I'm not going to readdress the
2 materials that my two colleagues have. I sent in
3 a written recommendation also.

4 Pheromones, lime sulfur, copper,
5 potassium bicarbonate, and hort oils, those are
6 pretty much our main products that we use. Now
7 people think that us organic farmers just spray all
8 this sulfur and copper, and that is just not the
9 case. We have released a lot of beneficials. We
10 try not to spray things, but some things you have
11 to do. And if it is on the list, to me, I think
12 it should be fine. You people decide what is on
13 the list.

14 You know, I have sat here and gave money
15 to Cornucopia, and after today, I won't give them
16 any more money. I just feel like they want to take
17 everything away from us, and I don't understand
18 that, without good, reliable science, what works
19 and what doesn't work.

20 Just wait until you have your chance,
21 sir.

22 So, I would just like to say again that

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1 I think these are important products that we need
2 to keep maintaining for. I am very passionate
3 about growing organic. I have spread the word.
4 When I first started being an organic grower, I got
5 a lot of crap up in Washington because it was, hey,
6 you're a granola head.

7 But after finding and solving ways and
8 building up predators and building up our soils and
9 just doing all the right things -- my goal was to
10 leave my soil in better hands than when I got it.
11 And I think after 20 years we have proven that.

12 I, again, would like to honor what you
13 guys do. I hope that when the 2017 votes come up,
14 that you will take into consideration that we are
15 an industry that wouldn't survive without some of
16 these things.

17 So, again, I would like to thank you for
18 letting me come up here and testify. Thanks.

19 CHAIR RICHARDSON: Questions?

20 MEMBER AUSTIN: Dain, don't go
21 anywhere.

22 Thanks for taking the time to come down.

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1 As one of the foremost organic consultants in the
2 State of Washington and one of the longer organic
3 crop producers, I appreciate you coming down here
4 and I appreciate your integrity in the process.

5 Quickly talk to us about, in your own
6 production or as a consultant, the impacts that you
7 see on soil health from the materials that we
8 currently use, especially the coppers and the
9 sulfurs and lime sulfurs.

10 MR. CRAVER: Okay. Very quick on
11 that, our copper sprays, we put on a spray in the
12 spring and a spray in the fall. This is to help
13 with the bacteria gummosis. It is a two-shot deal.
14 We don't use it over the season-long.

15 We are seeing, since MicroShield has
16 been taken off, we need other things to fight fire
17 blight. Well, lime sulfur was a good one. I have
18 used it for 25 years and I have never had fire
19 blight. So there, something could come in and
20 change it.

21 Our zinc levels, as Orlin stated
22 earlier, they are just terribly low. It doesn't

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1 matter what we do. But I know when I started my
2 farm I was at .06 on organic matter, and now I am
3 up over 3. My nutrient base levels are all very,
4 very good. I don't have a toxicity of copper. I
5 don't have a toxicity of sulfur, and I can't keep
6 enough zinc in the soil. We just don't have as
7 much. With our calcareous soils, the sulfur
8 actually is a benefit to us to help lower our pH
9 and have more nutrients be readily uptaken.

10 So, that's it.

11 (Audience member says something
12 briefly.)

13 You what?

14 CHAIR RICHARDSON: Excuse me. Just
15 don't do it. Thanks.

16 Thank you.

17 MR. CRAVER: Thanks.

18 CHAIR RICHARDSON: Thank you very
19 much.

20 We try to have it so that just the
21 speaker, the person presenting, will speak to the
22 Chair, and you can do the side comments later.

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1 The next speaker here is Colin
2 Archipley, and he will be followed by Karin
3 Archipley.

4 MR. C. ARCHIPLEY: Thanks for the
5 opportunity to present today.

6 I am here representing hydroponic and
7 soil-less farmers. I am both a soil and soil-less
8 farmer.

9 And I applaud NOP for creating this Task
10 Force to have this discussion.

11 I was in a room yesterday in discussion
12 with the National Organic Coalition. There were
13 a lot of opinions on this topic. Unfortunately,
14 only a few of those opinions were actually educated
15 opinions.

16 Current information about
17 hydro-organics that is being put out there is many
18 times false and blatant lies. For instance,
19 hydro-organic farmers rely on synthetic materials.
20 We apply zero defined synthetic materials within
21 our soil-less systems.

22 Some farms are trying to use NOP to

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1 mitigate competition as opposed to bringing to
2 market better products, more sustainably and
3 efficiently, and saying hydroponic farmers
4 shouldn't be allowed because they comprise
5 competition. And regulations shouldn't be used to
6 limit competition.

7 Again, we grow on both soil and
8 soil-less systems. Do you know what the
9 difference in the fertility and a pest management
10 plan between the two is? Nothing, except one is
11 extremely more efficient and more sustainable than
12 the other.

13 We are reliant on biological digestion
14 of organic matter that many consider soil ecology
15 or soil food web, just like soil organic farmers
16 are reliant on that as well. It is a scientific
17 fact that biology found in healthy soils is not
18 limited to soils and those processes aren't limited
19 to soils.

20 Organic soils are comprised of five
21 primary components: soil particles, water,
22 oxygen, organic matter, and the organisms that make

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1 the magic happen. Soil particles in California
2 are primarily comprised of quartz in the form of
3 sand, silt, or clay, and they have, basically, no
4 direct impact or benefit to the plant.

5 What they are is a container to hold in
6 place the soil -- excuse me -- the water, the
7 oxygen, the organic matter, and the combination of
8 organisms is where that magic happens and that
9 synergistic between that plant. If you remove the
10 soil particles, guess what changes. Nothing. It
11 is still an organic system that is reliant on that,
12 quote/unquote, "soil food web". It is just more
13 contained. It is more efficient.

14 You guys are in San Diego County. The
15 leader and No. 1 area of certified organic farms
16 and probably the leader in this discussion of
17 soil-less farming. Why? Because water is a huge
18 issue here. Where in other places in the State
19 where water has been an issue and it has destroyed
20 agricultural farmgate, in San Diego we have rosen
21 up that equation; we stand up that.

22 Our GDP in the agricultural industry

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1 has grown over the years. That is because we are
2 doing it more efficiently while maintaining the
3 same standards.

4 So, please don't base your decision on
5 soil-less farmers based on lies and
6 misinformation. You have the opportunity, being
7 here in San Diego County, to visit these farmers.
8 We have reached out to many to actually come visit
9 and learn what we are doing. Because, typically,
10 when people are skeptics of what we are coming, they
11 come out and they visit and they learn what we are
12 doing; they change their opinion.

13 And again, nobody has actually taken us
14 up on that opportunity. And so, a lot of the
15 opinions that are out there are based on falsified
16 information.

17 So, again, I just applaud the NOP for
18 creating this Task Force. I am going to send my
19 letter in to join that Task Force, and I look
20 forward to having that discussion.

21 Thank you.

22 CHAIR RICHARDSON: Thank you.

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1 Questions? Paula?

2 MEMBER DANIELS: I just wanted to make
3 a comment. For those of you who are new to
4 California, Colin is actually pretty well-known
5 here in California as a leading farmer. And I want
6 to thank you for coming.

7 MR. C. ARCHIPLEY: Thank you.

8 MEMBER DANIELS: He works a lot with
9 veterans as well --

10 MR. C. ARCHIPLEY: Yes, yes.

11 MEMBER DANIELS: -- and has a good
12 job-training program that is part of that.

13 So, I just wanted to thank you for your
14 testimony, Colin.

15 MR. C. ARCHIPLEY: Thanks for the plug.
16 I appreciate it.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 The next speaker is Karen Archipley,
20 and after that, it will be Albert Straus.

21 MS. K. ARCHIPLEY: Thank you for
22 allowing me to speak today, and thank you for being

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1 here. I love it that you are in San Diego, and I
2 encourage every one of you, if you have just an
3 hour, come to our farm; we're here.

4 Anyway, today I am in support of
5 hydroponic organic. We coin the phrase
6 "hydro-organic". And I can tell you, for us, it
7 is personal. It is inside our house, it is under
8 our cupboards, and it is in our farm, because we
9 live it. It is not just a business.

10 And I have heard people speak here today
11 where they were reading off of a template to be
12 against hydro-organic growing. I actually
13 approached one of the women that spoke and she
14 looked shocked that I was a hydro-organic farmer.
15 And I invited her to our farm.

16 I think we have to educate. People
17 mock what they don't understand. I think, as
18 organic farmers, we need to support each other. We
19 are in this together. We have a lot of stuff we
20 have to fight, but to fight each other seems very
21 fruitless to me.

22 So, I thank you for the opportunity to

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1 be here, and any questions, we're open.

2 CHAIR RICHARDSON: Are there any
3 questions for Karen?

4 (No response.)

5 Thank you very much, indeed, for
6 coming.

7 MS. K. ARCHIPLEY: Thank you so much.

8 CHAIR RICHARDSON: We appreciate it.

9 MS. K. ARCHIPLEY: You're welcome.

10 CHAIR RICHARDSON: Thank you.

11 The next speaker is Albert Straus.
12 Followed by that will be Bo McGee.

13 MR. STRAUS: Hello. Thank you for the
14 opportunity to speak today.

15 My name is Albert Straus. I'm the
16 founder of Straus Family Creamery. Straus Family
17 Creamery produces certified organic dairy
18 products, including milk, yogurt, butter, and ice
19 cream.

20 I am an organic farmer in addition to
21 running the creamery. I have been farming all my
22 life. I grew up on my family's dairy farm, which

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1 I have personally managed for almost 40 years and
2 converted the dairy to be certified organic in
3 1994.

4 I am here to ask that NOP resources be
5 allocated to review, streamline, and simplify the
6 current certification and recertification
7 processes that farmers must follow each year.
8 Organic farming is challenging in and of itself,
9 and we want farmers to focus on the priorities of
10 being good stewards of the land and provide
11 appropriate care for the animals.

12 I am a staunch advocate for organics.
13 It is critical that we maintain the integrity of
14 organic standards preserve consumer confidence in
15 the organic label. The organic certification
16 process that has evolved over the years was
17 developed and amended with very good intention.
18 That said, the certification process has become
19 more cumbersome over the years. I believe that the
20 process that farmers must go through annually to
21 retain organic certification has become needlessly
22 onerous and burdensome.

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1 This is especially true for small-scale
2 farmers who do not have time or employees to help
3 assist with the significant burden of
4 recordkeeping, documentation, and paperwork. To
5 keep my 500-acre farm certified, I have reviewed
6 and updated over 100 pages of documents each year.
7 This takes about a week and a half to two weeks of
8 dedicated work. Given the economics of
9 small-scale farming, hiring an outsider to do this
10 work is usually not an option.

11 The certification cost, including that
12 time that an owner needs to focus on this process,
13 puts recertification costs close to \$5,000
14 annually for a mid-sized dairy operation. This is
15 on top of the infrastructure needed.

16 Measuring dry matter in pastures is not
17 precise and it is seasonally variable and produces
18 unreliable numbers. The recertification
19 paperwork, which demands time and energy to provide
20 that pastures are productive, is, therefore, a
21 waste of time.

22 Many of the recertification processes

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1 are arbitrary and unnecessary to maintain organic
2 integrity. I will be happy to talk to you anytime
3 about specific questions that could be eliminated.

4 In summary, I urge the NOP to simplify
5 the certification procedures for farmers. The
6 current burden to all the paperwork is tremendous
7 and very time-consuming. If there is a way that
8 we can make the process simpler and more efficient,
9 I, as a farmer, would very much appreciate it.

10 Thank you.

11 I have one other topic that I quickly
12 will try to say. In light of organic integrity,
13 there is a loophole for liquid brewer's yeast to
14 be fed to cows or to livestock. It is being used
15 as a protein feed. It is replacing organic feeds.
16 We have not allowed in our creamery, and I think
17 it is a loophole that should be addressed.

18 Thank you.

19 CHAIR RICHARDSON: Thank you very much
20 for your comments.

21 Are there any questions? Yes,
22 Francis?

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1 MEMBER THICKE: Two quick ones. Is
2 that liquid brewer's stuff, is that organic?

3 MR. STRAUS: No, it's conventional.

4 MEMBER THICKE: Oh. And off the
5 topic, do California dairies use walk-through foot
6 baths?

7 MR. STRAUS: Yes.

8 MEMBER THICKE: Is it pretty
9 widespread, widely used?

10 MR. STRAUS: As far as I know, yes.

11 MEMBER THICKE: Okay. Thank you.

12 MR. STRAUS: Do you want me to expand
13 on that. Because there is hydrated lime I have
14 used in foot baths for quite a few years.

15 MEMBER THICKE: You use hydrated lime?

16 MR. STRAUS: Yes.

17 MEMBER THICKE: And it works okay for
18 you?

19 MR. STRAUS: And then, topical, when we
20 have issues, address them right away. We have
21 tables and we address them and put topical copper
22 sulfate if we need to, but we address the issues

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1 right away. And that seems to be a lot more
2 efficient and less -- I mean, I am concerned with
3 copper in my soil and keeping my soils healthy.

4 MEMBER THICKE: Do some farmers use
5 copper sulfate for walk-through baths?

6 MR. STRAUS: I would assume so.

7 MEMBER THICKE: Yes. Okay.

8 MR. STRAUS: Thank you.

9 CHAIR RICHARDSON: Tracy has a
10 question.

11 VICE CHAIR FAVRE: If approved, would
12 you be interested in using zinc sulfate in
13 combination with the copper sulfate for foot baths?

14 MR. STRAUS: Well, I would probably use
15 zinc instead of copper. Copper, I don't like
16 copper, and if there was a good alternative, I would
17 use it. But, also, hydrated lime seems to
18 be -- foot baths, I think it is more specific to
19 the animal if you can just topically put it on the
20 hooves of the animals, so you're not putting it in
21 the environment as much.

22 CHAIR RICHARDSON: Great. Thank you

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1 very much.

2 The next speaker is Bob McGee, and on
3 deck is Zak Wiegand.

4 MR. MCGEE: Good evening. I think I
5 can say good evening now, since the hour, and I
6 appreciate your endurance through this.

7 My name is Bob McGee, and I'm the
8 President of Straus Family Creamery. Yes, that
9 was my boss that just spoke.

10 Thank you for the opportunity to be here
11 today.

12 Straus Family Creamery was founded in
13 1994 and was the first 100-percent certified dairy
14 in the country. In 2010, Straus Family Creamery
15 became the first creamery to verify that all of our
16 farms qualify under the non-GMO Project. So, this
17 has been something that has been very important to
18 Albert and the team that he has assembled.

19 I'm here to ask that the NOP maintain
20 and strengthen the integrity of the USDA organic
21 label by including a GMO testing and verification
22 protocol under the rule. Consumers are becoming

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1 more and more concerned about the presence of GMOs
2 in the food supply. This is evidenced by the
3 increase in food manufacturer usage and consumer
4 interest in non-GMO labeling and recent state
5 ballot measures to require GMO labeling on food
6 products.

7 The prohibition of GMO usage in organic
8 products is a pillar of the National Organic
9 Program, and we applaud others that have tried to
10 increase consumer understanding and awareness of
11 this key issue in organics.

12 The future of the organic system is
13 predicated on maintaining consumers' complete
14 faith and trust in the integrity of the organic
15 label. Loss of that trust and faith would be
16 devastating to organic farmers, their families,
17 and others that grow and produce the inputs and
18 products that we bring to market.

19 In a 2011 study conducted by OTA, 11
20 percent of the corn that was labeled organic had
21 GMO contamination in excess of 1 percent. Even in
22 corn that was labeled organic and identity

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1 preserved, 3 percent of the corn had that same
2 contamination.

3 This contamination is likely coming
4 from a number of different sources, drift or
5 handling procedures, accidental mixing, not any
6 one easily-controllable source. So, the only
7 answer for tracking this and controlling this is
8 to test and to test regularly.

9 Like most technological solutions, the
10 tools are improving and the costs are rapidly
11 decreasing. Since 2008, Straus Family Creamery
12 has been requiring the farms that ship us milk to
13 obtain proof of identity-preserved feeds with
14 every load. And then, Straus Family Creamery, as
15 a secondary step, randomly tests those through
16 strip testing.

17 Through this practice, we have found
18 that testing and verification is reasonable and is
19 a minimal investment of time and effort that helps
20 us to ensure that we fulfill the promises that we
21 make to our consumers. We recommend that similar
22 testing and verification processes become standard

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1 practice within the organics industry.

2 In summary, I urge the NOP to integrate
3 a requirement for testing and verification for
4 GMOs. The integrity of the organic seal must never
5 be doubted by consumers because so many organic
6 farmers' and others' livelihoods depend upon it.

7 It is incumbent upon all of us to
8 fulfill our respective responsibilities in making
9 this happen, and I appreciate the NOSB exercising
10 leadership in this critical area.

11 Thank you.

12 CHAIR RICHARDSON: Thank you.

13 Questions?

14 (No response.)

15 You're getting off light tonight.

16 Oh, sorry, Mac. There you go.

17 MEMBER STONE: So, if GMOs are not
18 allowed in organics, what was the motivation for
19 the non-GMO Project label? And how different was
20 that verification?

21 MR. McGEE: I don't know that I feel
22 qualified to answer that question for you. There

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1 is not testing. There is not a threshold. I think
2 we all know that there is contamination and there
3 are GMOs in organic foods. I think it was an
4 additional step to try to help add some rigor to
5 a process that, hopefully, would give the consumer
6 some confidence that people were doing something
7 to try to ensure that GMOs were not getting into
8 their food unintentionally.

9 CHAIR RICHARDSON: Thank you.

10 Sorry. Colehour?

11 MEMBER BONDERA: Thank you, Bob. I'm
12 sorry to hammer this point, but I just want to
13 understand it because I am trying to figure out the
14 implications or where to go with it.

15 In terms of something, for example, the
16 non-GMO Project -- and I'm not mentioning that any
17 more than that is what you brought up -- so, is that
18 the kind of strategy that you, maybe not that
19 specific, but is that the kind of thing that you
20 think that the program or the NOSB somehow should
21 be requiring for organic milk?

22 MR. MCGEE: Personal opinion?

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1 MEMBER BONDERA: Well, yes, I'm asking
2 your personal opinion --

3 MR. McGEE: Yes, I do.

4 MEMBER BONDERA: -- and/or what we
5 could do to make that happen.

6 MR. McGEE: Yes, I do. The non-GMO
7 Project is primarily process-oriented. There is
8 not the actual testing, and testing is available.
9 It is possible, and it provides a higher level of
10 confidence to the consumers that what we say we are,
11 we are. So, anything that gives an additional
12 step, additional confidence, I think is worth
13 taking.

14 CHAIR RICHARDSON: Thank you very
15 much.

16 Zak, you're up now. And the next
17 speaker will be Mabell Rivas.

18 MR. WIEGAND: All right. Good
19 evening.

20 My name is Zak Wiegand. I'm the
21 Processing Program Technical Specialist for Oregon
22 Tilth.

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1 I want to thank the NOSB Handling
2 Subcommittee for all their hard work leading up to
3 these meetings.

4 We greatly appreciate the opportunity
5 to share our comments today.

6 And also, happy birthday, Zea. I had
7 to get that in there.

8 Tonight I will touch briefly on a few
9 things that will be discussed this week. We want
10 to provide comments to you from a certifier's
11 perspective and what we see working with certified
12 operations on a daily basis.

13 Oregon Tilth works with over 700
14 certified handlers throughout the U.S. and
15 internationally. These 700 handlers only about
16 half of the certified operations we actually work
17 with. The other half are crop and livestock.

18 While 700 may not seem like a huge
19 number, they cover a lot of ground and produce many
20 products in the marketplace. For some perspective
21 of those 700 operations, roughly 700 operations,
22 they produce over 25,000 certified products. Let

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1 me just say that we work tirelessly every day to
2 ensure that those products meet the strict
3 requirements of the rule.

4 First, I would like to just cover the
5 proposal for glycerin. We support the work that
6 the NOSB has done thus far and the recommendation
7 to remove from 205.605 and add to 205.606. While
8 we remain concerned that there is not enough supply
9 to meet the current demand, we believe that moving
10 to 606 would require organic glycerin, when
11 commercially available, and that will continue to
12 encourage the supply to grow.

13 The updated proposal addresses the
14 concerns regarding the listing motion from the
15 previous meeting and will help to ensure the
16 changes address the complex issue of multiple
17 product production methods of the substance.

18 From a certifier's perspective, this
19 will likely add a little bit more paperwork load
20 both on the certifier as well as the certified
21 handlers regarding commercial availability
22 searches. But we do think that it is important and

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1 a step in the right direction, as the industry
2 continues to grow the supply of organic glycerin.

3 Secondly, I would like to talk about the
4 ancillary substance review. We would like to
5 applaud the Handling Subcommittee for your
6 continued work on this subject and making it to this
7 point.

8 We have submitted written comments for
9 the proposal. While I won't really go into details
10 on that, that written comment, I want to express
11 our concerns about the potentially-static nature
12 of this trial review process.

13 As a certifier, we regularly see new
14 information about all kinds of ingredients when
15 reviewing products. When microorganisms are
16 requested for approval, we regularly see new
17 ancillary substances that we may have not seen
18 before.

19 Because of this, there are really two
20 important points to consider as you guys move
21 forward with this process. First, a thorough and
22 comprehensive review of any ancillary substances

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1 is absolutely critical. But, No. 2, know that many
2 industries are very dynamic and a lot of these
3 producers can change things quickly.

4 So, we heard some suggestions from
5 other commenters today incorporating these
6 reviewed ancillary substances within policy or
7 guidance documents, and we think that is a good
8 idea. The ability for these documents to be
9 updated as necessary would allow for some dynamic
10 changes if and when new materials are used.

11 Thank you very much.

12 CHAIR RICHARDSON: Great. Thank you
13 very much for your comments.

14 Questions?

15 (No response.)

16 No, you're getting off light tonight.

17 MR. WIEGAND: Thank you.

18 CHAIR RICHARDSON: Thank you very
19 much.

20 MR. WIEGAND: Thanks.

21 CHAIR RICHARDSON: The next speaker is
22 Mabell Rivas, followed by Julie Weisman.

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1 MS. RIVAS: Hello. My name is Mabell
2 Rivas. I'm a Senior Reviewer with Quality
3 Assurance International.

4 Thank you for the opportunity to
5 comment this evening.

6 In these comments today I hope to expand
7 on a statistic of information that QAI presented
8 to this Board through our written comment that was
9 submitted at the beginning of this month. That
10 written comment only addressed three specific
11 materials. This additional statistical report
12 that I am presenting today provides information
13 about 50 selected materials on 605 and 606.

14 The idea is to paint a picture of the
15 current use of these substances of QAI clients.
16 QAI is one of the largest certifiers in the U.S.
17 and happens to have a preponderance of food
18 processing clients. So, this report might give
19 you a sense of the materials used by organic
20 industry processors in general.

21 I brought 20 copies which I gave to
22 Michelle to hand over to you.

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1 The tables and graphs in this report
2 show the number of QAI-certified operators using
3 the materials as well as some examples of products
4 that use these materials. For certain materials
5 such as colors, we are providing you with a
6 breakdown of how many clients are using only
7 organic colors, how many clients are using only
8 non-organic colors, as well as those that are using
9 both.

10 When you have a chance to review this
11 document, you will notice that our color statistics
12 show a very colorful picture. It appears that
13 clients are using a great variety of colors, and
14 the numbers of clients using organic colors only,
15 58 percent, is greater than the number of operators
16 using non-organic colors, only 27 percent.
17 Fourteen percent are using both.

18 I should also clarify the statistics we
19 are providing for the use of glycerin. The numbers
20 for glycerin in this report represent primarily
21 clients using glycerin in manufacturing of organic
22 flavors and in some personal care products. This

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1 number does not represent the overall use of
2 glycerin.

3 Here is why: glycerin is very commonly
4 used in the manufacturing of non-organic natural
5 flavors. Clients using natural flavors are
6 indirectly using glycerin, currently allowed for
7 605. These statistics do not include many of our
8 clients using glycerin in this manner.

9 Hopefully, these numbers will help you
10 in your decision process with regards to handling
11 materials. I would like to stress, however, that
12 any particular item from this data is only
13 meaningful as an indication of general trends. It
14 is important to keep in mind that there are
15 sometimes competitive needs that require the use
16 of one ingredient rather than another.

17 For example, with colors, there is more
18 than one hue of red, and one organic red color on
19 the market might not meet the needs of clients
20 needing red. In other words, the technical
21 capability to use a different ingredient isn't
22 always enough to make its use possible.

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1 Another fact to consider is that the
2 substance that is used by very few could still be
3 vital to maintaining an organic offer in the
4 marketplace for that particular product.
5 Tomorrow my colleague, Alexis Randolph, will be
6 elaborating on that, on this concept.

7 The bottom line is that we hope that the
8 NOSB takes this information into account to assist
9 it with the general policymaking and planning, but
10 we also hope that the NOSB is careful not to jump
11 to specific conclusions about materials used based
12 on this summary snapshot of data.

13 Please feel free to ask any questions
14 about this report during this week's meeting or in
15 the coming weeks.

16 Thank you.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 Questions? Tom? And then, Calvin.

20 MEMBER CHAPMAN: I have two questions.
21 One, can you explain how you go about verifying the
22 commercial unavailability of the agricultural

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1 ingredients to allow a client to use a non-organic
2 form?

3 MS. RIVAS: Yes, sure. We have an
4 internal policy. We require that our clients
5 present information and keep records about their
6 efforts to search organic ingredients prior to
7 having to use a non-organic ingredient. And we
8 have a form that we facilitate to them. They don't
9 have to use that, but, yes, that is the way that
10 we verify.

11 MEMBER CHAPMAN: Via a form provided by
12 the handler?

13 MS. RIVAS: Yes, we have a form that is
14 provided to the handlers where they can record the
15 attempts to source organic ingredients, and they
16 have to submit that on a yearly basis to us. But,
17 again, they don't have to use it. It just a way
18 of helping collect that information.

19 MEMBER CHAPMAN: Okay. And then, as a
20 follow-up, I noticed on here your 606 items. I
21 have two quick questions. One, there are some
22 items that are up for sunset that are not on your

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1 list here. Is that, then, saying that your clients
2 are not using those items?

3 MS. RIVAS: No. This is just, like I
4 said in my comments, this is just 50 materials.

5 MEMBER CHAPMAN: Okay.

6 MS. RIVAS: Just for a matter of time,
7 we couldn't collect data for everything.

8 MEMBER CHAPMAN: Yes.

9 MS. RIVAS: But we are going to keep
10 working and finding more data to provide to you.

11 MEMBER CHAPMAN: And then, are some of
12 these numbers that you are reporting organic forms
13 of usage? For example, the whey protein
14 concentrate, you have 43 people using it. Then,
15 they have in parentheses, only a couple of
16 operations are using non-organic.

17 MS. RIVAS: Could you repeat which
18 material were you referring to?

19 MEMBER CHAPMAN: Whey protein
20 concentrate. So, you have 43 items listed on here
21 as snack bars, flavors, protein snacks, spices,
22 cookies. Only a couple of operations are using

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1 non-organic.

2 MS. RIVAS: Correct, yes.

3 MEMBER CHAPMAN: So, of those 43,
4 several of those are organic versions?

5 MS. RIVAS: Correct.

6 MEMBER CHAPMAN: Okay. Is that true
7 for these other items like chia?

8 MS. RIVAS: No, no. For some, we
9 provided you with the specific uses. We are saying
10 these are the clients that are using organic only,
11 and that would be specified there.

12 MEMBER CHAPMAN: Okay.

13 MS. RIVAS: Anything that is, it is
14 just general use. We didn't actually make that
15 distinction for many of the materials, only for a
16 few of those, and you will see it on the report
17 there.

18 MEMBER CHAPMAN: Okay. Thank you.

19 CHAIR RICHARDSON: Calvin?

20 MEMBER WALKER: I just have a quick
21 comment. I definitely appreciate this and it
22 helps. It is very helpful for me. I just hope

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1 that other groups could do the same thing when we
2 begin to look at materials. We are not always on
3 handling and crops in some of the other committees.
4 So, it is good that you were able to show this as
5 far as your group, and maybe other groups can do
6 the same thing or organizations.

7 CHAIR RICHARDSON: Thank you.

8 Any other questions?

9 (No response.)

10 Thank you very much.

11 MS. RIVAS: Thank you.

12 CHAIR RICHARDSON: The next presenter,
13 Julie Weisman, and then, Britt Lundgren.

14 MS. WEISMAN: Actually, I am fortunate
15 in following the previous presenter because it
16 segues very well into some of the comments that I
17 will make.

18 Chairperson Richardson, Members of the
19 National Organic Standards Board, my name is Julie
20 Weisman, and I am speaking today as a
21 representative of Elan and its affiliate,
22 Flavorganics.

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1 Elan is a producer of both organic and
2 non-organic flavor ingredients, including organic
3 glycerin and especially organic vanilla.
4 Flavorganics is a national brand of certified
5 organic flavor products for home use. Along with
6 our affiliate, Natural Flavors, Inc., we have been
7 making certified organic flavors since 1997.

8 I have been an organic consumer for the
9 past 30 years and, as a former NOSB member and a
10 former Chair of the Handling Committee, and a
11 veteran of the very first sunset, I am intimately
12 familiar with all aspects of this issue and the
13 process in which you are now engaged.

14 So, I have come here to say that flavor,
15 non-synthetic, should be relisted on 205.605(a).
16 They should not be allowed to sunset from the
17 National List in 2017.

18 Natural flavors are essential to the
19 continued sales of the majority of organic
20 agricultural products grown or raised in the U.S.,
21 even though they are only present in organic
22 consumer products in concentrations less than

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1 4/10th of a percent.

2 The current listing of flavors on
3 205.605(a) and the low concentrations at which they
4 are used means that there is little requirement for
5 organic flavors to be used, unlike colors that the
6 previous presenter was discussing, which are on
7 606.

8 Yet, there is a demand for certified
9 organic flavors, and my company was among the
10 first, but many others now produce hundreds of
11 certified organic flavors, and more are created
12 every single day.

13 At present, it is my estimate that about
14 20 percent of organic products that use flavors use
15 organic flavors. The other 80 percent use, quote,
16 "NOP-compliant" or flavors non-synthetic. And I
17 believe that, without further regulatory pressure,
18 those other 80 percent are not likely to switch to
19 organic flavors. However, I repeat, I am not
20 making an argument to let flavors sunset. Because
21 if that were to happen, I believe that the demand
22 for a substantial proportion of organic products

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1 that currently exist in the U.S. market would
2 dissipate very rapidly, and this would occur for
3 several reasons.

4 First, there would not be a sufficient
5 supply of organic raw materials needed to replace
6 most of the NOP-compliant flavors currently in use,
7 the ingredients in those. Secondly, most
8 certified organic flavors rely to a small degree
9 in volume, but to a very large degree in taste
10 impact on flavors non-synthetic. If those flavors
11 were allowed to sunset, many of the certified
12 organic flavors currently in use would no longer
13 impart the taste consumers expect. And
14 consequently, demand would drop for those organic
15 products. So, simply letting flavors sunset on
16 2017 would actually be a step backward for organic.

17 I am also not making an argument for
18 listing flavors non-synthetic or any classes or
19 types of flavors on 606, even though I love 606.
20 I have personally been involved in two different
21 working groups which attempted to advise the NOSB
22 and the NOP on how to divide this broad category,

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1 and I believe that, practically speaking, it can't
2 be done, especially given the load you already have
3 on your sunset reviews and petitions.

4 Yet, I do believe that commercial
5 availability should apply to apply to all flavors
6 covered by the current listing on 605(a), and I have
7 come to believe that the most effective way to do
8 that is through adding to the annotation of the
9 current listing.

10 I understand that annotation change
11 cannot be part of the NOSB sunset recommendation,
12 and that is why I strongly support the petition
13 submitted by the Organic Trade Association for
14 making just such a change to the annotation of
15 flavors. In addition, I strongly urge the
16 Handling Committee to review the OTA's position and
17 that a recommendation by the full Board be made
18 ahead of the 2017 sunset.

19 (Signal that time has expired.)

20 I would like to welcome the new members.
21 Glad you have arrived with your sleeves rolled up,
22 and I really appreciate the work that all of you

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1 are doing and your commitment to organic
2 agriculture and commerce.

3 CHAIR RICHARDSON: Thank you, Julie.

4 Questions? Tom?

5 MEMBER CHAPMAN: So, you touched on the
6 use of natural flavors on the National List and
7 organic flavors. As a producer of organic
8 flavors -- I am not going to cast you as an expert
9 on flavors in general -- what percentage of organic
10 flavors available on the market would you assume
11 use that method?

12 MS. WEISMAN: I'm not sure if I
13 understand what you mean by "that method".

14 MEMBER CHAPMAN: The portion of the
15 flavoring component in an organic flavor that is
16 from non-organic sources via the non-synthetic
17 flavor allowance.

18 MS. WEISMAN: I am going to guess that
19 compounded flavors, which I'm distinguishing from
20 things like extracts, distillates, and isolates,
21 compounded flavors I would say do rely, all of them,
22 about 2 percent of that, I would say, about, give

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1 or take, depending on the flavor, relies on the use
2 of flavors non-synthetic, in addition to whatever
3 purees, organic purees, of the named ingredient are
4 being used.

5 MEMBER CHAPMAN: Thank you.

6 CHAIR RICHARDSON: Zea?

7 MEMBER SONNABEND: Thank you, Julie,
8 for making a very confusing subject a little bit
9 more clear.

10 We haven't taken up fully the petition
11 from OTA. And so, I don't want to jump the gun on
12 this. But could you explain why you think that is
13 sufficient to push the needle towards more use of
14 organic rather than just being sort of a token, you
15 know, lip service to that effort?

16 MS. WEISMAN: I am going to refer back
17 to the comment made by the presenter that preceded
18 me. She was talking about how for colors, which are
19 a 606 item -- I may get the exact numbers
20 wrong -- but it was something over half of the
21 organic products that are in the marketplace, she
22 has presented information, are using organic

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1 colors.

2 I think something like 27 percent are
3 relying on -- it may not, but, whereas, for flavors,
4 where there is currently no commercial
5 availability criteria being applied, it is a much
6 smaller percentage of organic flavors. I mean, to
7 me, it is astounding that, without commercial
8 availability requirements, that there has been as
9 much of a demand as there has been. I mean, it has
10 been great. It has been great for my companies.

11 And so, I think that is the difference.
12 I think that is a very good demonstration of the
13 difference between having commercial availability
14 criteria and not having them.

15 CHAIR RICHARDSON: Great. Thank you
16 very much.

17 We have up now Britt Lundgren, and the
18 next speaker is Jerome Rigot.

19 MS. LUNDGREN: Good evening, and thank
20 you for this opportunity to comment.

21 My name is Britt Lundgren. I'm the
22 Director of Organic and Sustainable Agriculture at

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1 Stonyfield, an organic yogurt company.

2 I have submitted detailed written
3 comments, and I want to focus this evening on just
4 two things, the proposal on ancillary substances
5 and microorganisms and the 2017 sunset review of
6 dairy cultures.

7 I would like to start by emphasizing
8 that Stonyfield is supportive of the NOSB's efforts
9 to conduct a more thorough review of ancillary
10 substances because we believe this will improve the
11 transparency of the list itself and provide further
12 assurance to consumers that they can trust the
13 organic seal. We truly appreciate the hard work
14 of the NOSB on this topic.

15 I want to say upfront that we are not
16 ready to support the Handling Subcommittee's
17 suggestion that dairy cultures could be removed
18 from the list and included with microorganisms.
19 While dairy cultures are, indeed, a microorganism,
20 it is very difficult for us to evaluate the removal
21 of the separate listing until we have a better
22 understanding of how the review of ancillary

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1 substances is going to work.

2 That said, I want to focus on some of
3 the challenges that we had with understanding the
4 proposal on ancillary substances in
5 microorganisms.

6 First, the definition of ancillary
7 substances needs to be improved. For example, it
8 is clearly stated that an ancillary substance is
9 something that is added but not removed. Yet, in
10 the proposal on microorganisms, NOSB states that
11 they, quote, "primarily include the growth media
12 used to produce the microorganism". Our
13 understanding is that in the case of dairy cultures
14 at least, which ostensibly are a microorganism, the
15 growth media is removed because it is consumed by
16 the culture and, then, the cells are washed or
17 purified. So, if it is removed, that would mean
18 that it doesn't need to be considered in this
19 review. So, there is some confusion like that that
20 really needs to be cleared up for us to understand
21 how to respond to this proposal.

22 We recommend that NOP develop a formal

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1 affidavit or declaration that can be used across
2 the supply chain to consistently communicate and
3 collect the information that is needed to assess
4 compliance. Until the definition is clarified, it
5 is hard for us to know if we are asking our
6 ingredient suppliers for the right information.
7 This makes it hard to feel confident we have all
8 of the information that we need at the time of this
9 review, which leads to a question:

10 If an ancillary substance isn't listed
11 in the review, does that mean that we have to wait
12 until the next sunset review process to make sure
13 it is acceptable to use it? And where will the
14 information about which ancillary substances have
15 been reviewed and found to be acceptable be kept?

16 This leads us to three recommendations.

17 First, whenever possible, NOSB should
18 approve ancillary substances by category and
19 supplement this with individual listings, rather
20 than relying on approving each ancillary substance
21 individually.

22 Second, we urge NOSB to work closely

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1 with NOP to create a clear and consistent format
2 for communicating about which ancillary substances
3 or categories of ancillary substances are allowed
4 for use in substances on the National List.

5 And third, we urge NOSB and NOP to work
6 together to identify a way that ancillary
7 substances can be reviewed and approved in between
8 sunset reviews of an ingredient, so that product
9 innovation is not put on hold for five years simply
10 because something was overlooked during this
11 initial sunset review process.

12 Lastly, I would like to address the
13 NOSB's motion that organic sources for ancillary
14 substances must be used when available. In
15 general, Stonyfield is supportive of the
16 application of the commercial availability
17 principle to items on the National List whenever
18 possible because it will help promote increased use
19 of organic ingredients.

20 However, in this instance, the
21 recommendation seems like it will have no value in
22 terms of increasing the demand for organic

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1 ingredients.

2 (Signal that time has expired.)

3 CHAIR RICHARDSON: Do you want to
4 finish your sentence, Britt?

5 MS. LUNDGREN: Well, I think I
6 basically did. I don't think it will have a value
7 in terms of increasing the demand for organic
8 ingredients in a meaningful way.

9 CHAIR RICHARDSON: Thank you.

10 MS. LUNDGREN: I'm happy to take
11 questions.

12 CHAIR RICHARDSON: Questions? Zea?

13 MEMBER SONNABEND: Thank you very much
14 for those comments, and you will be hearing more
15 about this in our presentation tomorrow, which will
16 answer some, but maybe not all, of your points.

17 Although I did want to change the
18 subject just a wee bit because we are also in the
19 2017 sunset evaluating whey protein concentrate on
20 606. And we saw that Stonyfield was a petitioner
21 of this.

22 And so, you did not put in a comment

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1 about the availability of organic whey protein
2 concentrate. And so, we are just curious of
3 whether you have found a source of organic whey
4 protein concentrate and, if not, what the unique
5 functionality is of the non-organic form for the
6 products that you use it in.

7 MS. LUNDGREN: I am going to have to
8 apologize, Zea. I don't have the answer to that
9 question, but I can certainly reach out to the rest
10 of my company and find out and get back to you.

11 MEMBER SONNABEND: Thank you.

12 CHAIR RICHARDSON: Very good.

13 Any other questions for Britt?

14 (No response.)

15 No? Great. Thanks very much.

16 MS. LUNDGREN: Thanks.

17 CHAIR RICHARDSON: The next speaker is
18 Jerome Rigot, and the final speaker after that will
19 be Harriet Behar.

20 MR. RIGOT: My name is Jerome Rigot. I
21 have a PhD in agricultural and volatile chemistry
22 with a strong background in volatile toxicology.

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1 I work for the Cornucopia Institute as a Policy
2 Analyst.

3 I would like to comment on the 2017
4 sunset of colors derived from agricultural
5 products. Colors are added to food products to
6 enhance appearance and attractiveness of the food.

7 The Cornucopia Institute opposed the
8 relisting of color on the National List based on
9 the likelihood that they could contain significant
10 levels of pesticide residues and because most, if
11 not all, are available in organic form. Several
12 of the sources of any fruits and vegetables tried
13 to use as color are available as juice concentrate.
14 In addition, a web search found several suppliers
15 of organic colors.

16 The use of compounds derived from
17 conventional agriculture is not compatible with
18 the system of sustainable agriculture. However,
19 a past recommendation by the Board has not taken
20 into account the impact of chemical-intensive
21 agriculture from which colors are derived.

22 Indeed, in its August 2010

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1 recommendation for sunset review of colors, the
2 NOSB stated, "A review of the original petition and
3 recommendation in historical documents and public
4 comments does not reveal unacceptable risk to the
5 environment, human and animal health, as the result
6 of the use of manufacture of these colors."

7 Interestingly, in 2010, it had already
8 been established that the chemical intensity of
9 agriculture led to unacceptable risk to the
10 environment, human or animal health. Indeed, in
11 1962, Rachel Carson's Silent Spring inspired a
12 national awareness about pesticides, which
13 eventually led to the establishment of the Organic
14 Foods Production Act for the purpose of
15 guaranteeing a safe supply of food produced with
16 minimal impact to human and environmental health.

17 Thus, it is irony that the NOSB Board
18 states that no unacceptable risk as a result of the
19 use of manufacture of these colors was found. What
20 about the actual amount of pesticide residues in
21 colors?

22 The 2007 petition by the manufacturer

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1 of the commercially-grown coloring stated that,
2 "Because natural colors are concentrated and very
3 strong, they are used in organic food and beverage
4 products at very low levels."

5 This would imply, for example, that a
6 huge quantity of grape skins are needed in order
7 to obtain a small amount of color extract. Thus,
8 the pesticide residues and definitely the copper
9 residues -- copper, as you know, is extensively use
10 in the wine industry to control fungal
11 disease -- would end up being highly concentrated.
12 So, a very low level of color may actually contain
13 a toxic amount of pesticide residues with the
14 expected serious toxicological consequences.

15 It appears that the NOSB has never
16 considered the implication of concentrating
17 extract from commercially-grown plants and the
18 real possibility that high levels of pesticide
19 residues may exist in concentrated fruit or
20 vegetable extract.

21 A logical consideration, fully
22 supported by the industry's own admission as to the

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1 concentration natural colorants, this possibility
2 needs to be taken seriously and fully investigated.
3 There is no record of applicable testing having
4 been performed. Meanwhile, it would make sense to
5 err on the side of caution and allow colors to
6 sunset.

7 In conclusion, the Cornucopia
8 Institute opposed the relisting of colors to the
9 National List under 205.606.

10 Thank you for allowing me to present
11 testimony. I will answer any questions.

12 CHAIR RICHARDSON: Thank you.

13 Questions?

14 (No response.)

15 No? You're getting off lightly, too,
16 tonight. Thank you very much.

17 And last, but definitely not least, Ms.
18 Harriet Behar.

19 MS. BEHAR: Hi. I'm Harriet Behar.
20 I've been a certified organic farmer since 1989,
21 and I am currently the Senior Organic Specialist
22 with MOSES.

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1 And I want to talk about getting serious
2 about taking ingredients off of 205.606. When the
3 organic regulation was implemented in 2012, there
4 were quite a few ingredients that were not
5 considered commercial available as organic.
6 However, organic production worldwide has expanded
7 to the point that just about anything that is grown
8 or produced non-organically should be able to be
9 produced organically.

10 As the number and toxicity of
11 herbicides, pesticides, and fungicides used on
12 non-organic crops increases, it becomes even more
13 important that this list of non-organic
14 ingredients allowed in organic foods shrinks at a
15 much more rapid pace than what we are currently
16 seeing.

17 As an organic farmer advocate, I am also
18 concerned that these farmers are not reaping the
19 benefits of selling more organic agricultural
20 products into the marketplace. The National
21 Organic Program and the Organic Standards Board
22 must implement systems that will result in a more

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1 aggressive development of organic equivalence for
2 the non-organic ingredients on 606.

3 It has been said that listing an item
4 on 205.606 is an advertisement to manufacturers
5 that there is a market for an organic version, but
6 this is somewhat naive. Organic manufacturers who
7 are now allowed to purchase and use the
8 lower-price, non-organic ingredients need to do
9 more to stimulate the production of these
10 ingredients as organic, more than just being ready
11 to buy. Most processors will not take the chance
12 on making a new product without having a clear
13 volume, a contract, a price, and a solid buyer.

14 There is organic celery. What is the
15 barrier to producing organic celery powder? I
16 know many people growing organic elderberries.
17 Are the buyers of organic elderberry juice color
18 working with color manufacturers to source these
19 organic elderberries?

20 It is time to provide protocols similar
21 to what we have for commercial availability for
22 seed to petitioners for new items to add to 205.606

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1 as well as items up for renewal under the sunset
2 review process.

3 All barriers to the production of an
4 organic alternative must be comprehensively
5 reviewed by the NOSB. Only after it is clearly
6 shown that the barriers are insurmountable should
7 the non-organic agricultural ingredient be allowed
8 on 606.

9 There could be minimum production runs
10 in order for a manufacturer to consider the
11 production of organic equivalent, making it
12 difficult to source in small amounts. However, if
13 handlers worked with others and even their
14 competition to consolidate orders to meet the
15 minimum run requirements, it may be possible, then,
16 to produce that same ingredient organically.
17 Another roadblock might the need for contracts.

18 But, unless growers know there is a
19 market for a particular crop, they will probably
20 not grow it. A consistent checklist should be
21 developed to help the NOSB determine not only if
22 the ingredients are available as organic, but also

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1 identify the stumbling blocks to producing it
2 organically. Examples of questions for this
3 checklist were included in the National Organic
4 Coalition comments.

5 CHAIR RICHARDSON: Thank you, Harriet.

6 Questions? Comments?

7 (No response.)

8 MS. BEHAR: Dumbfounded, I can see.

9 (Laughter.)

10 CHAIR RICHARDSON: All right. No
11 questions for you.

12 MS. BEHAR: Okay.

13 CHAIR RICHARDSON: Thank you very
14 much.

15 And I would recess the meeting for
16 today. We will meet here again in this room at 8:30
17 tomorrow for the next day of our marathon meeting.

18 (Whereupon, at 6:34 p.m., the meeting
19 for the day was recessed, to reconvene the
20 following day, Tuesday, April 28, 2015, at 8:30
21 a.m.)

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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2015 MEETING

+ + + + +

TUESDAY
APRIL 28, 2015

+ + + + +

The Board met in the Ballroom, Salons
A-D, La Jolla Marriott, La Jolla, California, at
8:30 a.m., Jean Richardson, Chair, presiding.
PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
PAULA DANIELS
LISA de LIMA
NICK MARAVELL
ZEA SONNABEND
ROBERT "MAC" STONE
ASHLEY SWAFFAR
JENNIFER TAYLOR
FRANCIS THICKE
C. REUBEN WALKER

ALSO PRESENT

MICHELLE ARSENAULT, Advisory Board Specialist

LISA BRINES, List Manager, National Organic
Program

EMILY BROWN ROSEN, Technical Support

MILES McEVOY, Designated Federal Officer,
Agricultural Marketing Service, Deputy
Administrator

JESSICA WALDEN, Materials Specialist

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Management Advisor, Organic Consultant	
and former Member and Chair	
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P-R-O-C-E-E-D-I-N-G-S

8:30 a.m.

CHAIR RICHARDSON: Well, good morning, everybody. We have had an interesting last 10 hours, which I'll tell you about in a minute.

But, first of all, I would like to take the opportunity of introducing Mac Stone to you. Mac came a bit late yesterday, but I would like him now, if he would, to introduce himself.

MEMBER STONE: Thank you, Jean.

I want to apologize, Madam Chair, for being a little bit late. I was espousing the gospel of organic. At our farm we had our CSA open house. So, we were able to demonstrate to about 300 families, lots of children, the value of organic to them as individuals and the farm to us and the broader community. So, my wife said, "That's great. You get to go to California. You can leave as soon as the field day is over." So, I got here as quick as I could.

But thank you for that.

And on organic, I was speaking with

1 Lisa just now, that helping our customers,
2 helping the broader community understand the
3 value of organic is a pretty important topic at
4 our farm and our farmers' market and our
5 newsletters. Hopefully, some great stuff will
6 come out of this meeting and we will have more to
7 talk about.

8 So, thank you.

9 CHAIR RICHARDSON: Thank you, Mac.

10 I also have to let you know that
11 Harold Austin, immediately following the
12 exhausting marathon of yesterday, unfortunately,
13 slipped and fell and broke his hip, and is due to
14 have surgery this evening at five o'clock. And
15 so, he will not be with us for the rest of the
16 meeting.

17 And so, filling in for him, even
18 though it is his very, very first meeting, Tom
19 Chapman gets to be Chair of Handling and sitting
20 up here next to me. So, trial by fire. We have
21 to be thoughtful when we go through today's
22 activities.

1 And I would ask all of you to hold
2 Harold in your hearts during the day. I know he
3 is in a lot of pain. John Foster is going over
4 to visit him this morning. And so, just think of
5 him and send him your best wishes or prayers,
6 however you feel. I know it would make a big
7 difference to him, and he is devastated, of
8 course, not to be able to be here.

9 So, moving on with today's agenda, we
10 have public comments this morning. The first
11 person up is Dan Giacomini, and he will be
12 followed by Jim Winter.

13 MR. GIACOMINI: Thank you.

14 My name is Daniel Giacomini. I'm an
15 animal nutritionist, dairy farm management
16 advisor, and organic consultant. I was a former
17 member of the NOSB, having served on the
18 Livestock Committee, Chairperson of the Materials
19 Committee, and Board Chairperson.

20 I commend the NOP for the recently-
21 published policy on nanotechnology, noting that
22 it does represent the intent of the NOSB document

1 past. I encourage the NOP to encourage working
2 on past NOSB livestock recommendations regarding
3 injectables, preventable treatments, vaccines,
4 and the complete slate of animal welfare issues
5 for ruminants, non-ruminants, and aquaculture.

6 My main comment today is in support of
7 the livestock recommendation to add acidified
8 sodium chlorite to the National List, Section
9 603, as a teat dip in organic livestock
10 production. One year ago at the meeting in San
11 Antonio, commenters like myself in support of
12 this substance described it as a valuable tool
13 needed in the toolbox of organic livestock
14 farmers. We also warned of a problematic issue
15 with the surfactant excipient in almost all
16 iodine teat dips on the market.

17 Since that time, the dairy industry
18 producers and processors together acted to remove
19 that problematic substance from iodine teat dips.
20 The current result of these reformulated products
21 has been increasing reports from dairy farmers of
22 chapped teat ends and other problems with teat

1 skin conditioning and an increase in the
2 indicators of developing cases of mastitis. In
3 the past month, I have heard from at least a
4 dozen dairy farmers that are all seeing this
5 situation develop on their farm.

6 Today, adding ASC to 603 for teat dips
7 has changed from adding an additional tool to
8 fight mastitis in the messy, dirty biological
9 system of a dairy farm to being a necessary aid
10 needed to alleviate animal pain and suffering in
11 a situation of declining animal welfare and a
12 decline in the quality of milk and milk products
13 headed to our customer.

14 ASC is a valuable tool in minimizing
15 the needed use of antibiotics on sick and
16 suffering organic livestock. The Board added ASC
17 to 605 for handling in 2009 after determining it
18 met all criteria requirements and they found the
19 substance as safe, effective, and clean.

20 ASC is not included in the chlorine
21 materials listing on 605. This technology is
22 that different. There is no worker exposure to

1 volatile chlorine during use. The end-products
2 in the environment are a weak acid and table
3 salt. This is not your grandmother's chlorine
4 bleach. This is clean and safe 21st century
5 technology, the kind of technology that our
6 industry should be supporting.

7 In regard to producers' support,
8 submitted petitions have been signed by organic
9 dairy farm producers, dairy processors,
10 university organic dairy farm academics, dairy
11 cattle veterinarians, including Dr. Hugh
12 Karreman, one of the top organic vets in the
13 U.S., and consumers, all supporting the listing
14 of this substance.

15 Additionally, I would like to bring to
16 your attention written public comments submitted
17 by Mr. Kevin Engelbert, organic dairy farmer and
18 former NOSB member. With all respect to the
19 sincere passion Kevin brings to our industry, he
20 rightly identifies himself as "the Board's Mr.
21 No" when it came to anything but the most
22 necessary substances being added to the National

1 List. Kevin's support for adding this substance
2 to the National List is without hesitation. And
3 if you have not read that comment, I urge you to
4 do so.

5 I urge the Board to support the
6 recommendation on the Livestock Subcommittee to
7 vote and add ASC to the National List, Section
8 603, for use as a teat dip.

9 Thank you.

10 CHAIR RICHARDSON: Thank you, Dan.

11 Are there questions?

12 I am actually the lead person on that
13 one. So, I have to thank you for your concise
14 and clear report. It is much appreciated. Thank
15 you.

16 MR. GIACOMINI: Thank you.

17 CHAIR RICHARDSON: Oh, sorry, Mac?

18 MEMBER STONE: We hear a lot -- I am
19 going to shift gears to the methionine. And if
20 you are involved in the Livestock Committee, we
21 hear about the intent of the Board and the step-
22 down process. Then, we hear about animal welfare

1 and how that number was arrived at when they
2 jumped the number down from 4 to 2, or whatever.

3 Can you give us a brief sort of how
4 did that happen and what was the conversation
5 around that? Because some of us want to respect
6 the previous decisions of the Board, but we are
7 given new information. So, we are kind of
8 balancing information versus history here.

9 MR. GIACOMINI: Well, I believe in the
10 five years I was on the Board we addressed
11 methionine three times because of the timeout,
12 the drop-dead dates for the previous
13 recommendations.

14 It is always a very contentious issue.
15 There are a number from the portion of the
16 industry that wants to create, essentially, an
17 abnormal diet for omnivores, of making it a
18 vegetarian diet, and the constraints of that
19 within the rule, and also recognizing the
20 different aspects of what is truly required in
21 the rule and what is not.

22 In dealing with the Methionine Task

1 Force, it was frustrating at times, and I am sure
2 I had it on the public record where their target
3 would tend to change a little bit. One time it
4 was methionine grams per day. Another time it
5 was methionine/cysteine combined. Another time
6 it was pounds per ton in the feed.

7 That tended to change the target and
8 make it confusing for some members. But, in the
9 end, in trying to deal with all stakeholders,
10 recognizing that as much as everybody would like,
11 scientific support may not ever allow to totally
12 get rid of methionine if we are going to try to
13 be a vegetarian diet. That is debatable and it
14 is yet to be determined.

15 But we wanted to put a pinch on the
16 industry as much as possible, and that was the
17 intent, was to try to put a pinch, to see if we
18 could get things to really move. If there is an
19 issue with animal welfare, we did not want to
20 create a problem with animal welfare, but if
21 there was one, come back and tell the Board that
22 we need to back the fence up a little bit.

1 That's what we were trying to do.

2 Members on the Board did informal
3 surveys with feed mills and other people that
4 they could get in contact with. Those were some
5 of the places where we came up with numbers.
6 But, in an industry like the poultry feed mill,
7 you publish that a feed mill says they only have
8 to put in so much methionine, and the rest of the
9 industry might run away from them if they wanted
10 more.

11 So, unfortunately, it needed to be a
12 confidential situation, and that was the only way
13 we got the information that we did, was telling
14 them that we wouldn't say who we talked to. But
15 we did intend to put a fence around them and we
16 did intend to put a little pinch, and if there
17 was a problem, to come back to the Board.

18 The one thing that we, I think, when
19 I was on, that we always tried relying on was
20 respect the process and have confidence in the
21 process. And the process is the Board, your
22 Board, this Board of 15 members looking at

1 something from both the historical perspective
2 and the new information, and that vast, vast
3 majority of the time trusting the process and
4 this Board is going to get it right.

5 CHAIR RICHARDSON: Thank you, Dan.

6 MR. GIACOMINI: Thank you.

7 CHAIR RICHARDSON: Next up is Jim
8 Winter, followed by Alesia Bock.

9 MR. WINTER: Good morning.

10 It's great to be here again, Madam
11 Chairman.

12 I also have a list of some names of
13 people supporting the ASC use in teat dips from
14 both Colorado and Oregon dairymen and citizens
15 that did not make the original deadline.

16 My name is Jim Winter. I manage the
17 North American dairy farm business for Ecolab out
18 of St. Paul, Minnesota, and I am Past President
19 of the National Mastitis Council.

20 The objective of my comments this
21 morning is to support the approval of the use of
22 acidified sodium chlorite as an active in teat

1 dips used in organic milk production. I have
2 testified in favor in ASC chemistry, acidified
3 sodium chlorite, at the last two NOSB meetings,
4 pointing to the fact that it has a long, safe
5 history of over 20 years being used as a primary
6 active in teat dips as well as currently being
7 allowed by the NOP to be used as a direct
8 antimicrobial treatment in organic food
9 production.

10 Furthermore, as currently formulated,
11 acidified sodium chlorite teat dips do not
12 contain nonylphenol ethoxylates, which is a
13 surfactant complexing agent that Dan mentioned in
14 his earlier testimony. We commonly call them
15 NPEs. Removing potential NPE residues from whey
16 protein as well as milk powder is currently be
17 mandated by the dairy processing industry in not
18 only the U.S., but around the world.

19 During my past testimony, as well as
20 in the public comments submitted to the NOSB,
21 there have been continued questions raised
22 concerning potential chlorite residue in milk.

1 Extended herd studies have been run using
2 acidified sodium chlorite teat dips where milk
3 samples were tested for chlorite residues and no
4 detectable residues were found in these studies.

5 To support this statement, a Cornell
6 University herd study was run where an ASC teat
7 dip was used pre- and post-milking, with milk
8 samples collected at each milking and, then,
9 tested for potential chlorite residue, with none
10 found.

11 Furthermore, a research paper
12 presented at the National Mastitis Council showed
13 rapid degradation of chlorite when observed in
14 milk. It further stated that chlorite degrades
15 as an oxidant to chloride salt, which is commonly
16 found in milk.

17 Potential workplace exposure has also
18 been brought up during previous NOSB discussions.
19 I presented information back to the NOP related
20 to the fact that information has been presented
21 from a non-farm study performed in order to
22 determine the chlorine-to-oxide residue. And

1 chlorine to oxide is when you mix sodium chlorite
2 and lactic acid, you do get some bloom of
3 chlorine to oxide which is one of the germicidal
4 agents in the ASC technology.

5 So, this particular test was done to
6 determine the chlorine-to-oxide exposure levels
7 generated using an acidified sodium chlorite teat
8 dip, 4XLA, which happens to be a product produced
9 by Ecolab. In this study, the detection device
10 had to be within four inches, that close, of the
11 mixed product to exceed any detection limits on
12 chlorine to oxide. When mixing a teat dip into a
13 teat dip cup or a holding jug, the mixed product
14 would be approximately an arm's length from the
15 face of the individual doing the mixing.

16 One of the other areas of concern
17 which was brought up earlier, options for teat
18 dips to be used by organic milk producers are
19 more limited today than ever with the movement
20 away from iodine teat dips containing NPE. I
21 don't know whether you know it or not, but in
22 California right now, as of the first of the

1 year, most all of the processors will not accept
2 any milk that may have NPE residue in it.

3 With the movement away from iodine
4 teat dips containing NPE as a primary complexing
5 agent, the manufacturers of teat dips have had to
6 reformulate the iodine teat dips using
7 alternative complexing agents. This has not been
8 an easy task, with many of the new non-NPE
9 iodines providing some level of performance as
10 the previous iodine dips.

11 (Signal that time has expired.)

12 In essence, what Dan said, they don't
13 seem to be working as well. Because of these
14 performance issues, many non-organic producers
15 have moved away from iodine-based dips. The
16 problem we have with organic producers: they
17 don't have a lot of options.

18 With that, I'll stop my comments and
19 ask for any questions.

20 CHAIR RICHARDSON: Questions?

21 (No response.)

22 Great. Thank you.

1 MR. WINTER: Thank you very much.

2 CHAIR RICHARDSON: The next speaker is
3 Alesia Bock, followed by Charlotte Vallaeys.

4 MS. BOCK: Hello. Thank you for the
5 opportunity to speak today, and thank you to the
6 NOSB for all you do.

7 My name is Alesia Bock. I'm the owner
8 of Agrisystems International, a small consulting
9 group that assists clients of the organic
10 certification process as well as other third-
11 party sustainable labeling claims. I have
12 personally been in the food industry in a quality
13 regulatory role for over 25 years.

14 First, I wanted to make some general
15 comments for the Board. I want to thank you for
16 the substantial amount of work that you guys do.
17 Taking the time to review all these technical
18 materials against the NOP and OFPA regulations,
19 balancing the concerns of the different
20 stakeholder groups such consumers, producers, et
21 cetera, it is not easy, not to be taken lightly,
22 and it is critical to the success of this

1 program.

2 Our clients run the gamut from growers
3 to processors/handlers, from very small to very
4 large. But they all believe in the integrity of
5 the organic seal. They appreciate the NOP
6 framework in which to work and formulate their
7 products, and they have committed to the
8 certification process.

9 I have personally worked with FDA and
10 USDA regulations in my career, and I can tell
11 you, in my opinion, the organic certification
12 process is the most robust, transparent system in
13 the food industry. It is unique and it is the
14 only food regulation that covers ag practices
15 from farm to table.

16 So, thanks again for keeping the
17 organic regulations strong, while recognizing the
18 needs of growers and processors to have the tools
19 they need if and when organic options are not
20 currently available. This is necessary to meet
21 the growing consumer demand for organic products.
22 I believe we need a balanced, multidisciplinary

1 approach, keeping the big picture in mind.

2 Specifically, I want to voice my
3 support for acidified sodium chlorite, petitioned
4 for use in livestock as a teat dip. From what I
5 have heard over the last several meetings, I
6 believe there is a need for organic producers to
7 have this tool in their toolbox to help avoid
8 bacterial resistance, to keep herds healthy and
9 product quality high. There were a number of
10 signatures submitted over the last two meetings
11 to support this.

12 I also agree with the speaker
13 yesterday who said animal welfare tools must be
14 prioritized and not delayed. I think ASC and
15 methionine are both examples of this. These are
16 necessary tools that must be made available for
17 organic producers to maintain animal health until
18 proven organic alternatives become available.

19 Thank you again for your time.

20 CHAIR RICHARDSON: Thank you.

21 Questions?

22 (No response.)

1 Thank you very much.

2 The next speaker is Charlotte
3 Vallaeys, and she will be followed by Cheryl Van
4 Dyne.

5 MS. VALLAEYS: Good morning.

6 My name is Charlotte Vallaeys. I'm
7 with Consumer Reports Food Safety and
8 Sustainability Center.

9 Thank you for your hard work and
10 welcome to the new Board members.

11 Yesterday you heard from my colleagues
12 Urvashi Rangan and Aimee Simpson who provided a
13 legal analysis of the need to ensure that all
14 materials on the National List meet all criteria
15 in OFPA.

16 We don't believe in a blanket
17 prohibition on synthetics or non-organic
18 materials in organic foods. That is not what the
19 law states. The focus of our concern is not
20 about the length of the list, but that all
21 materials are carefully reviewed, ensuring all
22 OFPA criteria are met for every material, both

1 when it is initially petitioned and during its
2 sunset review.

3 We thank the Handling Subcommittee for
4 your careful evaluation of the petitions and for
5 your determination that they failed to meet all
6 OFPA criteria. We agree and urge the Board to
7 reject whole algal flour, triethyl citrate, and
8 PGME.

9 There are clearly too many sunset
10 materials to cover in four minutes and too many
11 to cover even in a 27-day comment period. We
12 plan to continue to research these materials, and
13 if human health or environmental concerns come to
14 light, we plan to present these findings and
15 would expect the NOSB to consider them prior to
16 the vote at the next meeting.

17 We urge you to consider the latest
18 scientific research on negative human health
19 impacts from the consumption of phosphate food
20 additives. There is recent research concerning
21 human health that you really should consider,
22 including concerns with long-term exposure and

1 kidney failure, cardiovascular disease, and
2 osteoporosis.

3 There is widespread use of these
4 additives in processed foods, and that raises
5 serious concerns. Organic processed foods like
6 mac and cheese, yogurt in tubes, and egg whites
7 appear side by side on store shelves with
8 identical products that do not contain them,
9 suggesting they are also not all essential.

10 The listing for nutrient vitamins and
11 minerals should sunset, and we urge you to read
12 our written comments for a detailed explanation
13 and for some history. Only synthetic nutrients
14 that are required by the FDA to be in the food
15 should be considered essential and allowed.

16 Thank you for your work on ancillary
17 substances. Gathering this information has been
18 a lot of work and it has improved transparency,
19 and we appreciate that, and it is a step in the
20 right direction.

21 But we continue to believe that OFPA
22 requires that all ingredients that end up in

1 organic foods must either be organic or on the
2 National List. Inulin and fructooligosaccharides
3 should be removed. These provide a prime example
4 of 606 materials that were not held to the OFPA
5 criteria when they were first reviewed and
6 approved.

7 There is a difference between
8 ingredients that are necessary as OFPA requires
9 and ingredients that are useful. Yes, these
10 types of conventionally-grown and highly-
11 processed ingredients are useful marketing tools,
12 but useful marketing tools are not essential. It
13 is entirely possible to make yogurt, milk, and
14 bread without these ingredients. Fish oil is
15 another example of a useful marketing tool that
16 is not essential.

17 We also urge you to consider the
18 environmental impacts of growing the crops that
19 end up on 606, especially for all the colors.
20 Those crops are grown conventionally, likely with
21 harmful toxic pesticides, and fail to meet the
22 OFPA criteria that there should be no harm to the

1 environments and that it should be compatible
2 with organic production.

3 Non-organic xanthan gum should be
4 removed. Organic gums are available. So, the
5 highly-processed, bacterial xanthan gum is not
6 essential to organic production. Again, it may
7 be useful, but not essential.

8 (Signal that time has expired.)

9 Thank you.

10 CHAIR RICHARDSON: Thank you,
11 Charlotte.

12 Questions? Paula?

13 MEMBER DANIELS: Good morning.

14 Could you explain your opposition to
15 whole algal flour? What is the basis of that
16 one?

17 MS. VALLAEYS: Yes, the basis --

18 MEMBER DANIELS: I'm just trying to
19 learn the product.

20 MS. VALLAEYS: Consumers expect
21 organic foods to have organic ingredients. And
22 so, for this, it has been petitioned as an

1 alternative to food, like butter, eggs. And we
2 do believe that for vegan consumers, for example,
3 that there are organic vegan foods available and
4 that this is not essential to producing organic
5 foods.

6 MEMBER DANIELS: But do you have any
7 concerns about its manufacturing process or it as
8 a constituent in food itself?

9 MS. VALLAEYS: Well, the manufacturing
10 process as far as we know is not, the production
11 of it is not organic. So, we certainly would
12 encourage them to look into making it organic and
13 making the process for producing it organic.

14 MEMBER DANIELS: Okay. Thank you.

15 CHAIR RICHARDSON: Tom?

16 MEMBER CHAPMAN: Can you help explain
17 how you divide between "essential" and "useful"?

18 MS. VALLAEYS: Yes. Well, in OFPA, it
19 was essential to the production and handling
20 because of the unavailability of wholly-natural
21 alternatives. And so, we see it as there are
22 things that you need to make an organic version

1 of a food. And so, we would consider essential.
2 You simply cannot make it without that
3 ingredient.

4 That is very different from something
5 that is useful, which you could really argue
6 anything out there is useful. You know,
7 glyphosate could be considered useful. So, a
8 marketing tool, in our opinion, is certainly
9 considered useful to some, but you don't need it
10 to make, say, yogurt. You can easily make yogurt
11 without some of these materials that are on the
12 National List.

13 CHAIR RICHARDSON: Yes, Mac?

14 MEMBER STONE: Thanks, Charlotte.

15 I know you have told us in years past
16 that you shop for your daughter in organic. And
17 so, if you are shopping and you see a customer
18 looking at labels and you know a lot more about
19 it than most, do you help them to understand how
20 wonderful the organic option is or is there a
21 tendency to point out some of the issues that we
22 debate in this room?

1 MS. VALLAEYS: I mean, so I will just
2 say professionally I -- well, personally, I
3 don't, but professionally I think it is very
4 important to focus on all of the benefits of
5 organic. And we certainly do that.

6 And I actually am glad you asked the
7 question because we just wrote a report on
8 pesticides. I urge you all to go to
9 greenerchoices.org and read the whole report. We
10 have a whole section on organic, farming without
11 pesticides.

12 And certainly we want outside of this
13 room to really promote the benefits of organic
14 and why it is so important for health and the
15 environment.

16 CHAIR RICHARDSON: Thank you,
17 Charlotte.

18 MS. VALLAEYS: Thank you.

19 CHAIR RICHARDSON: The next speaker is
20 Cheryl Van Dyne, and following that will
21 Gwendolyn Wyard.

22 MS. VAN DYNE: Thank you.

1 My name is Cheryl Van Dyne. I'm the
2 Director of Global Regulatory Affairs for CP
3 Kelco.

4 I wanted to talk a little bit about
5 some products that we produce, CP Kelco, that are
6 up for the sunset review.

7 CP Kelco is a global producer of food
8 ingredients we call hydrocolloids. On the list
9 this year for 2017 are pectin, locust bean gum
10 and xanthan gum.

11 Our customers and the organic
12 community in general benefit from the use of
13 these gums because they are used in small amounts
14 as ingredients in food, including some beverages.

15 Hydrocolloids provide options for
16 essential choices in dietary consideration such
17 as fat replacers, allergens, or gluten replacers.
18 Each hydrocolloid or gum has a unique property
19 which lends themselves to specific food
20 applications. These properties can be used alone
21 or with other stabilizers to deliver
22 functionality to the organic industry.

1 We believe that the fact that the gums
2 are currently used in a wide variety of 95-
3 percent organic products is proof that the
4 ingredients have value to organic producers and
5 consumers.

6 Organic should really be about the
7 production, but it is also about providing
8 choices for organic certified products to the
9 consumers. You all know this. I'm not telling
10 you anything you don't know.

11 I just want to make a point that those
12 who wish to avoid having non-organic ingredients
13 have an option to buy certified 100-percent
14 organic, and the choice for 100-percent organic
15 should not take the decision away from the
16 organic community as a whole.

17 So, we urge the National Organic
18 Standards Board and the National Organic Program
19 to consider continuing to provide the option for
20 organic food producers and consumers by keeping
21 the gums, hydrocolloids on the National List and
22 giving the ability to formulate and make healthy

1 and innovative food and beverage products
2 available to the organic community.

3 I want to talk about xanthan gum.

4 Xanthan gum is on the list, and there is a lot of
5 information that is being discussed about xanthan
6 gum that I would like not only to provide
7 information to you, but allow you the opportunity
8 to discuss with me, as the producer, representing
9 the producer of xanthan gum, if you had any
10 questions.

11 First of all, xanthan is produced from
12 natural sources. Fermentation is a nature-based
13 process that has been used in food production for
14 centuries, if not from the beginning of time. We
15 use a bacterial fermentation, carbohydrate and
16 protein nutrients.

17 While ethanol or isopropyl alcohol are
18 used in the final stages of the fermentation
19 process to separate out the xanthan gum from
20 fermentation broth, the alcohol does not
21 chemically alter xanthan gum, nor is it present
22 in the final product at a significant level.

1 Five hundreds ppm, parts per million, are per the
2 food additive regulations, and it is typically
3 that or less.

4 Therefore, there is no reason that
5 xanthan should be listed as a synthetic. I think
6 there was some opportunity for evaluation of
7 this.

8 So, again, in keeping with the organic
9 practices, xanthan gum does not harm the
10 environment, and even in production, our
11 wastewater here in San Diego, where it used to be
12 produced -- it is now produced in Oklahoma --
13 that wastewater treatment is cleaner than the
14 water that comes in. We do a super job keeping
15 the environment safe.

16 And FDA has raised no objections with
17 several GRAS notifications as the substances that
18 have been submitted to the agency review.

19 Xanthan gum functions effectively as
20 a thickener and stabilizer and emulsifier, and
21 Wanda will speak a little bit more about its
22 functionality and essentiality.

1 (Signal that time has expired.)

2 Oops.

3 (Laughter.)

4 CHAIR RICHARDSON: Do you have like
5 another sentence or two, or do you have lots more
6 to do? Do you just need to finish a little bit?

7 MS. VAN DYNE: I missed what you said.

8 CHAIR RICHARDSON: Do you need to
9 finish a little bit more?

10 MS. VAN DYNE: I would like to, if I
11 could just go to the next slide. Thank you,
12 Jean, Madam Chairman.

13 We are requesting that the USDA/NOSB
14 consider changing the listing for xanthan gum
15 from 205.605(b), synthetic, to 205.605(a). And
16 the reason that I have stated before is not only
17 is it not chemically altered during its
18 processing, which I think was the consideration
19 in its original listing, but it is grown through
20 natural processes, obviously, as found in nature.

21 So, that was what I wanted to close
22 with. Thank you.

1 CHAIR RICHARDSON: Thank you. I
2 assumed it was.

3 Questions? Zea?

4 MEMBER SONNABEND: Thank you.

5 And it is definitely in our work plans
6 to consider changing the listing. You know,
7 exactly how we do that in the sense this process
8 is a little complicated, but we will be
9 considering that between now and fall.

10 My question is, what particular
11 conditions would lead you to choose xanthan gum
12 over, say, locust bean gum or gellan gum or any
13 of the other gums in a particular product? Why
14 would xanthan gum be a better choice there?

15 MS. VAN DYNE: I would like to let
16 Wanda do her slides and provide you with
17 information about that because she is the
18 technical person on the team.

19 But, basically, with any gum, they
20 have unique functionalities. With gellan gum, in
21 particular, it forms matrices and it holds, you
22 know, suspends. With the xanthan gum, it has

1 other properties that it has. I don't know if
2 you remember the Kraft dressing, how the
3 particles were suspended. It suspends and it
4 also serves as a fat replacer.

5 Xanthan gum has also served in the
6 industry for, for instance, people with celiac or
7 with allergen, as a replacement for wheat flour
8 or other flours that could trigger an allergenic
9 reaction or some other reaction.

10 CHAIR RICHARDSON: Thank you.

11 MS. VAN DYNE: Uh-hum.

12 CHAIR RICHARDSON: Any questions?

13 (No response.)

14 Thank you very much.

15 MS. VAN DYNE: Thank you.

16 CHAIR RICHARDSON: The next speaker is
17 Gwendolyn Wyard, and she will be followed by
18 Alexis Randolph.

19 MS. WYARD: Okay. Good morning, Madam
20 Chair, NOSB Members, NOP staff, and ladies and
21 gentlemen of the gallery.

22 My name is Gwendolyn Wyard. I am the

1 Senior Director of Regulatory and Technical
2 Affairs for the Organic Trade Association. For
3 the new members, my area of expertise is in food
4 processing and technical review of handling
5 materials. My formal education is in food
6 science with an emphasis in fermentation science,
7 but my hands-on education for the last 20 years
8 has been in organic farming, organic inspection,
9 and organic certification.

10 You have all of our written comments,
11 and I understand that you have read them all.
12 Thank you. That makes my job really easy here
13 today. I am going to simply highlight a few
14 points as they relate to handling and materials
15 topics, and maybe leave a couple of extra seconds
16 for questions at the end.

17 GMO prevention strategy. The work
18 being done here ranks at the top of our list of
19 important topics. Francis, thank you. I
20 understand you are the champ for moving this
21 document forward. We have provided a couple of
22 suggestions for improvement, one of which is to

1 clearly include a recommendation to NOP to draft
2 guidance on GMO testing for ACAs and industry.
3 Otherwise, with the exception of the section on
4 seed purity, we urge NOSB to move the discussion
5 document to a proposal for the fall 2015 meeting.

6 With respect to establishing a seed
7 purity standard for non-organic seed, we
8 definitely think that this is a critical first
9 step in the right direction, and we need to move
10 forward on this front. The feasibility of a
11 standard, particularly as it relates to a
12 threshold, needs to be carefully evaluated. Any
13 threshold for seed, organic or non-organic, must
14 be established per crop and it needs to be data-
15 driven. It also must be acceptable to consumers,
16 seed growers, and users of organic and non-
17 organic seed.

18 You will find in our comments a
19 suggested five-year plan for testing and
20 evaluating the feasibility of a seed purity
21 standard for non-organic seed. I am hoping this
22 idea will be floated to the Seed Panel for

1 further discussion on Thursday.

2 Glycerin. Tracy, good to go. We
3 believe this version will work and we fully
4 support the end-goal of increasing the
5 development and use of organic glycerin.

6 Natural flavors, as Julie Weisman
7 mentioned yesterday, OTA submitted a petition to
8 revise the annotation for natural flavors that
9 would require organic forms when commercially
10 available. We understand that this is going to
11 require significant efforts on behalf of industry
12 and certifying agencies, but we firmly believe
13 that it is time to push the envelope and not only
14 recognize the growth of the organic flavor
15 sector, but support it via regulatory action.

16 Ancillary substances. We agree with
17 the comments made yesterday about the challenges
18 in trying to collect information on the ancillary
19 substances. There is a language barrier that we
20 are running up against because the term
21 "ancillary substance" is our own term and it is
22 not recognized by food manufacturers, food

1 scientists, FDA, or anyone else in the supply
2 chain that I have talked to. It takes a
3 tremendous amount of explaining, and even then,
4 there is still confusion.

5 There needs to be a standardized form
6 created that includes a clear definition to help
7 facilitate this process. I am in the process of
8 drafting a sample, and I am happy to share when
9 it is completed.

10 Finally, on sunset materials for
11 handling on 605 and 606, we have had 195 total
12 responses, a handful of which came in after the
13 comment deadline, and they continue to come in.
14 We do wish we had a process for continuing to
15 submit to you the comments that will continue to
16 come in. As my colleague Kelly mentioned
17 yesterday, each survey response is a unique
18 comment from an individual business addressing
19 essentiality.

20 For the 606 materials, our survey
21 results indicate that chia seed, lemongrass, and
22 chipotle peppers are adequately available in

1 organic form and it is time for their removal
2 from the National List. You can look at page 38
3 and 39 for a summary of our 606 survey results,
4 page 38 and 39 in the Resource Booklet that we
5 passed out yesterday.

6 Finally, I recognize that there is a
7 growing inertia or interest to greatly reduce, if
8 not eliminate 605 -- 606, I mean, 606.

9 (Signal that time has expired.)

10 And I just wanted to point out that
11 there is a 2007 NOSB recommendation that has
12 never seen the light of day for coming up with
13 standardized guidance on the 606 process. And
14 maybe that is an important point to focus on to
15 help that process along.

16 Thank you.

17 CHAIR RICHARDSON: Thank you,
18 Gwendolyn.

19 Questions? Zea?

20 MEMBER SONNABEND: Thank you,
21 Gwendolyn.

22 I would like to ask you the same

1 question I asked Julie yesterday about to
2 elaborate more on how you think an annotation on
3 flavors would have the same impact as just moving
4 natural flavors to 606, and if what you are
5 proposing is enough of a kick in the pants, so to
6 speak, to get people moving in that direction.

7 MS. WYARD: Right. You know, we have
8 been looking at this process for the last two
9 sunset cycles. Just as a reminder, in the 2012
10 recommendation on flavors during that sunset
11 review, the Board did express their intent that
12 you would not relist the full broad category
13 listing of flavors in 2017.

14 So, we have been looking at this for
15 a long time, and we have had tasks forces and we
16 have brought together experts as well as users of
17 both organic and non-organic flavors. And we
18 have tried to parse out all of the different
19 flavors that are out there. Some are
20 agricultural. Some are non-agricultural. And
21 there's literally thousands.

22 And so, where we came to at the end of

1 the day is that, rather than really kind of going
2 through what wasn't a helpful process at the end
3 of the day of separating out ag and non-ag, it is
4 just to recognize that most of them, many of them
5 could be organic. And if we just simply added an
6 annotation to 605 for the entire broad category,
7 that would, then, initiate the process between
8 the user of the flavor and the certifier to look
9 at what kind of flavors are being used and find
10 out whether or not there is an organic
11 equivalent. So, it is going to save a tremendous
12 amount of really unnecessary work and resources,
13 both on behalf of NOSB and NOP, by just simply
14 putting the annotation on there.

15 There are many different kinds of
16 flavors. There are the compounded flavors that
17 Julie was talking about yesterday that are
18 largely made up of organic material, usually
19 organic, say, raspberry puree, some sort of
20 organic flavor component, but they also will have
21 natural isolets which are the non-agricultural
22 flavor components that would kill all of the

1 organic compounded flavors if they came off the
2 National List.

3 There are extracts. There are
4 essential oils. There are essences. Most of
5 those are very easily, given the raw material,
6 can be created organically.

7 So, it is really complicated, and I
8 know we will dig in when the petition comes up
9 for review, and I am happy to assist on all that.
10 I have been working with flavors extensively for
11 many years.

12 CHAIR RICHARDSON: Any other
13 questions?

14 (No response.)

15 Great. Thank you very much,
16 Gwendolyn.

17 MS. WYARD: All right. Thank you.

18 CHAIR RICHARDSON: The next speaker is
19 Alexis Randolph, and she will be followed by Beth
20 Unger.

21 MS. RANDOLPH: Hi. Good morning,
22 everyone.

1 I'm Alexis Randolph, the Technical
2 Manager at QAI, an organic certification agency
3 here in San Diego.

4 It's nice to see everybody again. I
5 would like to welcome the new Board members in
6 particular. Thank you.

7 And I would also like to personally
8 invite all of you to the reception this evening
9 at the Birch Aquarium. I hope you will join us
10 there.

11 A year ago, QAI submitted written
12 comments that identified one client using
13 tragacanth gum on 205.606. Although a mandate of
14 the Board is to assess the necessity of materials
15 on the National List, our comment did not seem to
16 make much of an impression. Six months later I
17 was before you again with comments from our
18 client explaining why tragacanth was essential to
19 him. He made more of an impression. As a
20 result, tragacanth remains on the list and he is
21 still in business for the next five years.

22 This began a good conversation about

1 what certifiers are doing to educate companies on
2 the importance of raising their voice at this
3 meeting. In preparation to this meeting, QAI
4 reached out to all 1500 of our clients,
5 encouraging them to make comments and to complete
6 the OTA surveys on essentiality and ancillary
7 substances.

8 I personally followed up by providing
9 the OMRI comparison of brand-name products to
10 generic materials to our farmer and livestock
11 operators. I am not sure how many of our clients
12 completed the OTA surveys, but I was very
13 disappointed not to receive many returned emails
14 or phone calls, not even from "Mr. Tragacanth".

15 Previously, QAI submitted written
16 comment on the number of clients using 2016
17 sunset materials, and yesterday my colleague
18 provided you a 2017 material usage report for
19 handler materials. This is the best we can do if
20 our clients do not come forward to submit
21 comments.

22 We hope you will consider the numbers

1 that we are presenting to you as our best source
2 of information to explain to you the necessity of
3 materials that are being used in products today.

4 And I hope that the Board will recall
5 the tragacanth example when reviewing the
6 essentiality of materials. That material was
7 essential for a small startup company to compete
8 against a well-established company with a nearly-
9 identical product.

10 Essentiality does not simply mean that
11 another material can be a substitute.

12 Essentiality can make the difference between one
13 organic company or ten entering the market or the
14 long-term sustainability of a small organic
15 farmer. Essentiality varies based on scale of
16 operations, regional differences, and financial
17 ability to adapt to change.

18 Additionally, QAI submitted written
19 comments on the concept of commercial
20 availability, specifically regarding ancillary
21 substances. From the certifiers' standpoint,
22 this is very problematic and not sound or

1 sensible, because material manufacturers are not
2 certified organic.

3 If the Board chooses to move forward
4 with recommendations for commercial availability
5 of ancillary substances, I ask the NOP to take a
6 closer look at our comments for consideration
7 during rulemaking.

8 I also wanted to briefly mention that
9 QAI submitted written comments regarding glycerin
10 as well as flavors. And one of our documents was
11 titled incorrectly. So, they appear to be
12 perhaps one and the same document. If you did
13 not receive both those comments, please let me
14 know and I will be happy to share those with the
15 Board before the next meeting.

16 And since I have just a brief second
17 left on the clock, I also wanted to address the
18 question about methionine and can certifiers do
19 those calculations. And I just wanted to stress
20 what Nate had mentioned before. It is that it is
21 really not that different than the 30 percent DMI
22 calculations that we have to do.

1 A ruminant operation has different
2 classes of animals if we are talking about
3 dairies, and the formulations that are fed to a
4 milking animal versus a dry animal are quite
5 different. So, as a certifier, we don't go in
6 and we don't just look at the single formulation
7 for a single specific time. We have to do a
8 whole math balance taking into consideration all
9 the ingredients purchased, how much of those
10 ingredients are used in the different as-fed
11 formulations at different times, and then,
12 calculate out the balance of those ingredients.
13 It is a very complicated system of auditing, but
14 it is absolutely doable, and we are used to doing
15 it now. And it is easily translated to
16 methionine.

17 (Signal that time has expired.)

18 Thank you.

19 CHAIR RICHARDSON: Thank you, Alexis.

20 Questions? Zea?

21 MEMBER SONNABEND: Thank you, Alexis.

22 And the information we got yesterday

1 from your colleague is extremely useful. I
2 wasn't able to look at it closely enough to ask
3 her a question at the time, having just received
4 it. But I do have one question that, if you
5 don't know right now, maybe you could get back to
6 me before the meeting ends.

7 On the 606 materials, many of them, it
8 does identify whether the clients are using
9 organic forms, such as in gelatin and cornstarch,
10 but it doesn't say that for chia seeds. We seem
11 to believe that there is plentiful organic chia
12 seeds out there and it wouldn't need to be on
13 606.

14 So, I am wondering if you would know
15 if many of your clients, the 12 who use it, are
16 finding organic chia or not.

17 MS. RANDOLPH: I do know that we have
18 some clients using organic chia and some are not.
19 I don't know the exact percentage difference
20 based on these numbers.

21 MEMBER SONNABEND: Okay.

22 MS. RANDOLPH: And I can get back to

1 you with that, and I will also take a look at
2 which types of products are able to use the
3 organic and which are not.

4 MEMBER SONNABEND: Okay. Thank you.

5 CHAIR RICHARDSON: Any other
6 questions?

7 (No response.)

8 Thank you, Alexis.

9 MS. RANDOLPH: Thank you.

10 CHAIR RICHARDSON: The next speaker is
11 Beth Unger, and she will be followed by Lulu
12 Mauro.

13 MS. UNGER: Good morning.

14 Thank you for all the work you do, and
15 I am very impressed with the freshmen class this
16 year. Glad to have you onboard.

17 You know, we submitted a lot of public
18 comment on this one. I want to not go over that
19 so much because we put a lot of effort into it.

20 Some of the things I have heard that
21 I think are really important to remember is that
22 many of the stakeholders don't submit comment.

1 And so, you tend to hear from the same people
2 over and over again. And there is a huge
3 percentage out there that is not represented.

4 In Organic Valley, we have tried some
5 innovative ways to engage the farmers in the
6 comment process, with some results. You know, I
7 would love to see more, but we got some results.
8 And that is reflected in our comments.

9 I wasn't actually going to stand
10 before you all at this meeting because I thought
11 that we did what we could do. But, after
12 listening to what was going on yesterday, I
13 really felt compelled to come up to address a few
14 brief topics.

15 One is the celery powder on 606. And
16 I want to start off by making you very well aware
17 of the fact that at CROPP Cooperative we are so
18 dedicated to organics. We have a transparency
19 page all about the ingredients that we may use
20 that are not certified organic, and we try to
21 make that page as teeny as we possibly can. That
22 is something that we are doing every day in every

1 way with our product formulation.

2 Celery powder is one of those things
3 that is going to have stay on our transparency
4 page. There is really no way around it. Celery
5 powder is not a flavor. And, yes, there is a lot
6 of organic celery out there, but it is all about
7 the function of the celery powder in the product.

8 This is used in processed meats. I
9 love bacon. Many people in this room love bacon.
10 And you are not going to have organic bacon
11 without celery powder. And the reason you will
12 not have organic bacon without celery powder is
13 the function that it provides in that particular
14 product. It is all about providing the natural
15 nitrates to make the uncured bacon. Without it,
16 you are going to have a product that will not
17 even -- I mean, we eat with our eyes more than
18 anything else, and your eyes will say, "I'm not
19 touching that."

20 So, I am hoping -- I don't know --
21 that Kerry Ingredients and Florida Foods, two of
22 the suppliers of this product, submitted

1 technical comments for you. I'm not sure if they
2 did or didn't. For the first time in all of the
3 time I have been in the regulatory world I didn't
4 go and look.

5 But there is a lot of information out
6 there. We have to have it. When our new Mighty
7 Bars come out, it has got that celery powder in
8 it, and it will be your backpacking friend. It
9 is such an awesome product.

10 Rather than go over the other three
11 things I wanted to cover briefly, I do want to
12 acknowledge some of the commenters from yesterday
13 who made some very good comments about all of us
14 working together very nicely. So, this is my
15 favorite pen, and on it, it says, "Teamwork makes
16 the dream work." And so, we have got to get over
17 divisiveness and work together.

18 Thank you.

19 CHAIR RICHARDSON: Thank you, Beth.

20 Questions? Francis?

21 MEMBER THICKE: A question about
22 celery powder. Is it that you cannot make it out

1 of organic celery or what's the problem?

2 MS. UNGER: That's correct, Francis.
3 There has to be a certain nitrate level in the
4 celery, and I think it was Kerry Ingredients,
5 although I really would rather than people who
6 are knowledgeable in this area would speak to it.
7 But they have tried 15 different things to get
8 away from the conventional, and one of them was
9 organic celery. And so, you are not getting that
10 consistent nitrate level to get the function that
11 you need.

12 MEMBER THICKE: Is the nitrate in the
13 conventional celery from excess nitrogen-feeding?

14 MS. UNGER: Yes.

15 MEMBER THICKE: Whereas, organic, it
16 is natural?

17 MS. UNGER: Yes.

18 MEMBER THICKE: It does seem a little
19 weird that we need conventional celery with high
20 nitrate?

21 MS. UNGER: I can't speak to that and
22 say something smart about it.

1 (Laughter.)

2 CHAIR RICHARDSON: Other questions for
3 Beth?

4 (No response.)

5 Thanks very much.

6 MS. UNGER: Thanks.

7 CHAIR RICHARDSON: The next speaker is
8 Lulu Mauro, followed by Nick Gardner.

9 MS. MAURO: Is that good?

10 I would like to thank the National
11 Organic Standards Board and USDA for providing me
12 the opportunity to speak today.

13 My name is Lulu Mauro, and I am
14 representing DuPont Nutrition and Health, a
15 manufacturer of deoiled lecithin.

16 DuPont currently sells non-organic
17 deoiled lecithin to food producers in the organic
18 industry. The non-organic deoiled lecithin
19 ingredients provided to the organic industry are
20 produced from either sunflower or non-GMO
21 soybeans under our rigorous non-GMO identity-
22 preservation system.

1 We respectfully request the NOSB
2 consider the substance lecithin deoiled for
3 continued inclusion on the National List, Title
4 7, Part 205.606 of the CFR, for the following two
5 reasons:

6 One, we believe there may currently be
7 an inadequate supply of organic certified
8 ingredients that are functionally equivalent to
9 deoiled lecithin, as we are aware of only one
10 supplier of organic deoiled lecithin.

11 And two, we are not aware of an
12 organic version of deoiled lecithin made from a
13 raw material that is not on FDA's list of the big
14 eight allergens, such as sourcing from Sunflower
15 or canola.

16 Soy lecithin must be labeled as an
17 allergen, and food production facilities are
18 required to manage soy lecithin as an allergen in
19 their HACCP and quality management programs.

20 Removal of deoiled lecithin from the
21 National List may result inadequate supply of
22 this unique material and cause either the

1 discontinuation or a significant change in
2 sensory profile which may result in consumer
3 rejection of many organic products currently on
4 the market.

5 Deoiled lecithin is a unique
6 ingredient with unique functionality. To our
7 knowledge, there is only one supplier of organic
8 certified deoiled soy lecithin. We are not aware
9 of other organic certified substances that have
10 equivalent functionality to deoiled lecithin.

11 We would like to emphasize the
12 significant differences in form and function
13 between deoiled lecithin and powdered lecithin;
14 namely, powdered lecithins do not undergo the
15 deoiling process.

16 The acetone insolubles, or AI, is the
17 active portion of lecithin. The AI consists of a
18 mixture of polar molecules, primarily
19 phospholipids. One of the effects of the
20 deoiling process is to increase the AI. The
21 minimum AI of DuPont's deoiled lecithin is 97
22 percent while the AI of organic liquid lecithins

1 is typically no greater than 65 percent. Deoiled
2 lecithin is simply lecithin and does not contain
3 carrier ingredients such as maltodextrin, which
4 further dilute the AI.

5 Powdered organic lecithin products
6 currently on the market that are not deoiled have
7 similar characteristics and functionality as
8 liquid lecithin. Deoiled lecithin is used in
9 many food emulsions, including oil and water
10 emulsions. Examples of product applications can
11 be found in beverage, sauce, soup, dairy product,
12 and frozen dessert categories.

13 The apparent hydrophilic/lipophilic
14 balance, or HLB, of DuPont's deoiled lecithin is
15 seven, making it water dispersible and very
16 effective at emulsifying oil into a continuous
17 water phase. Standard lecithin, such as typical
18 organic liquid lecithin has an apparent HLB of
19 only four. Emulsifiers with HLBs of less than
20 six are generally ineffective for making oil and
21 water emulsions. Powdered lecithin that has not
22 been deoiled is not water dispersible, nor is it

1 an effective emulsifier for oil and water
2 emulsions.

3 In conclusion, we respectfully request
4 the continued inclusion of lecithin deoiled on
5 the National List. We believe there is not yet
6 adequate commercial supply of organic deoiled
7 lecithin or other organic substances providing
8 the same functionality as deoiled lecithin. In
9 addition, we are not aware of an organic deoiled
10 lecithin that is not derived from soy, which is
11 considered by FDA as one of the big eight
12 allergens.

13 (Signal that time has expired.)

14 All right.

15 CHAIR RICHARDSON: You landed right on
16 time, yes. Very good.

17 MS. MAURO: Thank you.

18 CHAIR RICHARDSON: Thank you.

19 Questions? Zea? And then, Tom.

20 MEMBER SONNABEND: Thank you. Sorry
21 I am asking so many questions, but I am
22 compensating for Harold not being here.

1 I am one of those people who is
2 allergic to soy and, therefore, allergic to soy
3 lecithin. And so, I would like you to clarify
4 your comment about the status of sunflower
5 lecithin, both organic and deoiled. Did I
6 understand you to say that you can only get
7 sunflower lecithin as deoiled and not in an
8 organic form?

9 MS. MAURO: No. You can get sunflower
10 lecithin that is deoiled, but we are not aware of
11 a commercial supplier of organic deoiled
12 sunflower lecithin.

13 MEMBER SONNABEND: And how about
14 sunflower lecithin organic not deoiled,
15 regularly-oiled lecithin?

16 MS. MAURO: I am not aware of the
17 status of that, if it is commercially available
18 or not. Deoiled lecithin and a liquid lecithin,
19 even if the liquid lecithin has been dried and
20 plated onto a powder, are completely different in
21 their form and functionalities. So, I would just
22 focus on the deoiled.

1 MEMBER SONNABEND: Good. Thank you.

2 CHAIR RICHARDSON: Tom?

3 MEMBER CHAPMAN: Does the use of a soy
4 lecithin require allergen labeling?

5 MS. MAURO: Yes. So, the FDA has
6 stated publicly numerous times that soy lecithin
7 would be included, if it is the only soy
8 ingredient or it has a functionality, it would
9 need to be labeled in the finished product, and
10 as well as for manufacturing facilities in their
11 HACCP and their quality management programs; they
12 have to treat soy lecithin as an allergen. So,
13 all of the cleaning processes, the warehouse and
14 the manufacturing facility segregation, all of
15 those issues that are common with other
16 allergens, soy lecithin is also included in
17 those.

18 CHAIR RICHARDSON: Any other
19 questions?

20 (No response.)

21 Thank you very much.

22 MS. MAURO: Thank you.

1 CHAIR RICHARDSON: The next speaker is
2 Nick Gardner, followed by Troy Aykan.

3 MR. GARDNER: Good morning.

4 My name is Nick Gardner, and I am
5 commenting on behalf of the International Food
6 Additives Council, or IFAC. IFAC is a global
7 trade association representing companies that
8 produce high-quality substances used worldwide as
9 food additives and food ingredients. And I
10 really do appreciate the opportunity to speak to
11 you all today.

12 So, IFAC strongly supports the
13 continued listing of xanthan gum on the National
14 List. However, we echo comments you heard
15 earlier that suggest perhaps the Board should
16 consider relisting the substance in Section
17 205.605(a) rather than as a synthetic at
18 205.605(b).

19 Xanthan gum is a natural
20 polysaccharide produced by bacterial fermentation
21 using carbohydrate and protein nutrients.
22 Fermentation is a natural process that has been

1 used in food production for centuries. Although
2 solvents such as isopropyl alcohol and ethanol
3 are used in the processing of xanthan gum,
4 xanthan gum is not chemically modified by these
5 solvents. Therefore, it is not a synthetic
6 substance. IFAC notes that substances produced
7 through similar fermentation processes are
8 currently listed at Section 205.605(a).

9 There are currently no organic
10 alternatives that have the same properties as
11 xanthan gum. I want to underscore that. Xanthan
12 gum is used as a stabilizer, thickener, and
13 emulsifier in a wide variety of organic foods and
14 beverages that include baked goods and dairy
15 products to dressings and sauces and juices.
16 Xanthan gum is also widely used in foods for
17 populations with certain allergies and celiac
18 disease.

19 The production of xanthan gum is not
20 harmful to the environment and aligns with
21 organic principles. IFAC urges that xanthan gum
22 be relisted on the National List, but, for the

1 reasons I noted a moment ago, we believe it
2 should be relisted at 205.605(a).

3 I also want to talk about IFAC's
4 support for the relisting of non-amidated pectin
5 at Section 205.606. Pectin is a natural
6 component of all edible plant material and is a
7 soluble dietary fibre. Pectin binds with water,
8 resulting in thickening and jelling properties.
9 Pectin is used in many organic applications,
10 including low-sugar jams and jellies, bakery
11 fillings and toppings, dairy products, beverages,
12 and nutritional products.

13 Pectin is an approved food additive
14 with a long history of safe use and is a vital
15 ingredient in a variety of organic products. As
16 such, we really do strongly encourage NOSB to
17 relist pectin on the National List.

18 In the few moments I have left, I want
19 to touch on a few other ingredients as well.
20 Deoiled lecithin, I echo the comments of the
21 previous presenter. It should be relisted at
22 Section 205.606. Deoiled lecithin provided to

1 the organic industry and formulators by IFAC
2 members is produced from sunflowers or identity-
3 preserved non-GM soybeans. It is used in food
4 emulsions to disperse oil and water.

5 As previously mentioned, there are
6 significant differences between deoiled lecithin
7 and powdered lecithin. So, we did recently learn
8 that there is now a supplier of organic soy
9 deoiled lecithin. We have a number of concerns
10 with there being only a single supplier.

11 First, we question whether the
12 supplier can meet the demand, both in terms of
13 volume and quality. Second, in the event of a
14 disruption in the supplier's production
15 capabilities, organic formulators would have no
16 alternative.

17 We understand the organic deoiled soy
18 lecithin will be manufactured in China, and the
19 soybean-producing regions of China over the last
20 five years have experienced significant droughts.
21 This could impact the production capabilities in
22 the future of this important ingredient.

1 I also want to underscore that
2 companies currently using sunflower-derived
3 lecithin would no longer be able to make an
4 allergen-free product and, frankly, we --

5 (Signal that time has expired.)

6 If I could have one more moment just
7 to finish this?

8 We also have some concerns about the
9 potential for price gouging with a single
10 supplier.

11 So, I would just direct you all to the
12 detailed comments IFAC provided. Frankly, I
13 can't cover everything in four minutes.

14 Thank you.

15 CHAIR RICHARDSON: Thank you.

16 Questions? Zea?

17 MEMBER SONNABEND: So, do you know the
18 status of sunflower lecithin, both regular
19 organic or powder organic, I guess, and deoiled?

20 MR. GARDNER: Well, I think we heard
21 yesterday another commenter indicate that they
22 were not currently able to produce a deoiled

1 organic sunflower lecithin. So, I think that
2 that speaks to that. Unfortunately, I can't
3 speak to regular lecithin as derived from
4 sunflowers.

5 MEMBER SONNABEND: Okay. Thank you.

6 CHAIR RICHARDSON: Tom?

7 MEMBER CHAPMAN: Do you have any data
8 on the usage of deoiled lecithin in the organic
9 market specifically that would support your
10 concerns about supply from a single supplier?

11 MR. GARDNER: Well, I think with a
12 single supplier, one of the things that we really
13 need to look at is not just volume, but is
14 quality. Unfortunately, as I indicated, we found
15 out that there was this supplier only about two
16 weeks before this meeting. So, I have not had an
17 opportunity to have my members review the quality
18 of the product that is being offered.

19 When you have multiple suppliers,
20 though, if there is a quality issue, you can turn
21 to other suppliers and perhaps solve that. You
22 wouldn't be able to in this instance.

1 CHAIR RICHARDSON: Great. Thank you
2 very much.

3 MR. GARDNER: Thank you.

4 CHAIR RICHARDSON: The next speaker is
5 Troy Aykan, followed by Wanda Jurlina.

6 MR. AYKAN: Good morning.

7 My name is Troy Aykan. I'm a food
8 scientist and attorney with the Hain Celestial
9 Group, one of the largest producers of organic
10 products in the world. I am also a part-time
11 food law professor.

12 We strongly support the renewal of
13 yeast on the National List. Yeast in various
14 forms is used in thousands of organic products.
15 A good percentage of yeast that we use is in the
16 form of yeast extract that is used as a flavor in
17 organic soups, gravies, entrees, snack chips, and
18 other products.

19 Much of the yeast that we use is
20 organic. However, organic yeast is not available
21 for all applications. For example, gluten-free
22 organic yeast is not available for use in our

1 gluten-free products.

2 In addition, organic torula yeast is
3 not commercially available. Torula yeast has
4 unique sensory characteristics that contribute to
5 the finished product's flavor profile.

6 In our organic bread business, there
7 are two suppliers of organic baker's yeast that
8 we have repeatedly tried to use in our products
9 without success. The proofing stage is greatly
10 delayed and the finished bread is flat and dense,
11 despite using increased amounts of yeast.

12 We use organic yeast when we can, but
13 there is still a requirement for non-organic
14 yeast in certain products.

15 Natural flavors. Natural flavors are
16 essential for the production of thousands of
17 organic products. Without flavors, consumers
18 would not purchase these products, as they would
19 be at a competitive disadvantage in taste
20 expectation to convention products.

21 There are thousands of different
22 flavors that are used in organic foods. Our

1 company uses over 200 different natural flavors.
2 And some of these flavors we use are organic and
3 some are not.

4 As an example, we use over 20
5 different vanilla flavors because each flavor has
6 unique sensory characteristics. And therefore,
7 an organic vanilla flavor cannot be substituted
8 for a non-organic vanilla flavor without
9 impacting the taste of the product. In addition,
10 consumers of an existing product expect to get
11 the same flavor profile every time they purchase
12 the product. This is why we need to keep natural
13 flavors on the National List.

14 Regarding commercial availability,
15 there is a petition to require the use of organic
16 flavors if they meet the requirements for
17 quantity, quality, and form. We support this
18 petition, and we already use many organic
19 flavors. However, we need to have the option of
20 using non-organic flavors when the organic
21 versions do not meet production requirements.

22 Malic acids. A commenter yesterday

1 alleged that the carbohydrate substrate used in
2 the fermentation process may be derived from
3 GMOs. We do not agree with this statement. Our
4 certifier requires a non-GMO questionnaire to be
5 signed which includes language regarding
6 verification of substrates and microorganisms.

7 (Signal that time has expired.)

8 Thank you.

9 CHAIR RICHARDSON: Thank you.

10 Questions?

11 (No response.)

12 Great. Thank you very much.

13 MR. AYKAN: Thank you.

14 CHAIR RICHARDSON: The next speaker is
15 Wanda Jurlina, and she will be followed by Jeff
16 Rakity.

17 MS. JURLINA: All right. Thank you,
18 everyone, for the chance to speak today.

19 My name is Wanda Jurlina. I'm the
20 Tech Service Manager for CP Kelco. We do supply
21 hydrocolloids to the industry. Those are
22 ingredients that thicken and gel water.

1 The first thing I would like to do is
2 welcome you all to San Diego, the city that I
3 have been lucky enough to call my home for over
4 40 years.

5 I have spent a bulk of my 25-year-plus
6 career working with customers on how to formulate
7 food products. The ingredient that I am going to
8 talk to you about today is xanthan gum. Cheryl
9 talked to you a little bit about it, telling you
10 about its background, how it is made. But what I
11 would like to talk about is really what makes
12 xanthan gum unique in the world of
13 polysaccharides.

14 When we look at the different
15 polysaccharides that we can use for thickening
16 and jelling in food systems, there's a couple of
17 things that stand out with xanthan gum. One is
18 that it is cold soluble. That means for
19 processes like making salad dressings that don't
20 have any heat in them, I can actually get xanthan
21 gum to work, where those hydrocolloids like
22 pectin or carrageenan, gellan gum, that need heat

1 may not work. So, that cold solubility is a
2 unique property.

3 It is very pH-stable. Many of the
4 products that we use in the food industry have
5 very low pHs to enhance our food safety. A low
6 pH for some ingredients, like guar gum, can
7 actually cause degradation as the product sits on
8 the supermarket shelf.

9 Xanthan gum, on the other hand, if I
10 have a salad dressing at a pH 3.5, holds up
11 beautifully and does not fall apart. So, that pH
12 stability is one of its unique properties.

13 It is also very temperature-stable.
14 Now you guys really aren't interested in our oil
15 field industry business, but we take xanthan gum,
16 we pump down an oil well at over 300 degrees
17 Fahrenheit, and it holds up beautifully. We
18 don't do anything near like that in the food
19 industry, but it is very temperature-stable as
20 well as being cold-soluble and that pH stability.

21 It also has the unique property called
22 pseudoplasticity. That actually just means that,

1 when I pump the xanthan gum or I go to pour it,
2 it actually thins greatly. For a manufacturer
3 who is trying to fill products into bottles or a
4 consumer who is trying to pour a product out of a
5 bottle, that pseudoplasticity is actually a great
6 benefit to them. It means the product comes out
7 of the bottle, but at the same time it still
8 gives great suspension when it is in that bottle.

9 On the suspension side, I do want to
10 address that. It is a great suspending agent in
11 viscous systems. So, it does provide some
12 viscosity to the product. In many products that
13 actually enhances the eating properties.

14 So, with that, I wanted to put up a
15 couple of pictures to show you some products made
16 with and without xanthan gum. The first one on
17 the top is a ranch dressing. Now that is not an
18 organic product, so it actually contains a
19 modified starch in it, in addition to the xanthan
20 gum. The product on the left is the one made
21 with xanthan gum. The product on the right is
22 the one that is made just with the modified

1 starch.

2 If I am making an organic product and
3 I have to take that modified starch out, my salad
4 dressing falls apart even worse. My herbs settle
5 out. I have a liquid layer on the bottom, and I
6 have oil coming out at the top of the product.

7 For the baked good on the bottom, that
8 is a gluten-free muffin made with and without
9 xanthan gum. If you look at gluten-free
10 products, it is near impossible to produce a
11 product without xanthan gum that has great volume
12 and eating properties.

13 I also included another slide just as
14 a reference that covers other hydrocolloids and
15 how unique xanthan is.

16 (Signal that time has expired.)

17 Thank you.

18 CHAIR RICHARDSON: Thank you.

19 Questions? Zea?

20 MEMBER SONNABEND: Thank you. You
21 certainly addressed my previous question on the
22 benefits of xanthan gum. However, you made it

1 sound so great, why would anyone ever use one of
2 the other gums?

3 (Laughter.)

4 MS. JURLINA: Well, you know what? I
5 actually did a presentation --

6 MEMBER SONNABEND: I think it is on
7 the small print on your slide, but what
8 situations does it not work for, I guess is what
9 I am asking?

10 MS. JURLINA: Well, that is a great
11 question. Okay. So, I did a presentation for
12 the Associations for Dressings and Sauces. It
13 was called, "Is Xanthan Always the Answer?"
14 because, for some of those folks, they don't know
15 that there are other ingredients out there.

16 But there are some situations -- I
17 talked about gellan gum the last time I came to
18 visit you all in Louisville -- where I need
19 suspension with a very low viscosity. I can't do
20 that with xanthan gum.

21 There are some products where maybe I
22 am looking for a heavier mouth feel. Xanthan gum

1 has a pretty light mouth feel. So, it is not the
2 answer in that product.

3 There are some products that perhaps
4 I am looking for a different process. Maybe I
5 don't want to build up viscosity early on in my
6 process, and I need something that hydrates later
7 on.

8 So, there's lots of different things
9 that come up when you are putting together both
10 the formulation and the process to make that
11 product where it will impact the choices that you
12 are making of hydrocolloids. But it is good
13 stuff.

14 (Laughter.)

15 All right. With that, any questions?

16 CHAIR RICHARDSON: Okay. Any
17 questions?

18 (No response.)

19 MS. JURLINA: Thank you.

20 CHAIR RICHARDSON: Thank you very
21 much.

22 The next speaker is Jeff Rakity,

1 followed by Ali Ali.

2 MR. RAKITY: Good morning.

3 Deputy Administrator McEvoy, wherever
4 he is, Members of the NOSB, and organic industry
5 colleagues, good morning.

6 My name is Jeff Rakity, and I
7 represent Natural Flavors, Incorporated, in
8 Newark, New Jersey.

9 I appreciate the opportunity to speak
10 to you today about the use of flavors, non-
11 synthetic and certified organic products.
12 Natural Flavors believes that flavors non-
13 synthetic should not be allowed to sunset in
14 2017. The use of organic flavors needs to be
15 incentivized. The petition that has been
16 submitted by the OTA to add commercial
17 availability criteria to flavors non-synthetic
18 via an annotation is the best way to incentivize
19 the use of organic flavors.

20 Natural Flavors has been in business
21 since 1986 and was the first company to begin
22 making certified organic compounded flavors in

1 1997. But now, according to a 2014 survey of
2 ACAs, there are currently 189 other companies
3 certified to produce organic flavors.

4 I also want to mention that I have
5 been in the flavor and fragrance industry for 30
6 years and have focused on organic flavors for the
7 last 10.

8 Anyhow, I would like to share some
9 information and figures to demonstrate the
10 potential impact of limiting the use of flavors
11 non-synthetic and certified organic flavors. We
12 estimate that approximately 4 million pounds of
13 certified organic flavors are being used in
14 organic processed products in the U.S. We also
15 estimate that organic flavors are being used in
16 only 20 percent of certified organic products
17 sold in the U.S.

18 So, the percentage of organic
19 ingredients in certified organic flavors versus
20 NOP-compliant or flavors non-synthetic. In a
21 certified organic flavor, 2 percent non-
22 synthetic, 88 percent certified organic, and 10

1 percent water versus an NOP-compliant natural
2 flavor which is 90 percent non-synthetic and non-
3 organic and 10 percent water.

4 So, if we are correct in our estimates
5 that we have shared previously, this means that
6 within the 30 million pounds of non-organic
7 flavors that are currently being used in organic
8 processed products there are potentially 26
9 million pounds of ingredients, such as agave
10 syrup, alcohol, and glycerin, not to mention all
11 the fruit and vegetable concentrates, oils, and
12 purees, which would be replaced with their
13 organic counterparts.

14 Many of these organic ingredients are
15 not currently available in adequate supply to
16 support the wholesale conversion of NOP-compliant
17 flavors to certified organic that sunset of
18 flavors would necessitate.

19 Subjecting flavors non-synthetic to
20 commercial availability criteria, as the OTA
21 position proposes, would provide the right kind
22 of pressure for our suppliers to scale-up their

1 production of organic ingredients required to
2 produce high-quality organic flavors that
3 function properly in organic foods demanded in
4 today's market.

5 I would like to thank the members of
6 the NOSB for your monumental effort on behalf of
7 the organic sector and welcome the four new
8 members. Good luck.

9 Thank you.

10 Any questions?

11 CHAIR RICHARDSON: Thank you.

12 Questions?

13 (No response.)

14 I guess not. Thank you very much.

15 The next speaker is Ali Ali, followed
16 by Zareb Herman.

17 Okay, it looks like Ali is not here.
18 So, Zareb, are you around? So, you get to come.
19 Is Zareb here? No? Oh, he's coming. So, Zareb,
20 you're up because the last guy isn't here yet.

21 MR. HERMAN: Okay.

22 CHAIR RICHARDSON: And so, after Zareb

1 will be Dale Nelson.

2 MR. HERMAN: My name is Zareb Herman.

3 I'm a food scientist with the Hain Celestial
4 Group. We manufacture a wide range of organic
5 products.

6 We want to thank Miles, although he is
7 not here, and his staff at NOP for all their
8 dedication and amazing work.

9 We welcome the new Board members and
10 we thank all of you on the Board for the many
11 hours that you put in. I suggested that your
12 salaries be doubled, but two times zero is still
13 zero.

14 (Laughter.)

15 We are here today to strongly support
16 the relisting of deoiled lecithin on the National
17 List. Lecithin is a fat emulsifier that is vital
18 for organic food production. We use organic
19 liquid lecithin, both sunflower and soy, in many
20 products. And we also used deoiled lecithin in
21 other products.

22 A few weeks ago, we learned that one

1 company is now selling organic deoiled soy
2 lecithin. We need to test it to see if it works
3 in our applications, but, if it works, we can
4 start using it.

5 We are concerned that, to our
6 knowledge, there is only one manufacturer of
7 organic deoiled soy lecithin in the world. If
8 this is correct, this one Chinese manufacturer
9 can charge unreasonably-high prices since there
10 is no competition. However, under the current
11 policy on commercial availability, we are
12 required to use the organic form regardless of
13 cost.

14 When there is only one supplier -- and
15 it would probably take years to construct another
16 plant -- the current policy gives the one
17 supplier carte blanche to charge whatever they
18 want. This policy can lead to markedly higher
19 prices for organic products.

20 Regarding the sunset vote for deoiled
21 lecithin, it is important to point out that much
22 of the deoiled lecithin that we use is sunflower

1 lecithin, not soy. We use sunflower because it is
2 not a food allergen and we use it in soy-free
3 products like this product here. If deoiled
4 lecithin is removed from the National List, we
5 cannot make these products because there is no
6 organic deoiled sunflower lecithin.

7 In addition, some of our co-
8 manufacturers are soil-free facilities. Our only
9 deoiled lecithin options for these soy-free
10 facilities are canola or sunflower, and these do
11 not exist in organic form.

12 A previous commenter yesterday
13 indicated that the Chinese manufacturer is
14 working on organic deoiled sunflower lecithin,
15 but working on something is not good enough. We
16 need a reliable supply.

17 If deoiled lecithin stays on the
18 National List and organic deoiled sunflower
19 lecithin does become available in the future, we
20 are required to use it, if it works and there is
21 a sufficient supply.

22 To change subjects, we want to support

1 the relisting of nutrient vitamins and minerals.
2 Thousands of organic products are fortified with
3 vitamins and minerals. Our nation has a long
4 history of fortifying food to prevent nutritional
5 deficiencies. Vitamin-D-fortified milk has
6 prevented countless cases of rickets, a bone
7 deformity disease caused by vitamin D deficiency.
8 And folic acid fortification of food has
9 prevented serious birth defects.

10 A few years ago, there was a Kiwi
11 Magazine survey of organic consumers, and roughly
12 75 percent responded that fortification of
13 organic foods was important to them and their
14 families.

15 We urge the Board to relist nutrient
16 vitamins and minerals.

17 Thank you.

18 CHAIR RICHARDSON: Thank you.

19 Questions?

20 (No response.)

21 The Board is being very quiet and
22 well-behaved today.

1 (Laughter.)

2 Thank you very much, Zareb.

3 MR. HERMAN: Yes.

4 CHAIR RICHARDSON: The next speaker is
5 Dale Nelson, and he will be followed by John
6 Immaraju.

7 MR. NELSON: Good morning.

8 I would like to talk to you as a
9 trained applicator on sprout-inhibiting potatoes.
10 I have been sprout-inhibiting potatoes for 36
11 years along with potato ventilation. We have
12 done sprout-inhibiting and ventilation in just
13 about every state in the United States that
14 stores potatoes. I also was hired by a process
15 company for five years to do consulting work on
16 sprout control internationally, mainly throughout
17 Europe and Asia.

18 I was very fortunate to get the
19 opportunity to bring clove oil to market. It
20 took us a very long time and a lot of hard work
21 to actually get clove oil to even start burning
22 sprouts on potatoes. We finally found the

1 correct process temperatures and the correct
2 procedures to get clove oil to perform.

3 Even after years of working with clove
4 oil, we still struggled on stressed potatoes and
5 in circumstances where we had to use clove oil as
6 a standalone product. This would be either for
7 organic potatoes or for other reasons that the
8 grower may have, such as putting seed potatoes
9 back into the same storage that he removed the
10 current potatoes from.

11 In these cases, there would have to be
12 a multiple amount of applications. On processed
13 potatoes, we would have an application every
14 three weeks to keep the sprouts somewhat in
15 control. On fresh-packed potatoes, every six
16 weeks.

17 Even with the multiple applications,
18 the results were at best marginal. Most of the
19 time, the potatoes would have to be shipped ahead
20 of schedule because of the sprout control or
21 accumulating sugars or even both.

22 Even after many years of using clove

1 oil and hundreds of applications, we have not
2 found a way to get any more of a performance from
3 it than what we did 10 years ago.

4 A few years back, we had another
5 opportunity, which was to help bring SmartBlock
6 to the market. The first commercial application
7 that was done was in a storage in Wisconsin. The
8 conditions of the potatoes in the storage were
9 not ideal. It was a partial bin of potatoes
10 already sprouting and scattered rot.

11 We did the application, came back the
12 next morning, and my response was, "Wow!" What a
13 job it had done on the sprouts. This was the
14 very first commercial application of SmartBlock,
15 and it was far better than the ones that we had
16 been doing with clove oil for the last 10 years.

17 With SmartBlock, it is real hard to
18 even find -- I mean, it does such a thorough job
19 of burning sprouts, it is even hard to find a
20 white eye on the potatoes after the treatment is
21 done. One of the advantages of using SmartBlock
22 is, instead of every three weeks on processed

1 potatoes having to go back and retreat, we will
2 get around six weeks or sometimes even more.
3 This creates less stress on the potatoes, less
4 sugar accumulation, and less cost for the grower.

5 On the fresh market, we can get up to
6 13 weeks or more of coverage on the sprout
7 control with SmartBlock versus six weeks with
8 clove oil. Here again, it is over twice as long,
9 more cost-effective, does a better job. The
10 customers are not having to move the potatoes
11 early for sprout issues or sugar issues.

12 We have been working with a potato
13 chip company for the last three years trying to
14 market organic potato chips.

15 (Signal that time has expired.)

16 After three years of treatment with
17 clove oil, the results have been marginal at
18 best. The company has had to move the potatoes
19 earlier than they wanted because of dark fry
20 color or sprouts, or both.

21 I do feel SmartBlock would be a great
22 to help my customers and expand the organic

1 market.

2 Thank you.

3 CHAIR RICHARDSON: Thank you.

4 Questions?

5 (No response.)

6 No? Okay. Thank you very much.

7 The next speaker is John Immaraju --

8 if I have misspelled that, just go ahead and

9 correct me -- followed by Sam Schaefer-Joel.

10 MR. IMMARAJU: Good morning.

11 My name is John Immaraju, and I am the

12 Director of Commercial Product Development at

13 AMVAC.

14 I want to thank the NOSB and the USDA

15 NOP for giving us an opportunity to support our

16 newly-petitioned product, 3-Decen-2-one, which we

17 think is a superior option for controlling

18 sprouting in organic potatoes in storage.

19 A little background on 3-Decen-2-one.

20 It is classified as a biopesticide and exempt

21 from tolerances by EPN and PMRA. It has been on

22 the market for a couple of years, and you heard

1 Dale talk a little bit about it. It is approved,
2 also, by the FDA as a direct food additive under
3 21 CFR 172.515. Chemically speaking, it is
4 unsaturated aliphatic ketone with GRAS
5 designation. It is naturally occurring in
6 yogurt, tuna, mushrooms, soy, and other foods and
7 spices. And EPA has estimated the natural levels
8 to be around 2.2 to 11.2 parts per million in
9 yogurt. And the petition material, which is
10 SmartBlock is synthetic, made by a single-step
11 synthetic processor and distilled thereafter to
12 about 98 to 99 percent purity.

13 A bit of background. As Dale
14 mentioned, typically, potatoes, they are planted
15 sometime now and they are harvested in
16 August/September. They typically have to be
17 stored for around eight months. Based on the
18 dormancy and storage temperature, sprout
19 suppressants have to be applied because sprouting
20 typically converts the starch inside the potatoes
21 into sugars, and the sugars typically also react
22 with the asparagine inside the potato. When you

1 fry them or bake them, it results in a chromide
2 formation, which is a known carcinogen and it is
3 also a Prop 65 in California.

4 The current organic option is clove
5 oil. It achieves sprout control for about two to
6 three weeks, and multiple applications need to be
7 made. It is expensive. You are applying many,
8 many applications over the course of the season.
9 It also leads to the apical dominance when you
10 make the first application. So, it is like
11 pruning. You make a cut, and then, it leads to
12 what I call the clove oil treadmill because you
13 have to constantly keep making these clove oil
14 applications. It also typically leads to the
15 loss of shelf life because you take it to the
16 marketplace and it is typically sprouted within
17 six days.

18 So, many organic growers, such as Wong
19 Potatoes -- and we heard Derin speak to this
20 yesterday -- report sprouting losses as high as
21 50 to 60 percent late in the season for potatoes
22 treated and maintained with clove oil.

1 This is a typical picture of what
2 SmartBlock can do. We can see on the righthand
3 side potatoes are heavily sprouted, and the ones
4 that are being treated, the ones with SmartBlock,
5 this is a picture taken about 12 days after
6 treatment.

7 And this is a picture that was
8 actually taken yesterday at an upscale
9 supermarket nearby, and you can see there are two
10 types of potatoes here. The one on the righthand
11 side happens to be a Russet Burbank, which is
12 typically a long-dormancy variety. It looks
13 fine. There is no problem there.

14 But, typically, the problem we run
15 into is there's more of these specialty varieties
16 like the reds, thin-skinned. They have shorter
17 dormancy, and you can see they are already
18 starting to sprout. And I have labeled it with
19 arrows there. I can guarantee you that overnight
20 the guy probably went out and culled these out if
21 they weren't sold yesterday. So, it leads to a
22 loss of potatoes at the point of sale.

1 So, our request, basically, our
2 position, I should say, is that clove oil
3 currently is not providing a commercially-viable
4 solution, and that NOSB recommend 3-Decen-2-one
5 for inclusion under Section 205.606 post-harvest
6 use for potatoes only, although personally I
7 think it would probably belong more under 601
8 because there is a post-harvest use. But it is
9 not a crop, but that is something to be
10 discussed, I guess.

11 But, particularly for organic use, I
12 think even one application, the current label
13 that we have allows for four applications during
14 a storage cycle. But, even if one application
15 were to be permitted, I think it would really
16 help clean up the clove oil and help the organic
17 potato grower.

18 (Signal that time has expired.)

19 And I think it is a sustainable and
20 reliable solution, and it will also reduce the
21 number of clove oil applications and increase the
22 overall potato quality, which results in happy

1 customers.

2 So, thank you very much. With that,
3 I will take some questions. And thanks for
4 listening.

5 CHAIR RICHARDSON: Thank you.

6 Questions?

7 (No response.)

8 No, no questions. Thank you very
9 much.

10 MR. NELSON: Thank you.

11 CHAIR RICHARDSON: The next speaker is
12 Sam Schaefer-Joel, and then, David Moore.

13 MR. SCHAEFER-JOEL: Good morning.

14 My name is Sam Schaefer-Joel. I am
15 the Material Input Coordinator for the Washington
16 State Organic Program.

17 We provide organic certification to
18 around 1100 operations and review materials for
19 compliance to organic regulations. We maintain a
20 publicly-available list of over 700 products that
21 comply with organic production requirements.

22 Our program certifies a significant

1 portion of U.S. organic tree fruit production.
2 Given this experience, I would like to provide
3 some data regarding several 2017 sunset materials
4 commonly used in organic orchards.

5 I will also offer a few comments
6 regarding our perspective as a material review
7 organization and make a brief comment on the 2016
8 sunset material ferric phosphate.

9 The following data represents the
10 prevalence of selected 2017 sunset materials
11 within the Organic System Plans, OSPs, of our
12 certified tree fruit operations. Please note
13 that this data does not represent usage data,
14 but, rather, the option to use an input material
15 when preventative management practices have not
16 been sufficient to control pests or disease.

17 Elemental sulfur. Eighty-one percent
18 of WSDA-certified tree fruit operations have this
19 material on their OSP for pest control. Lime
20 sulfur is present on 87 percent of tree fruit
21 OSPs. Horticultural oils are on 87 percent of
22 tree fruit OSPs. Pheromones on 79 percent.

1 Copper products, 68 percent. Potassium
2 bicarbonate, 60 percent. These numbers
3 illustrate the relevance of these materials to
4 organic tree fruit production in Washington
5 State.

6 Another 2017 material I would like to
7 address is lignin sulfonate. Lignin sulfonates
8 are commonly used as chelation agents and dust
9 suppressants within fertilizer and soil amendment
10 products. However, lignin sulfonates are not
11 typically disclosed on product labels. Farmers
12 may not be aware they are using products
13 containing lignin sulfonates or able to comment
14 on the importance of this material for their
15 operation.

16 As a material review organization, our
17 program has access to the confidential
18 information about these branding material
19 products that contain lignin sulfonates. Using
20 this information, we found that 37 percent of our
21 vegetable producer OSPs list WSDA-registered
22 products containing lignin sulfonates. However,

1 that 37 percent doesn't reflect the full
2 prevalence because, without access to the
3 confidential information about OMRI-listed
4 products, we weren't able to include those
5 products in our search. We don't know which ones
6 do contain lignin sulfonates.

7 EPA lists for inerts have a similar
8 issue where they are not specifically disclosed
9 on product labels. Due to that confidential
10 nature, organic producers don't have the ability
11 to comment on the necessity of the inert
12 ingredients and it is difficult to assess the
13 impact on organic producers caused by removing
14 any specific inert material from the allowed
15 list. Our program supports the process of
16 updating the allowed list of inert ingredients
17 through collaboration with the EPA's Safer Choice
18 Program.

19 If the NOSB does decide to remove
20 individual inert materials from the allowed list,
21 we would recommend sufficient time be allowed for
22 manufacturers to develop, test, and receive the

1 EPA and material review approvals for the
2 reformulated products in order to avoid
3 disrupting organic producers.

4 Ferric phosphate. Fifty-four percent
5 of WSDA-certified organic vegetable producers
6 located on the rainy and slug-infested side of
7 our State listed a ferric phosphate product on
8 their 2014 Organic System Plan. Our program
9 supports the 2012 NOSB recommendation that the
10 active ingredient ferric phosphate should be
11 considered separately from inert ingredients. A
12 separate process and timeline has been
13 established to review inert ingredients.

14 Thank you for this opportunity and for
15 all the work that you do. I would be happy to
16 take any questions, and I do have a summary of
17 those statistics with a few more details that I
18 will pass out.

19 CHAIR RICHARDSON: Great. Thank you
20 very much, Sam.

21 Questions? Zea?

22 MEMBER SONNABEND: Thank you, Sam.

1 The data is very useful to us in making our
2 determinations.

3 Now I do have a question about
4 pheromones. If I am putting you on the spot too
5 much, maybe talk to me about it later. But,
6 recently, I have seen products on the market that
7 are formulated with a pheromone and another
8 semiochemical called kairomones. And I am
9 wondering if you have determined that kairomones
10 are a type of pheromone or think they should be
11 and, therefore, would be covered by the listing
12 of pheromones. Because at least one of the
13 products is claiming to be WSDA-approved, and I
14 haven't gone to your website to check that. But
15 I am curious if you have encountered that and
16 what your thoughts are.

17 MR. SCHAEFER-JOEL: I think I would
18 have to look at the specific product to see how
19 we decided on that. But I believe I have seen
20 kairomones, depending on the definition, that
21 they may be considered as pheromones, depending
22 on what the particular substance is and the

1 effect that it has on the insect. But, again, I
2 would want to specifically know what substance it
3 was to evaluate it.

4 CHAIR RICHARDSON: Other questions,
5 comments?

6 (No response.)

7 Thank you, Sam.

8 The next speaker is David Moore, and
9 he will be followed by Kelly Pepper.

10 MR. MOORE: Good morning, ladies and
11 gentlemen.

12 My name is David Moore. I'm a
13 California-licensed Agricultural Pest Control
14 Advisor and Qualified Applicator. I work for
15 Neudorff, but today I am also here speaking
16 personally that takes crop protection and IPM
17 very seriously and personally.

18 I have been the guy out there in the
19 paper suit, the rubber gloves, the rubber boots,
20 and the funny hat spraying in the hot sun. I
21 have sent my direct-reports out into that same
22 heat to do that same job, and I have been

1 personally responsible for their safety and
2 training. And it has been my job to grow and
3 bring in a clean crop that meets the high
4 standards necessary to produce premium wine.

5 For the record, I farm those grapes
6 conventionally with a significant primary
7 reliance on some of the materials that you all
8 will vote on for 2017 sunset.

9 I am here mostly to say thank you.
10 Thanks to the NOP for your stewardship. Thanks
11 to the Board members for your hard work, both
12 past and future. Thanks to the Crops
13 Subcommittee for your diligent work on ferric
14 phosphate and for reviewing it on the merits.

15 Thanks also to the growers,
16 certifiers, and trade groups that support the
17 relisting of ferric phosphate, many of whom are
18 in the room today.

19 And thanks in advance to members of
20 the Board that vote to keep ferric phosphate on
21 the National List for the next five years. Your
22 vote is a vote for the organic grower and for her

1 continued success.

2 Thanks for all the work that will go
3 into the review of 2017 sunset materials, many of
4 which have been the foundation and pillars of
5 some of the finest IPM in all of agriculture for
6 far longer than there has been an NOP.

7 I encourage the Board to relist all
8 2017 crops materials. In particular, I encourage
9 the relisting of all soaps, of fixed coppers, of
10 sulfur compounds, of oils, and especially of
11 sticky traps and pheromones. I point out that
12 these are not all Neudorff products. I call for
13 these relistings on behalf of organic growers
14 everywhere, without whom there would be no
15 organic agriculture.

16 I also call for the renewal of all
17 uses of chlorine, especially in handling.
18 Chlorine is a crucial sanitation tool, and
19 sanitation is a crucial food safety issue.

20 Consider the implication for organics
21 of even a modest outbreak of food-borne illness
22 if chlorine sanitizers were deliberately removed

1 from the toolbox. Imagine for a minute having
2 Bill Marler looking at you across the courtroom.

3 Lastly, for all the many reasons
4 already presented, I encourage the Board to renew
5 the listing of List 4 inerts and to work
6 diligently and cooperatively for a prompt,
7 effective implementation of a rational
8 replacement standard based on the expertise and
9 existing work of EPA.

10 This will remove potentially crippling
11 uncertainty, and this new standard must
12 reasonably accommodate future changes, both
13 additions and potentially removals. This is a
14 sound approach, and to do otherwise would not be
15 sensible.

16 Thank you very much.

17 CHAIR RICHARDSON: Thank you.

18 Questions?

19 (No response.)

20 Thank you.

21 MR. MOORE: Thank you.

22 CHAIR RICHARDSON: The next speaker is

1 Kelly Pepper, and she will be followed by Nancy
2 Teas-Crain.

3 MR. PEPPER: Good morning, Madam Chair
4 and Members of the Board.

5 I am Kelly Pepper, Manager of Texas
6 Organic Cotton Marketing Cooperative, located in
7 Lubbock, Texas.

8 On behalf of the 35 members of our
9 Cooperative who produce most of the organic
10 cotton grown in the United States, I would like
11 to thank each of you for your dedicated service
12 to the organic industry.

13 Additionally, I would like to thank
14 the Crops Subcommittee for your vote in support
15 of relisting hydrochloride on the National List.
16 And I am here to encourage the full Board to
17 finalize this process.

18 I'm not going to take up your time
19 rehashing details that have been previously
20 presented to you, but I would like to reemphasize
21 that hydrogen chloride is essential to our
22 farmers due to the fact that it is used in

1 delinting all planting seed available in U.S.
2 organic cotton production.

3 I would also add that research on
4 mechanical delinting has progressed from benchtop
5 model to prototype, and we continue to be hopeful
6 that eventually this method will be perfected and
7 adopted by the seed industry. In the meantime,
8 however, the use of hydrogen chloride for
9 delinting cotton planting seed is critical for
10 our organic cotton producers.

11 To dispute a statement made yesterday
12 at this microphone, delisting hydrogen chloride
13 would not precipitate the use of mechanical
14 delinting, but, rather, would result in the
15 elimination of organic cotton production in the
16 U.S.

17 As I emphasized in my comments at the
18 fall meeting in Louisville, the volume of seed
19 required for organic cotton production is much
20 too small to drive any change by seed providers.
21 It will be necessary for mechanical delinting to
22 be perfected and, then, adopted by the seed

1 companies for their general use.

2 Thank you for your time, and I will be
3 glad to address any questions you might have.

4 CHAIR RICHARDSON: Thank you.

5 Questions? Francis?

6 MEMBER THICKE: Yes. Can you give us
7 any more information about the mechanical
8 delinting? Is that project still being funded by
9 ARS? Is it still ongoing?

10 MR. PEPPER: It is ongoing, and they
11 have recently moved from a small benchtop model
12 to a larger prototype.

13 MEMBER THICKE: Okay.

14 MR. PEPPER: And there's continued
15 research going on as well as interest from the
16 industry, but it is just a ways off.

17 CHAIR RICHARDSON: Other questions?

18 (No response.)

19 Thank you very much.

20 Oh, sorry. Nick?

21 MEMBER MARAVELL: Have you had any
22 assessment of the quality of the seed for

1 mechanical delinting?

2 MR. PEPPER: In earlier versions of
3 mechanical delinting, that has been an issue.
4 There has been reduced germination from some of
5 the earlier methods. That is part of the
6 research going on. And my understanding is that
7 this method, which is using brushes rather than
8 blades, that they have solved that issue.

9 CHAIR RICHARDSON: Great. Thank you
10 very much.

11 The next speaker is Nancy Teas-Crain,
12 to be followed by Bill Stoneman.

13 MS. TEAS-CRAIN: Hello. Good morning.

14 I'm Nancy Teas-Crain, and I am a
15 dietitian from Alpine, California. I am a member
16 of the Cornucopia Institute, and I am here today
17 as a citizen lobbyist.

18 I have volunteered to present
19 testimony because I want to help support and
20 ensure the integrity of organic food. As a
21 dietitian, I know that food is the cornerstone of
22 health, and for patients with problems such as

1 irritable bowel syndrome and Crohn's disease, it
2 is of great importance to know exactly what is in
3 the food they are consuming.

4 I'm also a Chapter Leader for the
5 Weston A. Price Foundation, an organization that
6 actively supports organic farming and honest and
7 informative labeling.

8 I would like to comment on the 2017
9 sunset of lecithin deoiled. Deoiled lecithin is
10 an emulsifier, surfactant, and stabilizer and
11 preservative in many foods such as baked goods
12 and chocolates.

13 The Cornucopia Institute opposes the
14 relisting of deoiled lecithin on the National
15 List as it is now available in organic form in
16 sufficient supply and because there is a
17 significant possibility that conventionally-grown
18 soy, the current source of deoiled lecithin, is
19 contaminated with GMO soybeans.

20 The National Organic Standards Board
21 asks, has a supply of dry forms of organic
22 unbleached lecithin increased sufficiently since

1 2009 that this can be removed from the list?

2 Lynn Clarkson, the head of Clarkson Soy Products,
3 testified in May 2009 that at that time his
4 company could not make organic deoiled lecithin.
5 However, now his company is selling and
6 distributed organic deoiled lecithin.

7 When the Cornucopia Institute
8 contacted Curtis Bennett, Vice President of Sales
9 for Clarkson Soy Products, Mr. Bennett stated the
10 manufacturer of organic deoiled lecithin has
11 produced this product for two years, recently
12 opening a second production facility, and so,
13 creating a surplus of organic deoiled lecithin.
14 This comment by an industry leader establishes
15 that currently there is a viable source of
16 deoiled lecithin commercially available.

17 The main source of conventional
18 deoiled lecithin is from soybeans, a chemically-
19 intensive agricultural crop. The reality is that
20 94 percent of the soybeans grown in the U.S. are
21 GMO, and this suggests a strong likelihood that
22 non-GMO soy is contaminated with GMO soybeans.

1 Indeed, in 2004, the Union of
2 Concerned Scientists found that 50 percent of
3 conventional non-GMO soybeans were contaminated
4 with GMO material. And so, it seems likely that
5 11 years later that percentage of contamination
6 is even higher.

7 Therefore, considering the strong
8 likelihood of GMO contamination of deoiled
9 lecithin currently used by the industry, and
10 considering that there is a viable commercial
11 source of organic deoiled lecithin that exists,
12 it makes sense to allow this material to sunset.

13 In conclusion, the Cornucopia
14 Institute opposes the relisting of lecithin
15 deoiled to the National List under 205.605.

16 Thank you for allowing me to present
17 this testimony. If you have questions about this
18 testimony, I encourage you to speak with one of
19 the Cornucopia staff members that are here today.

20 Thank you.

21 CHAIR RICHARDSON: Thank you very
22 much, Nancy.

1 The next speaker is Bill Stoneman,
2 followed by Stephen Grealy.

3 MR. STONEMAN: Good morning, Madam
4 Chairman and Members of the National Organic
5 Standards Board, and NOP staff.

6 I am Bill Stoneman, the Executive
7 Director of the Biopesticide Industry Alliance.
8 I am here to represent the biopesticide industry.
9 EPIA is a nonprofit 501(c)(6) organization
10 founded in the year 2000.

11 EPIA is made up of 90 member companies
12 involved in the discovery, development, research,
13 regulation, manufacture, and marketing of
14 biological control technologies.

15 The biopesticide industry represents
16 producers of biological pest control tools for
17 all growers, including organic growers. EPIA is
18 dedicated to fostering the adoption of
19 biopesticide technology through increased
20 awareness about their effectiveness and full
21 range of benefits to progressive pest management.

22 We respectfully ask for an extension

1 to the comment period before sunseting List 4
2 inerts. We believe strongly that more time is
3 needed to respond to the National Organic
4 Standards Board potential action if organic
5 growers are to understand the full impact and
6 comment on the potential delisting of List 4,
7 more specifically, List 4(b) inerts.

8 Not all growers fully understand the
9 sunseting rules and the role of the National
10 Organic Standards Board. It has taken time and
11 internal education for our own organization to
12 realize the impact and status of List 4 inerts in
13 the sunseting process.

14 EPIA fully supports the adoption of
15 integrated pest management as a foundation for
16 pest control in organic agriculture prescribed by
17 the National Organic Standards. Growers rely on
18 organic products and tools to produce organic
19 food crops only after all IPM practices have been
20 planned in the Organic Systems Plan, have been
21 implemented and documented.

22 If List 4 inerts are removed from the

1 National List, growers may be left without some
2 critical management tools. They can be the
3 difference between crop success and crop failure.

4 Substituting one inert for another in
5 a biopesticide formulation is not an easy
6 process. It requires time to reformulate as well
7 as many years potentially of rigorous field
8 testing, reevaluation, organic evaluation,
9 regulatory evaluation, and approval.

10 In the interim, there may be no
11 feasible alternatives to offer the grower.
12 Additionally, producers of biopesticides may
13 choose not to reformulate, leaving growers with
14 fewer tools.

15 Most biopesticides are carefully
16 designed to comply with stringent requirements of
17 the U.S. EPA and the National Organic Standards.
18 Since 2006, EPA has reassessed all inerts on List
19 4(b) and 4(a) and continues to review inerts as
20 key to the new safety standards required by the
21 Food Quality Protection Act.

22 Only those inerts that pass both

1 exposure and toxicology risk assessments remain
2 approved. Even if an active ingredient or an
3 inert is naturally-derived, the safety and risk
4 assessments still apply.

5 Today there is more, not less,
6 information that supports the continued approval
7 of the use of inerts on List 4. While the
8 industry respects the National Organic Standards
9 criteria for naturally-based inputs, naturally-
10 sourced active ingredients require a delicate
11 balance of inert ingredients which are carefully
12 selected. Formulations are crafted to enhance
13 efficacy, yet remain innocuous environmentally.

14 As the industry that provides these
15 tools to organic growers, EPIA would like to work
16 with the organic community to propose an adoption
17 of an alternative inert evaluation that adheres
18 to the National Organic Program's philosophies.
19 To minimize disruption, the process for inert
20 evaluation should be clear and transparent.

21 (Signal that time has expired.)

22 Thank you for the opportunity to speak

1 to your group.

2 CHAIR RICHARDSON: Thank you.

3 Zea?

4 MEMBER SONNABEND: Thank you for your
5 comments.

6 But were you here yesterday to hear
7 the Safer Choice presentation --

8 MR. STONEMAN: Yes.

9 MEMBER SONNABEND: -- from the EPA?

10 MR. STONEMAN: Yes.

11 MEMBER SONNABEND: Because we are not
12 proposing to remove all inerts from the National
13 List. We are proposing to move into an
14 evaluation program jointly with the Safer Choice
15 Program. And so, I am interested in your
16 thoughts on that.

17 MR. STONEMAN: The Safer Choice
18 Program has not yet been implemented for
19 biological pesticides or registered pesticides in
20 general. In fact, just recently, the EPA has re-
21 announced the pilot program for pesticide listing
22 under the old DfE moniker. So, Safer Choice is

1 yet to be applied to pesticide applications.

2 MEMBER SONNABEND: But do you think it
3 feasibly could work as a strategy?

4 MR. STONEMAN: Yes. Yes, as a
5 possible strategy, that's correct. And we would
6 like to work with the National Organic Standards
7 Board and the organic community in that effort.

8 MEMBER SONNABEND: Okay. Thank you.

9 MR. STONEMAN: Thank you.

10 CHAIR RICHARDSON: Other questions?

11 (No response.)

12 MR. STONEMAN: Thank you for the
13 opportunity.

14 CHAIR RICHARDSON: Thank you very
15 much.

16 The next speaker is Stephen Greal, y,
17 and that will take us to the break.

18 MR. GREALY: Miles, Chairwoman
19 Richardson, and Members of the Board, I would
20 like to also thank you very much for all of your
21 service.

22 My name is Stephen Greal, y. I'm a

1 Senior Technical Reviewer for QAI, but, also, I
2 have 30 years of experience in the compost
3 industry, five years as an organic farmer, three
4 as a consultant, and the last 20 years working
5 for the City of San Diego running a large urban
6 composting program.

7 Today I am going to address
8 contaminants in farm inputs, specifically
9 focusing on urban compost, since that is going to
10 be such a large, growing product that is going to
11 be available to the organic community. And
12 personally, I think it would be a real shame not
13 to have the organic community embrace that
14 product, given the supply that is going to be
15 there.

16 I really applaud the work that has
17 been done looking at, the preliminary work that
18 has been done by the Board looking at
19 contaminants coming in on farm inputs. On this,
20 there are two issues I think to look at. One is
21 tracing back and trying to avoid the contaminants
22 in the feedstocks, and the other one is looking

1 at the product quality.

2 For manure composts, source composts
3 and manures, I think going back to the source and
4 trying to address contamination at the source is
5 feasible. But, when you come to urban compost,
6 it is not feasible for all potential types of
7 contamination you might encounter.

8 For example, I see four main areas of
9 contaminants to worry about when you are looking
10 at urban compost. One is heavy metals. One is
11 fecal contamination. One is physical
12 contaminants from incidental trash that might end
13 up in the compost. And the final one is
14 pesticides.

15 I think we need to divide each of
16 those up and to look at them specifically for
17 specific solutions. With respect to heavy metals
18 and fecal contamination, that is something that
19 regulated composting facilities are already
20 addressing. In California, for example, every
21 5,000 cubic yards of product has to be tested.
22 Those results are maintained by file and

1 regulators inspect those reports to make sure
2 that the compost stays within state limits. So,
3 organic producers can get copies of those to
4 address those two.

5 On physical contamination, the State
6 of California currently has a written comment
7 period open for compost regulations. They are
8 revisiting their regulations to address
9 specifically one of the big issues, physical
10 contamination, and the comment period closes next
11 Wednesday. It just opened up last week.

12 But they are suggesting that there
13 should be less than 1 percent contamination,
14 physical contamination, coming in on the
15 feedstock and .5 percent on the final product of
16 any contaminants over 4 millimeters.

17 So, I think that is something that,
18 California often being the leader in terms of
19 developing regulations around the country, I
20 think that might be something for the Board to
21 look at in terms of establishing some sort of
22 limit on the physical contamination that should

1 be allowed when it comes to urban compost.

2 With respect to pesticides, that is a
3 trickier issue. As was the testimony given
4 yesterday, there are a lot of very potent
5 pesticides being used that have long residual
6 activity. We have had experience in the industry
7 since I have been in it with bifenthrin and with
8 clopyrolid as two in California that were a big
9 issue.

10 I personally got involved in the
11 clopyrolid issue and spent about a year working
12 with regulators and legislators at the State to
13 address that. The thing about that type of
14 contamination is that our customers, our compost
15 customers, are going to find out right away that
16 there is a problem, and you are going to hear
17 about it right away. The industry is going to
18 respond right away because, obviously, your whole
19 market is at risk.

20 And so, I think given the myriad of
21 chemicals that are out there, expecting compost
22 producers to test for every potential one is not

1 going to be economically feasible. However, when
2 there is an issue, then, as happened
3 with bifenthrin recently and clopyrolid back
4 then, there is a very quick, rapid response.

5 Like at our facility, for example, we
6 put up a large sign letting our customers know
7 that there is this issue we are dealing with. We
8 are actually able to go out and identify the
9 sources and get it out of our product and,
10 through several repeated tests, find out that we
11 didn't have it on an ongoing basis.

12 So, I think that is sort of the
13 practical way to address each of those different
14 issues. And I would like to offer myself as a
15 resource, you know, as you go through these
16 discussions and deliberations.

17 Thank you very much.

18 CHAIR RICHARDSON: Thank you.

19 Questions?

20 (No response.)

21 No questions. Thank you very much.

22 We are now ready to take a 15-minute

1 break. We are exactly on time, and we will start
2 again at exactly quarter to.

3 (Whereupon, the above-entitled matter
4 went off the record at 10:29 a.m. and resumed at
5 10:46 a.m.)

6 CHAIR RICHARDSON: The first speaker
7 who will be up in the next session of public
8 comment is Amber Pool. Amber Pool. Is Amber
9 around? Following Amber Pool will be Nancy
10 Utesch. Amber Pool and Nancy Utesch.

11 So, which one do I have up there,
12 Nancy? I am waiting. Is there an Amber Pool
13 here as well or not? Amber is there? Okay.

14 Well, why don't I just start with
15 Nancy since you are here.

16 Is there an NOP staff person that can
17 work the timer?

18 So, is this Amber up here? Okay.
19 Great. Thank you very much.

20 MS. POOL: Okay. Hi. Good morning.

21 I am Amber Pool. I work for CCOF
22 Certification Services in the Grower

1 Certification Department.

2 Today I would like to talk about the
3 micronutrient annotation. CCOF would like it to
4 read, "deficiency must be documented" instead of
5 "sole deficiency must be documented by testing".

6 We should avoid creating a standard
7 that overrelies on testing. We are not against
8 all annotations. We think other annotations such
9 as the various copper annotations which read
10 "Copper must be used in a manner that minimizes
11 accumulation in the soil" works really well.

12 I work with a lot of farmers who have
13 been farming 20, 30, 40 years. They have an
14 intimate knowledge of the relationship between
15 their crop and the soil.

16 An example I will give, since we are
17 in southern California, is with citrus growers.
18 They often experience a micronutrient deficiency
19 years before our soil test would demonstrate one.
20 If they wait the two years that the soil test
21 takes to demonstrate a micronutrient deficiency
22 and then they correct it, it takes years for the

1 crop to catch back up, and they have already had
2 a significant loss in crops by the time they can
3 show a soil test to their certifier demonstrating
4 a deficiency.

5 As a certifier, I should be verifying
6 their practices onsite, not their paperwork.

7 There are many challenges with the way the
8 annotation currently reads. I would just like to
9 say that healthy nutrient-balanced soils created
10 crops that are healthy and that are naturally
11 pest-resistant. So, allowing growers to use
12 micronutrients proactively will prevent less
13 allowed pesticide use.

14 Speaking of healthy soils, I wanted to
15 mention compost. Compost is an important tool
16 for organic farmers. It improves soil structure.
17 It supports a variety of soil organisms. It
18 makes soil nutrients more available to crops, and
19 it protects crops from pests and diseases.

20 With that, I am complete. And so, I
21 am happy to take any questions.

22 CHAIR RICHARDSON: Questions for

1 Amber? Okay, Zea?

2 MEMBER SONNABEND: What are the
3 typical types of documentation for micronutrients
4 that you think would be sufficient besides just
5 soil testing?

6 MS. POOL: Thank you for that
7 question, Zea.

8 I think a variety of documentation
9 should be allowed. Soil testing can be one.
10 Tissue testing is another good one. Also, like I
11 said, our growers have been farming in the area
12 for 20 or more years. They know more about the
13 soil than we do, as the certifier.

14 And also, maybe newer farmers are
15 working with crop advisors. And so, some of the
16 UC, University of California, publications saying
17 that soils in this area, this particular crop
18 needs this extra micronutrient at this point of
19 production, that could be a possible
20 documentation.

21 Also, we know that other certifiers do
22 allow a variety of different types of documented

1 soil deficiencies besides just soil tests.

2 However, our growers, they do use the OMRI list
3 and they see that restriction that, to use this
4 product, they need a documented soil deficiency.
5 So, they think that they just can't use it
6 because their soil does show normal levels of
7 that micronutrient. Even though they need it to
8 stay competitive, they just don't use it because
9 they don't think they are allowed to.

10 So, if the annotation was not removed,
11 but just if it read "a documented deficiency"
12 instead of "a documented soil deficiency through
13 soil testing," I think it would be better and we
14 could verify practices instead of paperwork.

15 CHAIR RICHARDSON: Francis?

16 MEMBER THICKE: Isn't it true -- maybe
17 Zea knows -- isn't true that tissue testing is
18 good enough testing to document a soil
19 deficiency? I think that tissue testing would
20 document a soil deficiency.

21 MEMBER SONNABEND: Well, it doesn't
22 have to be a soil deficiency. I mean, sometimes

1 it is in the soil, but the plants aren't taking
2 it up properly because it is all down the --

3 MEMBER THICKE: Well, the annotation
4 says soil deficiency must be documented by
5 testing, and you think you could document soil
6 deficiency by tissue testing. Correct?

7 MS. POOL: That is one way.

8 MEMBER SONNABEND: She is suggesting
9 changing it to --

10 MEMBER THICKE: Yes.

11 MEMBER SONNABEND: -- deficiency
12 documented by testing.

13 MEMBER THICKE: Right. I understand
14 that, but I think there was a misunderstanding
15 about that tissue testing can document a
16 deficiency.

17 MS. POOL: We agree that the tissue
18 testing can document a soil deficiency. If you
19 just removed the soil and the testing from the
20 annotation, then you could allow a variety of
21 ways to demonstrate a micronutrient deficiency
22 instead of strictly relying on testing.

1 Because even tissue testing, the
2 tissue can show that the levels are adequate, but
3 there could still be a deficiency, and it takes
4 the growers years to correct that deficiency in
5 their soil. So, by the time a soil test or a
6 tissue test shows a deficiency, they might be two
7 years behind in applying that micronutrient. And
8 we are always telling our growers that they need
9 to plan ahead and be proactive, but in this case
10 with the annotation they can't be proactive.

11 CHAIR RICHARDSON: Great. Thank you
12 very much, Amber.

13 MS. POOL: Thank you.

14 CHAIR RICHARDSON: The next speaker is
15 Nancy Utesch, and she will be followed by Dan
16 Chelleni.

17 MS. UTESCH: Good morning.

18 Thank you to your Board for all of
19 your work and for offering me this opportunity to
20 speak before you today.

21 My name is Nancy Utesch. My husband
22 and I are farmers raising 100-percent grass-fed

1 beef on our 150-acre farm in Kewaunee County in
2 northeast Wisconsin. Sitting right below the
3 thumb of Wisconsin on the beautiful Lake Michigan
4 shoreline, my once vibrant community is now home
5 to 15 industrial megafarms known as concentrated
6 animal feeding operations. These house as many
7 as 3, 5, 8 thousand animals in the close quarters
8 of confinement.

9 Kewaunee County has the highest
10 concentration of dairy cows per acre of any
11 county in the State of Wisconsin. When my
12 community members gather where I live, we talk
13 about manure, its makeup, and its management.

14 Being subject to the massive amounts
15 of CAFO waste generated where I live has made me
16 seriously question the practice of organic
17 standards allowing CAFO waste spread on organic
18 ground and crops. This dirty secret in organics
19 must be stopped, and the sooner the better.

20 These wastes are full of BGH,
21 antibiotics, hormones, copper sulfates, pesticide
22 residues, GMO residues, chemical barn cleaners,

1 pharmaceuticals, and possibly municipal waste.

2 Where I live, industrial wastes are part of that
3 makeup. These come from rendering facilities;
4 mink ranches; slaughterhouse waste, so blood,
5 hair, and paunch, which is the stomach and
6 intestine waste of slaughtered animals; cheese
7 wastes; heavy in chlorides; cattle truck wash;
8 lime slurry, and a myriad of other things
9 combined into a toxic soup delivered weekly by
10 the tons to farmers and landowners where I live.
11 These farmers and landowners are paid a tipping
12 fee for accepting these wastes.

13 Very little oversight takes place with
14 these wastes, which are self-monitored and
15 logged. These wastes carry with them the threats
16 of pathogens, endocrine-disrupting compounds, and
17 a general makeup that is harmful to human health
18 and the health of our soils.

19 The rendering facility that I
20 mentioned earlier remarked in a newspaper article
21 in 2005 that they anticipate their merger would
22 make business more secure, at a time when the

1 public is wary of contracting the human form of
2 mad cow disease.

3 Could voluminous amounts of blood in
4 rendered animal parts landsread hold within it
5 the threat of mad cow? In 2013, research from
6 the National Wildlife Health Center in Madison
7 revealed that prions, the infectious, deformed
8 proteins that cause chronic wasting disease in
9 deer, can be taken up by plants, such as alfalfa,
10 corn, and tomatoes.

11 Living in a CAFO community, I find the
12 notice and my tolerance and acceptance of the
13 spreading of CAFO waste on food deemed organic to
14 be beyond an oxymoron. It is offensive.

15 Obviously, the uptake of these crops
16 feeding on CAFO waste affects not only the
17 quality of the food, but its status. That is,
18 quite frankly, it is not organic.

19 The unhappy marriage and unhealthy
20 relationship of these two diversely-different
21 farming methods needs to be divorced. CAFOs have
22 impoverished my community, contaminated the air

1 and water where I live, and jeopardized human
2 health.

3 I am a farmer, but today I speak to
4 you as an organic consumer as well. Trust is so
5 important in the organic community. Keywords I
6 heard yesterday describing organics included
7 "trust," "truthfulness," "integrity,"
8 "authenticity," "faith," and "perception," "soil
9 biology".

10 My trust in organics is the reason I
11 am willing to pay premium prices for food that I
12 consider medicine. I find the use of industrial
13 farm waste used in growing organic foods a real
14 breach of trust and integrity within the organic
15 standards. All wealth and subsequent health
16 comes from our soils.

17 (Signal that time has expired.)

18 CAFO production waste and organics
19 don't mix. In this, "the Year of the Soils," as
20 declared by the United Nations, I implore you:
21 get the industrial concentrated animal feeding
22 waste out of organic production. It doesn't

1 belong there.

2 Thank you.

3 CHAIR RICHARDSON: Thank you.

4 Questions?

5 (No response.)

6 Thank you very much for your comments.

7 MS. UTESCH: Thank you.

8 CHAIR RICHARDSON: The next speaker is
9 Dan Chelleni, and he will be followed by Cindy
10 Elder.

11 MR. CHELLENI: Good morning.

12 My name is Dan Chelleni. I work for
13 Driscoll's, a private company that contracts with
14 independent farmers to grow proprietary berry
15 varieties which Driscoll's then markets and
16 distributes. My job as Applied Research Manager
17 is to ensure the profitability of those
18 independent growers while simultaneously
19 minimizing their environmental footprint.

20 For strawberries, I work with 34
21 different organic growers who collectively farm
22 1,072 acres in the Salinas and Potrero Valleys

1 of coastal California. Sixty-three percent of
2 those growers are Hispanic. Most began their
3 careers as pickers, truck drivers, or irrigators,
4 and then, worked their way up to achieve the
5 American dream of owning their own business.

6 Today I am here on behalf of those
7 organic farmers to ask the Board to support the
8 relisting of elemental sulfur, lime sulfur, and
9 plastic mulch for crop production.

10 I am also here on behalf of Driscoll's
11 to demonstrate the steps that they have taken to
12 ensure that these materials will be used within
13 the spirit of IPM and organic agriculture.

14 Powdery mildew is the most important
15 foliar disease affecting strawberries in coastal
16 California. Without elemental sulfur, economic
17 control would be near impossible, particularly in
18 regards to fruit quality.

19 To ensure that sulfur is only applied
20 when the risk of disease is high, Driscoll's has
21 partnered with uspests.org to make the UC Davis
22 strawberry forecasting model available to all

1 California strawberry growers by linking the
2 model directly to publicly-accessible weather
3 stations. Last year, in trials where we
4 evaluated this model with our organic growers, we
5 reduced the number of spray applications of
6 elemental sulfur from 18 to 11.

7 Plastic mulch is also critical for the
8 economic survival of Driscoll's organic growers.
9 The use of plastic mulch increases yields,
10 improves fruit quality, significantly reduces
11 labor costs due to hand-weeding, dramatically
12 reduces water use, which is especially critical
13 in a drought-starved region, and it reduces
14 nutrient runoff into local watersheds.

15 Although a worthy goal is
16 biodegradable films, currently there are none
17 that are satisfactory on the market. Driscoll's
18 works with growers to implement cultural
19 practices and use equipment to ensure that all
20 the plastic is removed from the fields. We have
21 also partnered with our growers to develop
22 opportunities to recycle the plastic after it is

1 removed from the fields. Currently, 90 percent
2 of all plastic mulch used by Driscoll's
3 strawberry growers in coastal California is
4 recycled.

5 Finally, as a research scientist with
6 25 years of experience helping organic farmers
7 develop systems-based approaches to managing
8 plants, pests, and diseases, I would like to see
9 organic farmers continue their programs to
10 enhance the natural biological feedback
11 mechanisms that are inherently present in
12 agroecosystems, but, also, to have available the
13 tools needed to return pest and pathogen
14 populations back to biologically-manageable
15 levels when pest outbreaks occur due to
16 circumstances beyond their control, such as the
17 contamination of seed or compost with plant
18 pathogens or weed seed.

19 If available, these tools should be
20 naturally-derived materials. Otherwise, organic
21 farmers should have access to synthetic materials
22 if they are molecularly and structurally

1 identical to the natural materials such as insect
2 pheromones and plant essential oils.

3 (Signal that time has expired.)

4 Thank you.

5 CHAIR RICHARDSON: Thank you.

6 Questions?

7 (No response.)

8 No questions. Thank you very much.

9 The next speaker is Cindy Elder, and
10 she will be followed by Ernie Peterson.

11 MS. ELDER: This is read on behalf of
12 OCIA's membership. We are producer, processor,
13 and handler members of the Organic Crop
14 Improvement Association International. OCIA
15 functions in the United States as a network of
16 chapter and direct members and as a USDA National
17 Organic Program Accredited Certification Agency
18 that provides certification services to more than
19 9,000 people in North, Central, and South America
20 and Asia.

21 Last year our International Board of
22 Directors submitted a letter to the NOP and

1 Agriculture Secretary Tom Vilsack on organic
2 certification of hydroponic production. There
3 have been no clear regulations to certify
4 hydroponic operations. Some certifiers, such as
5 OCIA, have refused their applications while
6 others accept them.

7 The NOP has started working on
8 addressing the organic certification of
9 hydroponic operations by asking for nominees on
10 a task force. That task force would make a
11 recommendation to the NOSB in 2016.

12 However, the NOSB already made a clear
13 recommendation to the NOP in 2010, after
14 extensive collaboration with the organic
15 community, including formal public comments,
16 after posting in The Federal Register.
17 Hydroponic systems should not be eligible in
18 organic certification.

19 NOSB should continue to encourage
20 diversity in organic operations while upholding
21 basic principles, such as soil-building being the
22 basis for organic agriculture. It should follow

1 that healthy soil grows healthy seeds, which
2 should yield good quality food for people.

3 We gave the NOP several viable options
4 to address the NOSB's hydroponics recommendation
5 last year. One, creation of specific standards
6 within the NOP covering hydroponic production.
7 Two, creation of a new and separate standard with
8 its own label, USDA Organic Hydroponically-
9 Produced. Or, three, a formal finding by the NOP
10 that new organic hydroponic production will not
11 be allowed, import of such production will be
12 discontinued, and current domestic production
13 will be discontinued after a reasonable amount of
14 time. It should be noted that many other
15 developed countries also prohibit organic
16 labeling of anything produced hydroponically.

17 We ask that the NOSB keep these
18 options in mind if it discusses further
19 recommendations on hydroponic production. We
20 understand the NOSB has an overwhelming amount of
21 other agenda items to prioritize. Hundreds of
22 materials are set to be reviewed this year alone

1 because of the NOP's 2013 process to sunset
2 substances from the National List. Other
3 stakeholders have said this new process that
4 requires a two-thirds majority vote to remove
5 materials from the list minimizes the meaning of
6 the organic label. We agree.

7 Organic operations can be innovative
8 by using substances in new ways in their diverse
9 operations. At the same time, we remind the NOSB
10 that the common perception of organic is it is
11 free from synthetic substances. NOSB should
12 continue to strengthen the innovation found in
13 organics while maintaining the transparency and
14 integrity that people are recognizing in the
15 organic label.

16 Seed purity discussions should keep in
17 mind diversity with emphasis on protecting
18 growers' freedom to save, develop, and share
19 their own seed.

20 Organic farmers or the conventional
21 farmers, our methods trace their origins back for
22 over 4,000 years. Chemical and biotechnology

1 agriculture are advocates of the radicals with
2 roots traced back 70 years to World War II
3 warfare chemistry labs, gene modification
4 experiments, and international corporate for-
5 profit boardrooms.

6 Thank you.

7 CHAIR RICHARDSON: Thank you very
8 much.

9 Questions?

10 (No response.)

11 Thank you.

12 MS. ELDER: Thanks.

13 CHAIR RICHARDSON: The next speaker is
14 Ernie Peterson, and he will be followed by Dana
15 Perls.

16 MR. PETERSON: Hello. My name is
17 Ernie Peterson, Cashton Farm Supply. We have an
18 organic certified processor since 1989.

19 I don't know how you folks spend four
20 days in those chairs. Thank you. I don't think
21 they could pay me enough. Priceless, huh? It's
22 not going to happen here. I'll dig ditches

1 first.

2 (Laughter.)

3 But, anyway, I am here to support the
4 two pounds of methionine for the life of the bird
5 versus the two pounds per ton. We feel large and
6 small producers. And really, I want to speak for
7 the small producers. We feed over 100 to 100-
8 plus producers from 1600 to 8,000 birds.

9 I am sure you guys have seen my
10 written reports and the rations I sent. They
11 were forwarded in the written comments, I
12 presume. Okay. Thank you.

13 The industry has changed. I remember
14 in the late eighties we had a discussion in
15 Wisconsin where an individual in Iowa wanted to
16 put in 2700 organic pullets. And the concern
17 was, could that be certified and would that wreck
18 the industry?

19 It has also changed in that we are not
20 feeding the same bird we did 10 and 20 years ago.
21 At that time, people dreamed about getting 22
22 dozen eggs in 12 months from a bird. Now it is

1 just plain expected.

2 These are birds that have requirements
3 and they are meant to produce. I think the
4 rations that I presented demonstrated that the
5 rations vary a lot by intake. We also realize
6 that the two pounds during the life is plenty
7 adequate. And by allowing two pounds for the
8 life of the bird, allowing us to use more in the
9 young bird as a chick and in the early lay
10 period, we will most likely, and I am sure, use
11 less methionine over the life of the bird.

12 Presently, it is unfair because people
13 in the North, the birds just eat more and we are
14 feeding more DL-methionine. In the South they
15 eat less and they are having more problems than
16 we are.

17 This is an animal welfare issue, and
18 it is really affecting our image. We use a kind
19 word of "feather picking". Ashley, you have been
20 in barns where there is feather picking and what
21 you hear is squawking all over, and they are
22 eventually going to go to the back of the bird,

1 the bent area where the skin is the softest and
2 they are going to pull a feather. They are going
3 to draw blood. And you are going to have 10-12
4 birds just descend on that one and they are going
5 to kill it and eat it. That is the reality of
6 feather picking.

7 We are forcing producers to feed more
8 protein. And now, we have the challenge of these
9 larger eggs. We tear vents; we get blood on the
10 eggs. And it is certainly, once you tear that
11 vent, we have blood again, and that is where the
12 cannibalism comes. They are just going to eat
13 and consume that bird.

14 We are putting more ammonia into these
15 barns and they stink a lot more. It is not good
16 for the health of the bird. We are putting more
17 free nitrogen into the air. And now, the manure
18 obviously contains more nitrogen, which is a
19 concern for our groundwater and what we are
20 actually spreading on these fields.

21 I certainly understand the need for
22 the research and to find alternatives. I think

1 Dave Will is here, and he will probably spend the
2 greatest share of time talking about the research
3 that we have done and define it.

4 A lot of people in the industry have
5 given money, and those funds are available for
6 research.

7 For the people in the industry, they
8 are in a hurry to try to develop something
9 because, as soon as some company can come up with
10 an alternative, whether it be natural or
11 whatever, they are going to be the one that is
12 going to make a lot of money off of this. So,
13 they are working hard to do that.

14 We know that anybody that can give a
15 label that says no methionine is going to have an
16 advantage. So, this urgency is there.

17 In a quick summary, I really want to
18 speak for the small producer, these 100-plus
19 producers, 1600-8,000 birds.

20 (Signal that time has expired.)

21 The two pounds in the life of the bird
22 is needed, and we are going to use less.

1 We need to do something as an industry
2 to quit forcing the bird suffering that we are
3 doing and what we are doing to the environment.
4 It is part of the reason for the organic. I do
5 understand the need, and I hope that you do
6 consider what is right, both for the industry and
7 the bird that we are supposed to take care of.

8 Thank you.

9 CHAIR RICHARDSON: Thank you.

10 Question? Tracy?

11 VICE CHAIR FAVRE: So, do I understand
12 from your comments that you believe, if you are
13 given the option to use an average over the life,
14 that the overall methionine consumption will
15 drop?

16 MR. PETERSON: That is correct, and it
17 is going to be a rare exception that it will not
18 drop.

19 VICE CHAIR FAVRE: Thank you.

20 MR. PETERSON: We're forcing birds.
21 We have a flock that we work very close with that
22 we obviously had to limit to two pounds. Now we

1 are continuing to feed methionine to bring
2 feathers back on and get that bird into
3 condition. We will use less.

4 CHAIR RICHARDSON: Question from
5 Ashley?

6 MEMBER SWAFFAR: On those smaller
7 flocks that you are seeing the problems, can you
8 describe kind of the outdoor access of those? Do
9 they have outdoor access?

10 MR. PETERSON: They definitely have
11 outdoor access, you know, and obviously, the
12 pressure is for dirt in the smaller firms. They
13 definitely have problems.

14 In the wintertime, they have fewer
15 problems than a good barn or managed barn. And
16 it is not because of how they are managed. It is
17 just the facility. If you put 2500 birds in a
18 barn, it is very difficult in Wisconsin to keep
19 it 70 degrees. As you lower that temperature,
20 that bird is going to eat more. Seventy-eight
21 degrees is where you are going to get the most
22 egg on the least amount of feed. Anything under

1 78 degrees, that bird starts eating more just to
2 stay warm. And when it eats more, that is when
3 the methionine, DL-methionine, intake actually
4 increases for that bird and solves some of these
5 problems.

6 I don't see any difference between a
7 person with outdoor access or limited outdoor or
8 closely-confined, as you think, Ashley.

9 CHAIR RICHARDSON: Thank you very
10 much.

11 Oh, sorry, Calvin.

12 MEMBER WALKER: Thanks for your
13 comments.

14 Birds that have cannibalism problem,
15 feather picking and all those things, what are
16 producers doing to remedy that when it does
17 occur, being that we are still feeding two pounds
18 for layers, two pounds for broilers, and three
19 pounds of synthetic methionine for turkeys? So,
20 what are you doing to remedy that when it does
21 occur?

22 MR. PETERSON: And it is not uncommon.

1 A good flock coming into good production early
2 will normally see the feather picking. The first
3 thing we are trying to do is try to add some hay
4 or straw, a slab of that once a day or so, to
5 give the birds something to play with. It is
6 very common that we will take bags and hang them
7 in the barn, something to distract the birds.
8 Most people will take toilet paper or a paper
9 towel, walk around the barn, and just distribute
10 small pieces of that. The bird will pick it up
11 and run with it and play with it. It helps, but
12 does not eliminate the problem.

13 MEMBER WALKER: Do you attribute all
14 of that to the step-down?

15 MR. PETERSON: People claim there is
16 a difference in breeds. Okay? I think and it is
17 my opinion that the step-down has a greater
18 effect on it.

19 Once we started thinking about intake
20 and the DL-methionine and trying to really work
21 with the producers to find out what intake once,
22 it became very clear that these producers at 23-

1 24 pounds of feed per 100 birds had a lot more
2 problem than another producer at 27 to 30 pounds
3 per bird.

4 Cooling these barns down, putting
5 extra water in the feed to increase intake is
6 another way that we are trying to help that. And
7 the only thing we are doing is we are just
8 feeding more methionine. That is the way we can
9 get it into them.

10 Our certifier Steven is here, and they
11 look at our records and they look at our DL-
12 methionine purchases, and we know we can't. But,
13 as an industry, it is not right that we just use
14 our extra resources to try to take care of the
15 birds.

16 I'm sorry, I didn't mean to go around
17 that, Calvin, but is it my opinion? I think when
18 you speak to producers, they will find that it is
19 a common thing that we find a way to increase
20 intake to solve this feather pecking, along with
21 a number of things in the barn that you have to
22 change. They're like kids; you've got to give

1 them a new toy every day, and that does help
2 some.

3 CHAIR RICHARDSON: Mac?

4 MEMBER STONE: Do you hear producers,
5 when they are coming in for feed or ordering
6 feed, question you as the point person of why did
7 they not give us enough? You know, why would
8 organic -- it seems outside organic to create a
9 situation like this. What do the producers think
10 about the situation they are in?

11 MR. PETERSON: Most of the rations
12 that we feed are formulated by us. And, yes,
13 allow me no insult; they just think it is a dumb
14 thing. It is too bad it happened. And yet, they
15 understand, they don't want synthetics. I
16 understand that the organic producer, the organic
17 people don't want synthetics. Most of it is made
18 in China. You know, we have environmental issues
19 where it is made. I understand.

20 The producers also understand. We get
21 constantly questions: why don't you just put in
22 an extra pound and a half and solve this problem?

1 Because Steve is going to come and tell me I
2 can't make feed next year again.

3 But they don't understand -- I think
4 we have done enough research and education with
5 them, that they understand how it happened. It
6 was our fault. We did not come early enough with
7 the evidence, with the research, with the
8 attempts to find a way for the producer to find
9 an alternative; you folks didn't have any choice
10 but to say, "Find it," and you thought there was.

11 We even had a person, Karen Reed, who
12 came to the office last Friday. We make a bag
13 product. And she says, "I don't know what the
14 big deal about this methionine is because I buy
15 your feed and I don't feed methionine." We do
16 put two pounds in per ton. I think it
17 demonstrates that we have a lot of producers,
18 great people -- understand me -- but until they
19 read the tag on the bag of feed they are buying,
20 they don't understand that they are actually
21 feeding methionine.

22 The producers understand. They hope

1 it gets changed. They really want it to get
2 changed. And I don't think there is any producer
3 that wants to hurt the bird the way that we are
4 doing it. There are some people in this industry
5 that -- you know, we are all in it for the money
6 -- who really care about the industry. But the
7 greatest share of them do. You know, the
8 majority of people want to do what is right and
9 make this industry go.

10 So, they understand it and they want
11 it changed. It is unanimous that they want to
12 find an alternative. And I think with the
13 industry knowing that there is a lot of money to
14 be made once they find an alternative, it will
15 really encourage that to happen quickly.

16 CHAIR RICHARDSON: Thank you.

17 MR. PETERSON: You're welcome. Thank
18 you guys. Good luck and take care.

19 CHAIR RICHARDSON: The next speaker is
20 Dana Perls, and she will be followed by Larry
21 Pamm. Or is it Pamm Larry? Yes, I got it
22 backwards.

1 MS. PERLS: Good morning.

2 My name is Dana Perls. I'm the Food
3 and Technology Campaigner with Friends of the
4 Earth.

5 My remarks are focused on the NOSB's
6 excluded method terminology and its inclusion of
7 synthetic biology, a new form of extreme genetic
8 engineering or, as it is more popularly known,
9 GMOs 2.0.

10 Friends of the Earth urges the NOSB to
11 consider any ingredient derived from in vitro
12 nucleic acid techniques, including synthetic
13 biology, to be completely prohibited from organic
14 products. Synthetic biology is an emerging
15 technology that is developing rapidly and
16 entering the marketplace. Like traditional GMOs,
17 the products of synthetic biology are virtually
18 unrelated, haven't been assessed adequately for
19 impacts on our health or the environment, and are
20 not required to be labeled.

21 Instead of swapping genes from one
22 organism to another, as in traditional genetic

1 engineering, a new basket of engineering
2 techniques, including computer-generated DNA,
3 directed evolution, site-specific mutagenesis,
4 and more, all cluster around this approach called
5 synthetic biology.

6 Currently, synthetic biology products
7 on or on the cusp of entering the market are
8 high-value flavors and fragrances, including
9 vanilla, saffron, stevia, orange and grapefruit
10 flavors, and coconut oil derivatives. Despite
11 being produced by extreme GMOs, these ingredients
12 are being marketed as "natural".

13 Products of GMOs are excluded from
14 organics, and the NOP's definitions of excluded
15 methods should cover in vitro nucleic acid
16 technologies, including synthetic biology. This
17 must also apply to the National List, especially
18 categories including natural flavors and
19 fragrances.

20 I would also like to comment on the
21 use of nanomaterials. I congratulate the NOSB
22 for their hard research and prohibition of

1 nanomaterials in organics. Studies have clearly
2 shown that nanomaterials now used commercially,
3 including those used in food products and food
4 packaging, can pose new toxicity risks to human
5 health and the environment.

6 Given the absence of regulations to
7 ensure these novel products, ingredients, and
8 materials are safe for human health and the
9 environment, and labels to ensure the consumer
10 right to know, Friends of the Earth calls on NOSB
11 and the NOP to ensure a full prohibition of
12 nanofoods and materials from organics. And that
13 includes via the National List and via specific
14 petitions.

15 I would also like to comment on
16 Solazyme's application for whole algal flour. It
17 is critical to examine the complete production
18 cycle of the product, including the inputs and
19 the feedstocks required for the production of
20 this algal flour. My understanding is that with
21 products such as -- well, my understanding is
22 that cows, for example, need to be fed organic

1 feed to be considered organic. Likewise, I
2 believe that the NOSB should ensure that if the
3 inputs such as sugar used as feedstock to produce
4 the algal flour is non-organic or GMO, this
5 product should not be allowed for use in
6 organics.

7 And lastly, Friends of the Earth urges
8 NOSB to continue your good work on GMO
9 contamination and prevention and the push for
10 shared responsibility for patent-holders and
11 technology-users.

12 In conclusion, in vitro nucleic acid
13 techniques, such as those to be considered
14 synthetic biology, are all genetic engineering
15 and, thus, should be included in the NOSB's and
16 the NOP's definition of excluded methods. While
17 the organic standards clearly exclude GMOs and
18 prohibit substances from non-naturally-occurring
19 biological processes, it is critical that the
20 NOSB recommends that the NOP regulations ensure
21 that ingredients produced by synthetic biology
22 and nanotechnology are also excluded from the

1 National List and specific petitions.

2 Thank you.

3 CHAIR RICHARDSON: Thank you.

4 Questions? Yes, Tom?

5 MEMBER CHAPMAN: On whole algal flour,
6 you brought up the concern of the growing medium
7 and genetic modification. Can you explain why
8 Section 205.105(e) prohibiting excluded methods
9 is not sufficient to meet that concern?

10 MS. PERLS: Okay, I am not familiar
11 with which one (e) --

12 MEMBER CHAPMAN: That is the
13 prohibition on excluded methods.

14 MS. PERLS: Okay. So, my concern in
15 general is that the process for the whole algal
16 flour includes a lot of feedstock, sugar,
17 generally sugarcane or corn, and the corn is
18 generally GMO corn. Specifically I think
19 Solazyme buys it from ADM, which is GMO corn.

20 So, if the feedstock is GMO, then it
21 should be excluded from organics because the
22 inputs are genetically-engineered and, therefore,

1 the product of a GMO organism should, therefore,
2 be excluded, or the feedstocks that went into the
3 organism should be excluded from organics, even
4 if the organism itself isn't genetically-
5 engineered, if it is fed with those products.
6 That is my read on it.

7 CHAIR RICHARDSON: Other questions?

8 (No response.)

9 Okay. Thank you very much.

10 MS. PERLS: Thank you.

11 CHAIR RICHARDSON: The next speaker is
12 Pamm Larry, and she will be followed by Kayo --
13 oh, here we go, an interesting name -- Tsunenari.
14 No? Something like that. Correct me when you
15 come up.

16 MS. LARRY: Hi. My name is Pamm
17 Larry, and I come here as a mom and a grandma,
18 and as a person who has been working for four
19 years on food justice and transparency issues,
20 primarily around genetically-engineered foods,
21 but around all real food.

22 I wanted to let you know that my work

1 involves talking with people directly. We don't
2 do surveys, although I am involved with social
3 media. It is about real conversations with real
4 people out on the street.

5 I also wanted to very much tell you
6 that I appreciate you folks for a very difficult
7 job you have in a world where we are trying to
8 define and redefine what is real food and what is
9 real agriculture. And it is not an easy task. I
10 don't envy you.

11 I would like to speak about slippery
12 slopes, perceptions, and trust in the real world.
13 And I come here representing the thousands of
14 moms that I have talked to directly and the tens
15 of thousands of people that I do reach on my
16 limited social media presence.

17 But we want you to hold the line. I
18 can tell you that people who care about their
19 food and eat organic food as a general rule do
20 not trust the USDA and do not trust the FDA.

21 The National Organic Standards Board
22 to date has not been included in that distrust.

1 There is still trust there, from what I talk
2 about, hear about on the streets, but it is
3 eroding very, very quickly.

4 One of the things that I wanted to
5 talk about is that we know that the process by
6 which the Board is run has been co-opted and has
7 been imposed upon. If people don't trust the
8 USDA to begin with, I have to tell you that this
9 reflects on the NOSB and increases their fears,
10 because what they are seeing happen is what they
11 have always been afraid of, which is that large
12 agrichemical companies are going to come in and
13 co-opt the National Organic Standards Board and
14 they are going to lose, the USDA symbol is going
15 to lose its viability.

16 Then, they get it reinforced when they
17 hear that you guys did your due diligence about
18 nanotechnology, and then, the NOP, from my
19 understanding, says that they can still apply,
20 hand in applications for consideration. The
21 trust erodes.

22 We are asking you to hold the line.

1 We are asking you to hold the line on algal flour
2 because, when people find out that this is made
3 by a company that also does genetic engineering
4 or synthetic biology, they are going to see this
5 as the beginning of a slippery slope that could
6 eventually erode into synthetic biology being
7 somehow PR'ed into the National Organic
8 Standards.

9 Hold the line on yeast. I don't know
10 anything about hydroponics. But please keep the
11 purity intact for the integrity of the label.

12 Finally, because GMOs are my favorite
13 topic, and the one that I work on the most, I
14 wanted to talk a little bit about them, and
15 encourage you, like so many have been, about
16 holding the line with them, too.

17 I came into this movement starry-eyed
18 that GMOs weren't in organics. As I started
19 working in 2012, I discovered that there was
20 contamination. I became very upset and became a
21 bit of a militant and have since been educated
22 quite a bit on the fact that this is a very

1 complicated system and that there is more than
2 meets the eye.

3 However, in order for the integrity of
4 the label, I have two suggestions. One would be
5 that either the NOSB and the USDA adopt the Non-
6 GMO Project standards as their own, so that
7 everybody, including the GMO Project itself --
8 every Board member I've ever talked to wants the
9 Non-GMO Project to go away. They only started it
10 because they felt like there was a slippery slope
11 happening that wasn't being tended to.

12 The other alternative would be that
13 the NOSB allows a certain threshold, less than
14 like .2 percent in seeds, around the things that
15 have already been contaminated, such as the corn,
16 the canola, the soy, and probably the alfalfa
17 now.

18 (Signal that time has expired.)

19 Everything else remains a zero
20 threshold.

21 Okay, I would like to say more than
22 that, but that is kind of it. Okay.

1 CHAIR RICHARDSON: Thank you very
2 much.

3 Questions? Calvin? And then, Zea.

4 MEMBER WALKER: Could you elaborate
5 just a little bit more on the threshold?

6 MS. LARRY: Again, when I started this
7 investigation last year was when I really started
8 calling farmers and producers and distributors,
9 and stuff like that, to learn. Because I went
10 into it, everything should be zero. I mean, the
11 last time I came before you, I said we just get
12 rid of GMO corn, you know, organic corn; we draw
13 the line.

14 I realize it is a problem, but I now
15 have come to understand and I know that organic
16 means a lot more. I mean, I have always known
17 that it means a lot more.

18 But, if you have a very, very small
19 threshold level with a timeframe on it, so that
20 it eventually can go to zero, too, the NOSB Board
21 says, "Okay, we messed up. We weren't holding
22 the line. For these products, because of the

1 rest of organics, we will allow this threshold in
2 the seed," okay, because I believe the seed is
3 the really important part, that that would be
4 okay for a little while. But nothing else.

5 You know, you say we can catch it now.
6 If we have the threshold be zero now, then we
7 won't have that problem of the slippery slope
8 downline.

9 Does that help? Yes, okay.

10 CHAIR RICHARDSON: Zea?

11 MEMBER SONNABEND: Thank you, Pamm,
12 and we will be talking a lot more about this on
13 Thursday with our Expert Seed Panel.

14 But one of the things we are
15 investigating is why you would choose the number
16 of .2 percent and why the Non-GMO Project chose
17 .9 percent, and why other groups might choose .1
18 percent. You know, are they numbers out of a hat
19 or do you have reason to believe that .3 percent
20 is bad and .1 or .2 percent is not bad?

21 MS. LARRY: It is a difficult one. I
22 am just listening to the people out there that

1 are telling me. I am not the expert. So, when I
2 talk to like, you know, the folks in CCOF that
3 are talking about things, I don't know what the
4 right number is. I know that the .9 percent for
5 the Non-GMO Project is in a finished food. It is
6 not the seed, is it? I don't know what the Non-
7 GMO Project seed thing is.

8 MEMBER SONNABEND: Everything I
9 believe.

10 MS. LARRY: What?

11 MEMBER SONNABEND: It's everything I
12 believe.

13 MS. LARRY: Oh, okay. I don't know.
14 But, anyway, that is just what I have been
15 hearing. So, I am just a mom and a grandma who
16 cares.

17 CHAIR RICHARDSON: Great. Thank you
18 very much.

19 Kayo, you are up next, and after that,
20 Melody Meyer.

21 MS. TSUNENARI: Hello. My name is
22 Kayo Tsunenari from QAI, Quality Assurance

1 International.

2 I am not much of a public speaker, but
3 I will try my best.

4 First of all, I would like to thank
5 the Materials Subcommittee for revisiting the
6 definitions of excluded methods to provide
7 further clarification on what needs to be kept
8 out of organic production and processing, and for
9 coming up with the most effective prevention
10 strategy for excluded methods.

11 I would like to take this opportunity
12 to support a chart similar to the one in the
13 discussion paper to describe the compatibility of
14 methods with organic standards, to give ACAs
15 clear guidance and provide a transparency to all
16 stakeholders on which methods are allowed in
17 organic production and processing.

18 On the prevention strategy guidance
19 for excluded methods, under the role of ACAs and
20 the oversight section, the discussion document
21 mentions the GMO testing. I would like to note
22 that the testing might not be the most practical

1 way to evaluate the GMO contamination at the
2 handler level, since the DNA of input must
3 sufficiently be intact to allow valid analysis by
4 the testing, meaning many food processing methods
5 such as refining or fermentation break down the
6 DNA, resulting in that processed food such as we
7 find in oil do not contain testable DNAs.

8 Regarding the GMO testing in general,
9 ACAs need further guidance on sampling
10 procedures, including sample sizes, testing
11 methods, PCR versus strip dust, acceptable labs
12 to be used, and threshold levels.

13 During each certification cycle, QAI
14 verifies that certified operations are following
15 the best management practices for seed and crop
16 production, for livestock and for handling, which
17 are recommended in the discussion document, to
18 prevent contamination with the GMOs. This
19 includes asking for suppliers reverification that
20 organic seed is non-GMO, evaluating the buffer
21 zones are adequate to prevent contamination, and
22 reviewing planting cycles of neighboring crops.

1 For handlers, QAI has a very robust
2 non-GMO questionnaire that evaluates the
3 manufacturing of non-organic materials used in
4 certified organic and made-with-organic products.

5 We also verify that no commingling of
6 organic and non-organic ingredients occurred from
7 receipt through production.

8 Lastly, QAI would like to recommend
9 the NOP continue evaluating the areas of the
10 supply chain that are excluded from
11 certification, such as brokers and some
12 distributors. Non-certified brokers can purchase
13 from organic and conventional farms and direct
14 them both into the organic supply chain by
15 falsifying records.

16 Requires these entities to become
17 certified would increase oversight of the supply
18 chain, eliminating potential points of
19 contamination by non-organic and GMO commodities.

20 Thank you.

21 CHAIR RICHARDSON: Thank you very
22 much.

1 Questions?

2 (No response.)

3 No questions. Thank you.

4 MS. TSUNENARI: Thank you.

5 CHAIR RICHARDSON: The next speaker is
6 Melody Meyer, followed by Mark Squire.

7 MS. MEYER: Good morning, Madam Chair,
8 Members of the NOSB. Welcome, new members. And
9 good morning, NOP staff.

10 My name is Melody Meyer. I have been
11 in the industry since before there was an organic
12 standard, over 35 years. So, I appreciate the
13 rigorousness and the thoroughness of the vetting
14 that we do here and at every meeting, and I
15 appreciate your hard work.

16 I work for UNFI, United Natural Foods,
17 Incorporated. We are the largest distributor of
18 organic products in North America.

19 And I appreciate the opportunity to
20 provide public testimony on several critical
21 topics that you all are working on. My comments
22 today will focus on the discussion documents

1 addressing GMO prevention strategies and excluded
2 methods terminology.

3 The use of GMOs is prohibited in
4 organic production/handling, period. Informed
5 shoppers purchase organic products with that very
6 expectation. Consumer trust that organic
7 products are non-GMO is, in fact, one of the
8 hallmarks of being certified by USDA's Organic
9 Program. Therefore, it is critical that the
10 organic sector continue to take proactive steps
11 to keep GMOs out of organic products.

12 For this reason, I want to commend the
13 Materials Subcommittee for drafting the
14 discussion document on GMO prevention strategy
15 guidance. This work is paramount, and I strongly
16 believe that formal guidance on GMO prevention
17 from the NOP will reflect USDA's commitment to
18 enforcing the non-GMO requirements in the organic
19 regulations.

20 I think the proposed guidance will
21 offer NOP adequate materials to work with. Given
22 the various suggestions for improvement offered

1 by other stakeholders, I urge the Subcommittee to
2 move this discussion document forward to proposal
3 for the fall 2015 meeting.

4 Regarding excluded methods
5 terminology, in line with the Subcommittee's work
6 on GMO prevention guidance, your work on
7 clarifying the standards and terminology for
8 excluded methods is also very paramount. One
9 area that is of particular interest and concern
10 for me is the emerging practice of synthetic
11 biology, as you have identified on the fourth
12 page of this discussion document.

13 I do not, however, see synthetic
14 biology included in Appendix 1. So, I am
15 concerned that this new form of genetic
16 engineering may not receive the attention that it
17 deserves.

18 It is critical that any final document
19 that moves forward to the NOP clearly delineates
20 synthetic biology as a prohibited synthetic
21 process and/or one that fits under the definition
22 of excluded methods. It is very important for

1 everyone to understand that, although the name
2 indicates a synthetic and, thus, prohibited
3 process, proponents of the technology are
4 attempting to classify it as a natural process
5 because of the fermentation that is involved.

6 Vanilla flavoring, for example,
7 produced via synthetic biology may be classified
8 by the FDA as a natural flavor. If synthetic
9 biology is viewed as natural, and if it is not
10 clearly captured under our definition of excluded
11 methods, ingredients produced through this method
12 could find their way into organic products.

13 Again, my request is that the
14 Subcommittee take a very close look at this new
15 technology and assure that it is covered under
16 the definition of excluded methods and prohibited
17 under the organic regulations.

18 Lastly, I want you, the NOSB, to
19 consider the principles of continuous improvement
20 when you are reviewing the long list of materials
21 that you have ahead. If we limit the organic
22 industry, we deny consumers a choice of a cleaner

1 alternative in the market.

2 So, let's work together to grow the
3 organic industry beyond 1 percent of agriculture
4 and 5 percent of food.

5 (Signal that time has expired.)

6 Thanks, everyone, for your extensive
7 work, tireless hours. Much appreciated.

8 Thank you.

9 CHAIR RICHARDSON: Thank you.

10 MS. MEYER: Questions?

11 CHAIR RICHARDSON: Questions?

12 (No response.)

13 There are no questions.

14 MS. MEYER: Thank you.

15 CHAIR RICHARDSON: Thank you, Melody.

16 The next speaker is Mark Squire, and
17 after that will be Kelly Damewood.

18 MR. SQUIRE: Good morning. Thank you
19 for having me.

20 My name is Mark Squire. I'm a
21 retailer in the San Francisco Bay Area. Just for
22 transparency, I am also a Board member of the

1 Non-GMO Project, although my statements are for
2 myself today, not from the Project.

3 I specifically want to comment on the
4 many GMOs that appear as secondary ingredients in
5 organic processed foods. I believe that NOP has
6 done an inadequate job of defining and monitoring
7 this part of our organic standard. I also
8 believe that the lack of definition has led to
9 many GMO materials entering into organic
10 processed foods, generally unbeknownst to
11 consumers.

12 I refer to a number of items contained
13 on both 605 and 606. Although my reading of the
14 National Organic Standard clearly states that
15 none of these products may be produced using
16 excluded methods, GMOs, when I have asked
17 clarifying questions of certifiers, et cetera, I
18 seem to get a lot of confusion about what
19 actually applies and what doesn't. These
20 materials are not being adequately screened to
21 avoid GMOs by certifiers who do not seem to have
22 either the knowledge or the guidance to do so.

1 I would like to hear from the NOP the
2 following clarifications which I hold to be true:

3 One, the prohibition on GMOs has
4 nothing to do with the testable DNA of these food
5 ingredients and additives, but clearly states
6 that they are prohibited because they are
7 produced with excluded methods.

8 Two, the exclusion of GMOS in
9 permitted ingredients and additives would
10 prohibit the use of materials that have been
11 produced using excluded methods in any manner
12 during their production. And this would include
13 the following processes:

14 The GMO material making up the
15 agricultural building block of the material that
16 was then synthesized to produce the final
17 product. Vitamins are an example of that.

18 Highly-refined or molecularly-
19 distilled products made from oils derived from
20 GMO sources, tocopherols, et cetera.

21 Products produced from animals that
22 have been raised on a diet of largely GMO feeds,

1 like whey protein and gelatin.

2 Products produced as a byproduct or
3 secretion of genetically-engineered bacteria,
4 yeast, or algae.

5 Products produced using bacteria,
6 yeast, or algae where the feedstock or substrate
7 for these organisms is partially or wholly made
8 up of GMO materials.

9 And then, my third question for
10 clarification is, if ingredients are allowed
11 because of lack of commercial availability, that
12 the prohibition on being made with excluded
13 methods is still in place for those products.

14 I request that clarity for all of the
15 above would further a meaningful discussion of
16 these issues that are important to my customers.
17 My understanding is that even the best of our
18 organic certifiers do not understand policy here
19 or even have the most basic methods to collect
20 this kind of information on these materials that
21 can make up 5 percent of organic products and up
22 to 30 percent of made-with-organic products.

1 I would recommend the establishment of
2 a level for these items under which they are not
3 considered as present for certification purposes.
4 This is the approach that the Non-GMO Project has
5 taken. It has been accepted by consumers, and it
6 also protects the consumer from higher levels. A
7 good example to illustrate that is yeast, where I
8 think everybody would agree that yeast, to bear
9 the certification mark, would have to be grown
10 with organic substrates, nutrients. And yet,
11 yeast is allowed on the list of non-organic
12 products. I know there is a caveat for it being
13 commercially available, but it is allowed.

14 (Signal that time has expired.)

15 And so, that could make up 30 percent
16 of the product in a made-with thing. And, you
17 know, that is really hard to explain to the
18 consumer at the shelf.

19 Thank you.

20 CHAIR RICHARDSON: Thank you.

21 Zea?

22 MEMBER SONNABEND: Thank you, Mark.

1 Could you elaborate a little bit more
2 on -- you said the approach that the Non-GMO
3 Project took to these things, but did that
4 involve testing them or not testing them? And
5 how does the Non-GMO Project handle the sub-
6 ingredients or things on 606 like that?

7 MR. SQUIRE: Yes, basically, the way
8 the Project does it is, if it is less than half a
9 percent of the final product, then we accept it
10 as being okay. So, it gives the consumer an
11 assurance that that is the total amount that
12 would be there of that ingredient. To me, that
13 is the one thing that I feel like the NOP
14 standards don't include. So, for the consumer,
15 there is no guarantee that they aren't actually
16 eating a substantial amount of GMO product like
17 yeast in their chips that they are eating,
18 thinking that they are totally organic chips.

19 MEMBER SONNABEND: You mentioned a
20 number of things in your comments that are not
21 clear, but one thing that is quite clear is that
22 the excluded methods provision does apply to the

1 5 percent of the materials that can't -- you
2 know, of things you can use from the National
3 List. Now whether that is enforced evenly among
4 certifiers, that might need to be looked at more,
5 but, no, you could not use a genetically-
6 engineered yeast. That is very clear.

7 MR. SQUIRE: Well, the yeast organism
8 itself isn't genetically-engineered, but the
9 substrate it is grown on is. And in a yeast
10 product that could be quite a bit of the finished
11 product. So, I would disagree with that.

12 Another example is the use of gelatin,
13 which I think is another thing that is
14 inadequately monitored. I know for a fact that,
15 you know, you look on the market for a gelatin
16 that isn't produced with GMO feed, and I don't
17 think you will find it. So, there are a number
18 of examples like that.

19 MR. McEVOY: Jean?

20 CHAIR RICHARDSON: Yes, Miles?

21 MR. McEVOY: Yes, that was a lot of
22 very technical questions, and I would encourage

1 you to send us a letter with those particular
2 questions, and we can get back to you.

3 The basic premise in the standards is
4 that GMOs are prohibited in organic production
5 and handling. And there is no threshold. If
6 there was going to be a threshold that was
7 established, then the NOSB would be the body that
8 would want to make a recommendation concerning
9 that. But the way that the standards are set up
10 is that GMOs are prohibited, full stop, in
11 organic production and handling.

12 But your specific questions are quite
13 detailed. So, if you could send those to us in
14 writing, and then, we can take a look at it to
15 see if we need to provide more clarification on
16 those particular questions.

17 Thank you.

18 MR. SQUIRE: Well, you do have my
19 comments in writing.

20 MEMBER SONNABEND: Yes, they are in
21 his written comments that he submitted to the
22 docket.

1 MR. SQUIRE: And I have got to admit
2 I feel a little confused because I feel like --
3 you know, just on the grocer side I look at
4 products on my shelves, and I can tell you point
5 blank -- you know, I can go pull a product on my
6 shelf. You know, it is kale chips with non-
7 organic yeast on them. The non-organic yeast is
8 grown on beet sugar; I guarantee it. I have
9 never seen a yeast where, a non-organic yeast
10 where that wasn't the case.

11 So, that is where I am saying I feel
12 like what I think the whole industry needs is
13 clarity about these issues, definition, and I
14 hear a lot of confusion.

15 CHAIR RICHARDSON: Thank you very much
16 for your comments. Very much appreciated.

17 MR. SQUIRE: Thank you.

18 CHAIR RICHARDSON: The next speaker is
19 Kelly Damewood, and she will be followed by Megan
20 Westgate.

21 MS. DAMEWOOD: Hi. I'm Kelly
22 Damewood, Policy Director at CCOF. We certify

1 throughout North America and advocate on behalf
2 of our membership at the federal and state level.

3 I, too, am discussing the prevention
4 strategies document. Whether it is prevention
5 strategies, definitions, thresholds, NOSB needs
6 to continue to address GMOs. This is the most
7 appropriate venue to develop tools and guidance
8 for at-risk producers and processors.

9 And I urge NOSB to update these
10 materials, including the terminology and excluded
11 methods. We cannot fall behind the times in this
12 era of rapidly-changing technology. And it is no
13 longer enough to stay up on the times. We need
14 to move policy forward as an organic community.

15 So, today CCOF requests that the NOSB
16 establish a research priority to better
17 understand sources of contamination. Is it
18 happening through seed, drift, post-harvest
19 commingling? Where? When? At what levels?

20 And this is not just an issue of
21 certification, verification, enforcement. This
22 is an issue of an organic advocacy and taking

1 organic policy to the next level.

2 A major barrier to organic production
3 is lack of research dollars and resources for
4 organic priorities. As a policy person, when I
5 talk to policymakers and public officials about
6 organic research, I need specifics. I can't just
7 say we need research on GMOs. It is not specific
8 enough. It is too controversial and it is too
9 convoluted.

10 So, the more specific the request, the
11 stronger the request. For example, I can go to
12 the University of California System and I can
13 explain that it is completely inappropriate to
14 not address organic priorities in their research
15 agenda, as the leading state in organic
16 production. And they are immediately going to
17 turn to me and say, "What are your priorities?
18 Explain them to me."

19 And I have to include GMOs because it
20 is certainly a priority for the organic
21 community. When they laugh at me and tell me
22 that GMO contamination is not a California issue,

1 I can explain that we do \$6.8 billion in organic
2 processed product a year in California, and
3 ingredients in those products may or may not be
4 at risk. And so, it behooves organic
5 stakeholders in California and consumers of
6 California's products to understand where
7 contamination is or is not occurring.

8 In other words, establishing a
9 research priority to better understand sources of
10 contamination is an important communication tool
11 that we can leverage at the policy and advocacy
12 level and help support existing growers and new
13 organic production in the United States and
14 beyond.

15 Thank you.

16 CHAIR RICHARDSON: Thank you.

17 Questions? Yes, first, Mac, and then,
18 Calvin.

19 MEMBER STONE: Do you have clients
20 that can hold an organic certificate for a
21 product because it is process-based, but, then,
22 the marketplace rejects it because of a

1 detection? And where is the marketplace looking
2 for this outside of the certificate?

3 MS. DAMEWOOD: Well, we do do GMO
4 testing as part of our periodic sampling program.
5 Does that answer your question?

6 MEMBER STONE: Well, we hear that --
7 and this may be more of a corn-based sort of an
8 issue -- but a grower can have a certificate, but
9 because of drift or seed that is unbeknownst to
10 them, the product would detect a GMO even though
11 it met all the standards of their production OSP.

12 And I am just curious, where in the
13 marketplace are we sort of looking? Are growers
14 being hung out to dry because they have an
15 organic product that the marketplace isn't
16 accepting?

17 MS. DAMEWOOD: I think that the
18 marketplace wants assurance that a product is
19 non-GMO. So, we do use prevention strategies and
20 we incorporate GMO testing as part of our
21 periodic program. And we try to do education and
22 outreach on what organic growers are doing to

1 prevent contamination.

2 CHAIR RICHARDSON: Calvin?

3 MEMBER WALKER: I just have a comment,
4 and I thank you for bringing that up. I have
5 mentioned on a couple of occasions the 1890
6 institutions, which is where I'm from and Dr.
7 Taylor, predominantly historically Black land
8 grant colleges, but we have diversity; 1862, like
9 Oregon State, LSU, Cornell, and the Hispanic-
10 serving institutions.

11 Every year USDA and other agencies
12 provide over a billion for research. And I like
13 what you said about we need to begin to tap into
14 that particular avenue for some of the research
15 that we need in organics.

16 MS. DAMEWOOD: Thank you.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 The next speaker is Megan Westgate,
20 and after that, it is Steve Mohr.

21 MS. WESTGATE: Thank you for this
22 opportunity to comment to the NOSB.

1 The Non-GMO Project appreciates the
2 Materials Subcommittee request to NOP to develop
3 a prevention strategy for excluded methods. We
4 also very much appreciate NOP's response in the
5 April 14, 2014 memo asking NOSB to recommend best
6 practices for prevention of unintended GMO
7 presence.

8 The Non-GMO Project strongly supports
9 organic as an essential and meaningful system in
10 protecting food purity and the environment. In
11 fact, the Project was founded by organic
12 retailers and producers looking to protect the
13 long-term integrity of organics.

14 When the Project was incorporated in
15 2007, there was a significant gap in consumer
16 expectation and market reality regarding GMO
17 avoidance. Organic producers who were testing
18 for GMOs saw a growing risk of contamination and
19 understood that testing was a necessary component
20 of any meaningful system for addressing that
21 problem.

22 As GMO issues gain increased public

1 attention, market demand for third-party
2 verification based on ongoing testing and
3 consistent action thresholds has only grown. We
4 recognize that many producers find Non-GMO
5 Project verification to be a necessary complement
6 to organic certification.

7 If the NOP were to adopt the same
8 level of GMO avoidance controls as the Non-GMO
9 Project standard, this would no longer be the
10 case. The Non-GMO Project would consider it a
11 success for our long-term shared mission of a
12 sustainable food supply if our label were to
13 become redundant for organic producers. To that
14 end, the Project is very interested in offering
15 our expertise to assist the NOP in effectively
16 addressing the market demand for rigorous GMO
17 controls.

18 We agree with many of the comments in
19 the Organic Trade Association's October 1, 2014
20 draft comments regarding the importance of seed
21 purity and testing systems. The Non-GMO Project
22 supports the idea that a seed purity standard is

1 an important critical control point to start
2 applying analytical methods for limiting GMO
3 presence. This is an area where there is
4 significant opportunity to work together to
5 effect meaningful change and help protect the
6 long-term integrity of the organic label.

7 Further, we agree that it is essential
8 for the NOP to create guidance and provide
9 training to certifiers on conducting GMO sampling
10 and testing under the residue testing rule. The
11 Non-GMO Project has significant experience in
12 conducting meaningful sampling and testing for
13 GMOs and would welcome the opportunity to serve
14 as a resource for the NOP.

15 We are mindful of the sensitivity to
16 GMO issues in our industry and we want to serve
17 in whatever way would be most helpful to the NOSB
18 and NOP as we collectively grapple with this
19 challenging and complex topic.

20 There are hundreds of certified
21 organic producers who are also Non-GMO Project
22 participants, and we deeply recognize the

1 importance of improving practices for keeping
2 GMOs out of organic seed, feed, and crops. In
3 the spirit of working together to protect a safe
4 and healthy food supply for future generations,
5 we commend you for addressing this topic and
6 respectfully extend our expertise and assistance.

7 And I just want to add two points.

8 One, on looking at updating the definitions, we
9 really appreciate that work, and I do support the
10 idea of a chart format. The Non-GMO Project has
11 reciprocity in certain parts of our standard for
12 organic products. It is, therefore, important to
13 us that we keep our definitions aligned with
14 NOP's.

15 (Signal that time has expired.)

16 And so, we support that idea of a
17 chart and would like to work with you on that.

18 Also, we do have a different threshold
19 for feed than we have for seed. The threshold
20 for food is .9 percent, but for seed it is
21 currently .1 percent with a .25 percent variance.
22 That was just to clarify an earlier comment.

1 CHAIR RICHARDSON: Thank you.

2 Questions? Zea?

3 MEMBER SONNABEND: Thank you.

4 Could you elaborate briefly on how you
5 picked those levels of .1 and .9 percent?

6 MS. WESTGATE: They were based on
7 input from seed companies, but, as I said, we are
8 very interested in working together on this
9 because, quite frankly, we don't have a lot of
10 engagement from the seed sector and we agree that
11 that is really, as a foundation of the food
12 supply, that is the critical place to focus.

13 Because of the difference in our
14 approach where we require post-harvest testing,
15 testing seed can be a good way to ensure that the
16 post-harvest tests meet our requirements, our
17 action thresholds. And we are trying to get
18 traction further back in the supply chain. But,
19 to date, there is limited participation from seed
20 companies. And so, we appreciate the work that
21 you are doing to get input on the same kind of
22 conversations that we have through various venues

1 over the year. But the fact is there is no
2 black-and-white like, yes, clearly, this is the
3 percentage that it should be.

4 So, I think what is important is that
5 we have alignment with what is feasible for the
6 industry and what is also meaningful in terms of
7 keeping contamination out. And we would like to
8 see the Non-GMO Project standard be aligned with
9 where the NOP lands on this.

10 CHAIR RICHARDSON: Thank you. Thank
11 you very much.

12 Oh, I'm sorry, Nick.

13 MEMBER MARAVELL: The .1 contamination
14 level in seed, you said, and .9 in food products,
15 which would mean feed for --

16 MS. WESTGATE: We have a different
17 threshold for animal feed.

18 MEMBER MARAVELL: What is the
19 threshold for animal --

20 MS. WESTGATE: 1.5 percent.

21 MEMBER MARAVELL: 1.5 percent? So,
22 that is higher than in human food.

1 MS. WESTGATE: Right, and that is
2 based on the practice, and even prior to the Non-
3 GMO Project, the organic producers who were
4 voluntarily testing, it was a very common
5 practice, or producers who were supplying to
6 various IP markets, when contamination was over
7 the market-accepted levels, it often gets put
8 into the animal feed supply stream. So, that
9 elevated threshold makes space for that to
10 happen.

11 MEMBER MARAVELL: So, I guess my
12 question is, if a producer met the .1 percent
13 level of contamination, would you expect
14 contamination to go up to .9 percent or 1.5
15 percent? I am trying to see what we are talking
16 about here.

17 MS. WESTGATE: I wouldn't but, I
18 think, to the point that the last commenter made,
19 I think that is an area where it would be very
20 valuable to do more research. All we really have
21 is anecdotal data. We have seen on a very large
22 scale, even with corn which is very promiscuous

1 in its pollen spread, that when you start with
2 clean seed below .1 percent, even with
3 conventional fields around, you rarely end up
4 with a post-harvest test over .5 or .6 percent.
5 But that is just anecdotal and it is limited, and
6 it would be very good to do further research to
7 understand the connection between the seed
8 threshold and the post-harvest thresholds.

9 One other thing on the seed thing, the
10 seed threshold, is that -- and an earlier
11 commenter touched on this idea -- our threshold
12 only applies for those crops that are already in
13 commercial production. There is no tolerance for
14 the things that aren't already -- I think it was
15 Pamm who was talking about that. So, holding
16 that line and not just having a blanket
17 threshold, even for things where we don't already
18 have contamination that we are dealing with.

19 CHAIR RICHARDSON: Thanks.

20 Okay?

21 MEMBER MARAVELL: And what is the
22 protocol for your test on seed?

1 MS. WESTGATE: In terms of sampling
2 methodology or testing, there is probably more
3 detail than you want me to go into right now, and
4 it does depend on the producer. But this is an
5 area where we have done a lot of work in terms of
6 which labs we will allow people to use and the
7 type of requirements that they have to meet.

8 And then, in terms of sampling, we
9 cite GIPSA and other industry guidelines like
10 that. We require a 90 percent confidence level.
11 There are details in the Non-GMO Project
12 standard, but we also have separate guidance that
13 we could provide, if you are interested in the
14 full breadth of technical detail there. It
15 depends on the crop also, the size of seeds, all
16 of that sort of thing.

17 CHAIR RICHARDSON: Thank you very
18 much.

19 The next speaker is Steve Mohr, and
20 that will be followed by Harrison Reid.

21 MR. MOHR: Good morning.

22 My name is Steve Mohr. I'm owner of

1 Foundation Organic Seeds out of Wisconsin.

2 Just some background. I have science
3 degrees from several major universities on ag
4 science and a master's dealing with corn at Iowa
5 State University.

6 Other background. I have worked for
7 major national seed companies since the
8 seventies. Twenty years ago I thought I could do
9 it better myself. So, I started my own seed
10 company. In the meantime, I also took inspector
11 training, and I have been part-time organic farm
12 inspector. I did that for a little over six
13 years.

14 We have our own farm. We do some of
15 our own seed production. I also have growers in
16 five states -- we do organic seed corn and
17 alfalfa -- and then, also Canada.

18 Regarding some of the proposals, I
19 notice the common theme through reading through
20 the written materials and, then, listening to
21 people here, it seems all about numbers. Some of
22 the numbers here, it is we are going to solve

1 these problems by testing.

2 Here's one: test and verify it's
3 clean seed before it is used, which means the
4 seed is the problem, not the environment.

5 Know your buyer's GMO requirements and
6 testing protocols. But, mostly, it has been
7 9/10ths of a percent, talking to grain buyers at
8 all the organic conferences and shows I go to.
9 That is kind of a European standard.

10 If you have ever driven from western
11 Pennsylvania to eastern Colorado across the Corn
12 Belt on Interstate 80, I haven't seen any place
13 there that looks like Europe. So, Europe may be
14 able to do 9/10ths of a percent. They have GMO-
15 free countries. We don't have a state here where
16 we grow corn that is GMO-free. So, that is a
17 number I don't particularly care for.

18 Determine minimum thresholds of GMO
19 contamination for rejecting inputs. And I take
20 that to mean seed.

21 Certifiers need additional guidance on
22 GMO testing. So, more testing.

1 Here's one. We just heard about it.
2 A suggested threshold of 1/10th of 1 percent, and
3 then, it says "a common number". I have been
4 doing seed production, and even back in the
5 DEKALB days in the seventies, and to hit that
6 kind of a number, we had seed production fields
7 down by the Platte River, Kearney, Nebraska, with
8 300-and-some acres. Those places you can hit
9 these numbers as far as purity because you are
10 diluting the effects of your border rows. So,
11 big fields, fine.

12 My growers, the average field size is
13 20 acres. I use farmer growers. We don't have
14 these big fields and the luxury of diluting all
15 this seed.

16 Here's another one. You're going to
17 hear about this Thursday when the seed experts
18 come. There's one group, they are not really in
19 it; they're not walking the walk. They are
20 talking the talk, but they really sell much seed,
21 and some of them none at all. They claim they
22 can hit some of these new low thresholds and

1 standards, and they will probably do it with
2 maybe one big field, maybe clean up one parent
3 line. We have 32 inbreds we work with. Some of
4 the other companies coming Thursday have as much
5 or more than that.

6 So, to clean up the whole bunch of
7 inputs we have to use, some people say they can
8 do it, and they are going to have some pure line.
9 They are going to cash in on that. It is not
10 going to be shared with the rest of us.

11 There is a company out there that has
12 got something called Pure Maize. We put some
13 money in that project five years ago. We don't
14 get to use it because they put more money in. As
15 a business decision, they kept it to themselves.

16 So, when this technology and clean
17 stuff gets out there, it is not shared. So, it
18 is not an answer to our problem.

19 And I notice in the book here your
20 comments. You think by requiring seed purity
21 declarations here's what you are going to
22 accomplish: shift the burden of testing. Right

1 now, all of us that sell organic seed also sell
2 non-GMO seed, and all of our parent lines are
3 non-GMO/non-organic. We test all of them. We
4 are doing the burden now.

5 Reduce introvert introduction of GMOs
6 into organic crops. That makes it sound like
7 organic seed is pure and cleaner than the others.

8 (Signal that time has expired.)

9 We test both. And let me tell you,
10 the non-GMO stuff a lot of times is cleaner
11 because it comes from bigger fields and older
12 lines.

13 As far as suggestions, I would
14 suggest, to clean up things, maybe get on the
15 farmers. As an organic inspector, I have looked
16 at hundreds of fields, and the border rows, 25
17 foot. We use the identity-preserve requirements
18 or suggestions of 600-and-some feet. These
19 farmers are using 25 foot, and they don't know
20 what their neighbors are planting. They are
21 missing an opportunity to clean up their own
22 grain.

1 So, just in conclusion, there are 65
2 million acres of GMO corn planted out there. We
3 have to operate. We live out there. That is
4 where the grain facilities are at or our seed
5 facilities. My growers, we can't live in a
6 bubble. We can't go down and produce seed in
7 Arizona or Alaska or North Dakota and keep it
8 clean. So, that is what we are dealing with.

9 So, stick with certifying the process.
10 And these little numbers, I would like to talk
11 about them, where they are all coming from. It
12 is not going to fix the problem.

13 Thank you.

14 CHAIR RICHARDSON: Thank you.

15 Questions? Francis?

16 MEMBER THICKE: Thank you for your
17 very emphatic comments.

18 Do you have any suggestions for
19 thresholds or do you think that we should just
20 totally ignore them? What is realistic in your
21 mind for corn, for example?

22 MR. MOHR: For numbers?

1 MEMBER THICKE: Yes.

2 MR. MOHR: As far as GMO

3 contamination?

4 MEMBER THICKE: Yes, organic.

5 MR. MOHR: We are getting the numbers

6 down. It has gotten better in the last three

7 years. We are trying to identify pure lines. We

8 can't demand that from our genetic suppliers

9 because they will tell us to take a hike. We are

10 small. It is a small percent of their business.

11 Now we have some really good lines.

12 This year, 2014, I put my 90-day grain corn in

13 the Wisconsin Grain Trials, first place out of

14 46; beat every GMO corn in there.

15 We will lose things like that if you

16 demand total purity here. And 2/10ths, that's

17 sampling error. Where do you come up with these

18 low numbers?

19 You are going to hear about this

20 Thursday. A buzzword. Instead of putting a

21 number on it, let's say zero seeds found in 3,000

22 seeds tested. Now, to me, those are numbers.

1 Zero is a number; 3,000 is a big number. We test
2 400 seeds out of each batch. Now, when they say
3 3,000 seeds, they never say, "Is that 3,000 of a
4 bag?" Is it of a tote? Is it of a pickup truck?
5 Is it out of a semi? Is it out of a 10-acre
6 field or a 50-acre field? It is just a number.

7 So, there are lots of numbers floating
8 around. And I know I talk to my competitors.
9 The rest of the guys that sell the organic seed,
10 the Blue Rivers, the Albert Lees, and American
11 Organics, and Merit, we talk.

12 Some of the things we are doing
13 internally is screening, trying to pre-screen
14 inbreds before we plant them. The problem, the
15 expense, and no one talks about the expense. It
16 is just nice; let's have 2/10ths in our food.

17 To achieve these numbers, it is going
18 to be expensive, both for us and the farmer. His
19 selection of hybrids is going to drop. We have
20 20 in the book right now. If this proceeds at
21 these numbers and levels, we are going to drop
22 that to eight, and we are going to start growing

1 some other stuff like GMO stuff to survive,
2 because we have a seed business to run and I have
3 got a family.

4 CHAIR RICHARDSON: Could we just be a
5 little bit more concise here because we are
6 getting way behind again now?

7 MR. MOHR: Okay. What would you like
8 in the concise answer?

9 CHAIR RICHARDSON: Do I have another
10 concise question and answer here?

11 MR. MOHR: No, it is hard to put a
12 precise one because you get uneven emergence; you
13 get stress. These things change. It is a moving
14 target.

15 Right now, my average is 1.6 percent
16 out of 75 tests I ran last year, 1.6 percent.
17 The range was zero percent to about 4.5. That is
18 in the seed.

19 CHAIR RICHARDSON: Much appreciated.
20 Thank you very much.

21 The next speaker is Harrison Reid,
22 followed by Elizabeth Wolf.

1 MR. REID: Hello. My name is Harrison
2 Reid. I'm a health advocate, a chef, an
3 educator, and consumer from San Diego,
4 California.

5 As a member of the Cornucopia
6 Institute, I'm here today volunteering to help
7 present this testimony because I want to ensure
8 the integrity of organic food.

9 As an organic consumer, it is
10 extremely important that we can trust what is
11 being labeled as organic and going into our food.
12 With the ever-increasing toxic environment that
13 we are all exposed to, it is now more important
14 than ever to nourish our bodies with reliable,
15 clean, organic food that we can trust.

16 I would like to comment on the 2016
17 sunset of activated charcoal. This synthetic,
18 non-organic substance is used to remove color,
19 filter out certain undesirable tastes and odors,
20 and to filter water.

21 It is unknown how many organic
22 processors are currently using activated

1 charcoal. It was added to the National List in
2 2006.

3 The most recent Technical Review for
4 activated charcoal is dated back to 2002. Having
5 a new Technical Review would allow for the
6 investigation of concerns over disposal of
7 potentially-hazardous waste, should toxic
8 chemicals be removed by the activated charcoal;
9 the availability of activated charcoal processed
10 from agricultural products that meet NOSB
11 standards and the compatibility of this method of
12 filtration with organic handling standards.

13 The reviewers in 2002 noted some
14 potentially environmental and health impacts.
15 Activated charcoal can be made from both
16 agricultural and non-agricultural sources. The
17 non-agricultural sources include natural gas,
18 burning oils and resins, which have multiple
19 environmental and human health impacts and should
20 continue to be prohibited from use, as stipulated
21 in the listing notation.

22 Another concern of activated charcoal

1 is when it is used as filtering agent, which can
2 remove vital antioxidants and minerals from our
3 food, thus, degrading the product's nutritional
4 quality.

5 However, the full scope of potential
6 liabilities of activated charcoal will remain
7 unknown without a new, current Technical Review.
8 There is not one single entity who submitted
9 written testimony in the fall of 2014 opposing
10 this substance.

11 Therefore, the Cornucopia Institute
12 supports the continued inclusion of this material
13 on the National List.

14 Thank you for allowing me to present
15 this testimony. If you have any questions about
16 this testimony, I encourage you to speak with one
17 of Cornucopia's staff members present here today.

18 Thank you.

19 CHAIR RICHARDSON: Thank you.

20 The next speaker is Elizabeth Wolf,
21 and she will be followed by Emily Posner.

22 MS. WOLF: Good afternoon.

1 It is an honor to present testimony
2 before this distinguished Board, NOP staff, and
3 the organic community.

4 My name is Elizabeth Wolf, and I am a
5 staff member with the Cornucopia Institute,
6 serving as the Communications and Development
7 Director.

8 Today I wish to comment on the NOP's
9 recent guidance on nanotechnology and related
10 big-picture issues. Cornucopia stands with
11 others in the organic community, including the
12 National Organic Coalition, the Center for Food
13 Safety, and Friends of the Earth, in supporting
14 the NOSB's recommendation to strictly prohibit
15 all engineered nanomaterials in organic.

16 Yesterday Mr. McEvoy stated that the
17 new NOP guidance affirms that nanomaterials are
18 prohibited in organic -- thank you -- and that
19 the guidance, quote, "expands the Board's
20 authority". End quote. Yet, the guidance also
21 allows nanomaterials to be petitioned for use on
22 a case-by-case basis, although this was left out

1 of yesterday's presentation.

2 With respect to Mr. McEvoy, to my ear,
3 this statement sounds moderately Orwellian.

4 Rejecting the Board's central recommendation to
5 prohibit nano in organic is expanding the Board's
6 authority; to me, that sounds contradictory.

7 If you imagine that I am uncomfortable
8 right now, you would be right. Challenging
9 authority is uncomfortable. It is often
10 unpopular. Sometimes it is even dangerous. It
11 is also the foundation of democracy. For that
12 reason alone, speaking truth to power is a right
13 I choose to defend and to exercise.

14 That is one of the reasons I work for
15 the Cornucopia Institute. Among the many stellar
16 and necessary organizations in our organic
17 movement, Cornucopia plays a unique role. Our
18 small staff of 10 strives to defend what we all
19 have worked so hard to build over the past 40
20 years, a just, sustainable food system that is
21 not just an alternative to the industrial
22 chemical model, but one day will hopefully

1 replace it.

2 The diverse farmers that grow the way
3 the founders of the organic label intended are
4 looking to Cornucopia to help them stand out
5 among the industrial organic operations that bear
6 the same label. If we are not careful, they will
7 abandon the label altogether. And then, where
8 will we be?

9 Admittedly, Cornucopia's role is
10 sometimes unpopular. When the watchdog is
11 barking its head off in the middle of the night,
12 waking up everyone in the neighborhood, it is
13 tempting to want to muzzle the beast.

14 But which would you rather have, the
15 noisy watchdogs of the past or sewage, sludge,
16 and irradiation in organic today? Which would
17 you rather have today, an organization not afraid
18 to expose threats to organic integrity or an
19 agricultural promise destroyed by GMO
20 contamination, nanotech, CAFO operations, risky
21 ingredients? And the list goes on.

22 Yesterday we heard eloquent calls for

1 unity in the organic community. Cornucopia
2 shares that vision. But, just like in a big,
3 messy family, unity does not always mean harmony.

4 I understand unity as being united
5 toward a common goal. That goal is building an
6 alternative to the industrial chemical ag model
7 that is, frankly, killing the planet; providing a
8 livelihood for the farmers who grow our food, and
9 ensure access to wholesome, nutritious foods for
10 all communities. We can be united without
11 shrinking from the sometimes difficult process of
12 achieving that vision.

13 Anything worth defending needs
14 watchdogs. The Cornucopia Institute is not going
15 to slink into a doghouse, but, rather, will keep
16 sounding the alarm in defense of organic
17 integrity and the farmers and processors that
18 uphold it. This will benefit us all.

19 Thank you for the Board's great
20 service to the organic community, and thank you
21 for letting me share my views here today.

22 (Signal that time has expired.)

1 Hey, do I get the prize?

2 (Laughter.)

3 CHAIR RICHARDSON: Thank you very much
4 for your comments.

5 Questions? Mac?

6 MEMBER STONE: As the communications
7 person with Cornucopia, how do you balance
8 educating your membership about how much a higher
9 standard organic already is over conventional
10 food and engaging them in debate on where they
11 want this Board to guide the program going
12 forward?

13 MS. WOLF: That's a great question,
14 and it is a constant dance, I would say.
15 Cornucopia maintains that organic remains the
16 gold standard in the food system or is very near
17 the top. At the same time, there is always work
18 to be done to defend that, the superiority of
19 organic work.

20 We know that it is a difficult balance
21 to call out problems within organics, at the same
22 time promote organics. And sometimes perhaps we

1 do it better than other times, but, personally, I
2 feel like overall we are organic champions. And
3 we certainly see ourselves that way and we
4 certainly support the organic label
5 wholeheartedly.

6 Does that answer your question?

7 CHAIR RICHARDSON: Any other
8 questions?

9 (No response.)

10 Thank you very much.

11 MS. WOLF: Thanks.

12 CHAIR RICHARDSON: The next speaker is
13 Emily Posner, followed by Paige Tomaselli.

14 MS. POSNER: Good afternoon.

15 My name is Emily Posner, and I am the
16 Policy and Legislative Counsel at the
17 Recirculating Farms Coalition. And I here to
18 talk about fish.

19 But, before I get started on fish, I
20 do feel like I have to say, in light of the civil
21 unrest that is happening in Baltimore, that I
22 hope everyone in this room, both in the public

1 and private sector, continues to make sure that
2 all of our decisions and our actions are working
3 to make sure that there are not disparate
4 outcomes in those decisions and actions and that
5 we are inclusive in everything that we do.

6 So, with that said, I am here to talk
7 about fish. I represent the Recirculating Farms
8 Coalition. We work with growers throughout the
9 United States who use nutrient-rich, naturally-
10 cleaned, and constantly-recycled water in place
11 or in addition to traditional soil-based farming
12 as the basis to grow food and other agricultural
13 products.

14 These are circulating farms and play
15 hydroponics, growing plants, and recirculating
16 nutrient-rich water, which is also known as
17 aquaculture, and we raise fish in tanks on the
18 land with recirculating water. And aquaponics is
19 a combination of hydroponics and aquaculture
20 where fish and plants are raised together in one
21 closed-loop symbiotic recirculating system.

22 Recirculating farms are currently

1 operating successfully throughout the United
2 States and in many other countries. In fact,
3 recirculating technology has been developing for
4 nearly 40 years in the United States. Facilities
5 across the country and around the world are
6 conducting research and implementing new ways to
7 further improve and expand these farms.

8 Recirculating farms may be indoors,
9 like in a greenhouse or another structure, or
10 outside, depending on the climate. Their main
11 feature is that the water used is continuously
12 filtered and recycled, then circulated throughout
13 the farm.

14 These farms are mostly closed-loop
15 operations. Their contained nature makes it more
16 difficult for pests and contaminants from outside
17 the farm to get in. So, often these systems can
18 operate without antibiotics and other drugs or
19 chemicals.

20 Recirculating hydroponics,
21 aquaculture, and aquaponic farms also need not be
22 connected to natural waters, to source, or

1 dispose of water. Being closed-loop means that
2 whatever is in the farm system is unlikely to
3 escape.

4 These farms can also rely largely on
5 renewable energy like solar, wind, and geothermal
6 power or repurposed energy like methane gas
7 generated from waste and previously-used
8 vegetable oil to heat later, otherwise power the
9 farm.

10 Recirculating farms can be completely
11 contained systems that reuse most of their water.
12 There are a number of filtration methods to
13 remove waste. The filtered water is then
14 recycled back through the system. Ideally, farms
15 only replace very small percentages of the total
16 water volume, and due to some loss during waste
17 removal and/or evaporation, making them extremely
18 water-efficient. These farms are scalable, too,
19 and they can be as compact as a desktop for
20 personal use or larger for commercial operation.

21 Because recirculating systems are
22 entirely controlled, they have both entirely

1 known inputs and outputs. This, combined with a
2 long list of factors above, make them very eco-
3 efficient and ecologically-sustainable; thus,
4 ideal for organic growing.

5 New recirculating farms are popping up
6 all around the United States. These farms are
7 continuously working to increase their safety,
8 efficiency, and environmental sustainability.

9 The industry should not be penalized
10 for their unique and innovative practices by
11 being grouped in with other farming techniques
12 with different inherent risks.

13 RFC appreciates NOSB's comprehensive
14 summary presented in the aquaculture materials
15 review update, also known as the legacy document.
16 This is a timely report that summarizes the
17 NOSB's 15-plus-year history as it relates to
18 aquaculture standards and materials.

19 While RFC understands that there is an
20 agency desire to have seafood labeled as USDA
21 organic, there remains significant problems with
22 the aquaculture standards proposed in 2008.

1 These issued, outlined below, which I have also
2 emailed in that you all will be able to have
3 later, must be resolved prior to moving forward
4 before any final rules for USDA organic seafood
5 labels move forward.

6 We are wholly opposed to the
7 permitting --

8 (Signal that time has expired.)

9 I got cut off. But, basically, we are
10 opposed to the use of an organic seafood label
11 for fish that are raised in open-ocean net pens
12 and believe that all feeds should not come from a
13 wild-source fish.

14 CHAIR RICHARDSON: Great. Thank you
15 very much.

16 Questions? Yes, Calvin?

17 MEMBER WALKER: Your group sent in
18 comments through the public comment period?

19 MS. POSNER: We emailed them in, and
20 I have two copies, like I was instructed to
21 bring, but I also can provide additional
22 comments.

1 MEMBER WALKER: Yes, I would like to
2 have a copy.

3 MS. POSNER: Okay.

4 CHAIR RICHARDSON: Jennifer?

5 MEMBER TAYLOR: Thank you. Thank you
6 for your presentation.

7 Can you tell us some hazards to the
8 closed-system, recirculating-system type?

9 MS. POSNER: I'm sorry, could you say
10 the last part of that again?

11 MEMBER TAYLOR: Some hazards?

12 MS. POSNER: Hazards to recirculating
13 systems?

14 MEMBER TAYLOR: Yes.

15 MS. POSNER: In what sense? What are
16 you --

17 MEMBER TAYLOR: Are there any?

18 MS. POSNER: In terms of like
19 environmental hazards or --

20 MEMBER TAYLOR: Environmental hazards.

21 MS. POSNER: -- health hazards or --

22 MEMBER TAYLOR: -- health hazards.

1 MS. POSNER: Well, that is a good
2 question. I mean, I think the same sort of
3 hazards that would exist in any kind of food-
4 based operation. You have to make sure that your
5 systems are -- that you are operating within
6 health code; you know, that you are operating
7 within the other infrastructure, legal
8 infrastructure, that is in place.

9 But, in comparison to traditionally
10 soil-based growing, I don't think there is any
11 additional hazards that exist.

12 MEMBER TAYLOR: In comparison to open
13 pen?

14 MS. POSNER: Oh, okay. Yes, that is
15 a very good question.

16 So, fish that are raised in closed-
17 loop systems, as I was saying earlier, you know
18 exactly what is going in and what is going out.
19 And so, that is in line with organic principles
20 when you know what is going in and what is coming
21 out.

22 Whereas, fish that are raised in open-

1 ocean net pens, we have a lot more problems with
2 environmental impact on biodiversity within the
3 open-ocean system as well as those fish are much
4 more reliant on the use of antibiotics. You need
5 to have feed that goes to those fish. And so,
6 you are not necessarily sure that you can get an
7 organic feed that is going to fall in line with
8 organic principles. And so, those are the
9 problems, those are the types of problems that we
10 see with potentially using a label of organic
11 with seafood.

12 So, one of the other things that my
13 comments to you emphasize is that we believe fish
14 that are raised should have the label USDA farm-
15 raised fish because that is different than a
16 wild-caught fish. But, if we are going to move
17 forward with an organic label, then that organic
18 label should be specifically reserved only for
19 fish that are raised on land in a closed-loop
20 system.

21 CHAIR RICHARDSON: Paula?

22 MEMBER DANIELS: Thank you.

1 I am wondering if you could also
2 comment. You have mentioned fish, and I
3 appreciate your comments on that. But a lot of
4 the systems that you are looking at, and even
5 developing I think in your work in New Orleans,
6 are aquaponic, right?

7 MS. POSNER: Correct.

8 MEMBER DANIELS: So, why don't you
9 explain a little bit about what aquaponic is,
10 about how that includes fish and plants
11 hydroponically?

12 MS. POSNER: Sure. I mean, I did try
13 to restrict my comments to the aquaculture legacy
14 document.

15 But, yes, my organization is based in
16 New Orleans, though we are a national
17 organization. We are actually in the process of
18 developing a model recirculating system that does
19 include aquaponic. That is the raising of fish
20 and plants together.

21 And so, the waste from the fish, it
22 goes through a filtration system and is able to

1 feed the plants, so that they can grow. And so,
2 you are able to almost create like a mini-
3 ecosystem that mimics the natural processes that
4 take place in the environment.

5 We are really excited about this
6 technology. We think, in particular, in places
7 like New Orleans and other urban areas, where
8 there are food deserts and people are struggling
9 to have access to fresh, sustainable, hopefully
10 organically-labeled food, that aquaponics is a
11 potential solution where you can get like the
12 nutrient-rich organic basis that you need in
13 order to grow those plants in a much smaller
14 contained system.

15 MEMBER DANIELS: Yes. Thank you.

16 MS. POSNER: No problem.

17 MEMBER DANIELS: It is actually a new
18 technology, but a very old one, 3,000 years old,
19 I think, at least.

20 MS. POSNER: Exactly.

21 MEMBER DANIELS: Once used in Hawaii,
22 by the way.

1 All right. Thank you very much.

2 MS. POSNER: No problem.

3 CHAIR RICHARDSON: Thank you very
4 much.

5 MS. POSNER: Great. Thank you.

6 CHAIR RICHARDSON: Our next speaker is
7 Paige Tomaselli, and I just will comment that we
8 do have four speakers before we break for lunch.
9 And the one after Paige will be John Ashby.

10 MS. TOMASELLI: All right. Good
11 afternoon.

12 I'm Paige Tomaselli, Senior Attorney
13 at Center for Food Safety.

14 I want to address two topics today,
15 excluded methods and methionine.

16 CFS's science staff assessed the new
17 breeding technologies used to engineer microbes,
18 plants, and animals, and provided detailed
19 comments on those findings.

20 The current definition of excluded
21 methods covers nearly all the new breeding
22 technologies currently being used or in

1 development. The existing list of methods in the
2 excluded methods definition is meant to be
3 illustrative and not exhaustive. CFS urges the
4 NOSB and the NOP to keep it that way.

5 Given the fact that emerging
6 technologies come and go, some of which make it
7 to the market each year, CFS does not think it
8 would be prudent to list every single technique
9 as an example in the regulations. The newer
10 definition would become quickly obsolete and we
11 would once again be faced with a possible rule
12 change.

13 We recommend that NOP issue guidance
14 to clarify any ambiguities or confusions as they
15 arise and continue to engage the organic
16 community and the NOSB in this process, as it has
17 been doing.

18 On a similar note, we encourage the
19 Board to continue its excellent work on GMO
20 contamination prevention and push for the shared
21 responsibility from patent-holders and
22 technology-users.

1 I have testified on methionine at
2 several NOSB meetings, and I honestly think that
3 we are no closer to a solution today than when I
4 first drafted comments on the issue two-and-a-
5 half years ago. In fact, I think we are taking
6 steps backwards.

7 The Subcommittee's recommendation
8 fails to assert pressure on the organic poultry
9 industry to take responsibility for the
10 methionine phaseout by conducting feeding trials
11 that contribute to the development of proven
12 alternatives. Instead, the petition and the
13 recommendations stall implementation of necessary
14 improvements in organic poultry production while
15 increasing the overall allocation of methionine
16 in organic poultry.

17 Research suggests that the primary
18 purpose of synthetic methionine is to ensure that
19 growth and development are not compromised in
20 spite of unhealthy, crowded, and unnatural
21 conditions. Indeed, the purpose of synthetic
22 methionine is not primarily to promote overall

1 poultry welfare, but, instead, to bring birds to
2 market faster. We have stated this many times in
3 our comments and provided research to support
4 this.

5 Feather pecking is not a result of
6 reduced methionine levels. It is a result of
7 conventional-style, crowded poultry conditions
8 with inadequate lighting and food that does not
9 contain enough insoluble fiber to keep the birds
10 busy.

11 We admit animals get agitated when
12 they are exposed to increased ammonia due to
13 higher protein feed, but the solution there is to
14 replace litter or better manure management.

15 Organic livestock production is based
16 on the premise that livestock producers will not
17 administer growth promoters to their animals. In
18 fact, the Organic Food Production Act
19 specifically condemns the practice. Yet, NOSB
20 has permitted synthetic methionine to do just
21 that, promote growth in poultry.

22 According to Dr. Walter Goldstein,

1 feeding synthetic methionine diets promotes
2 animal productivity mainly by stimulating the
3 production of a natural growth hormone, IGF-1,
4 and a growth hormone receptor. He argues that
5 the hormonal effects of synthetic methionine are
6 comparable to RBGH in dairy cows and, therefore,
7 industry's reliance on this synthetic input is
8 driven by economics and not as industry
9 representatives have suggested, concern for
10 animal health and well-being.

11 Feeding a growth-promoting diet to
12 organic poultry distances organic production from
13 a systems-based philosophy, consumer perception
14 and public expectations, and it contravenes OFPA.
15 We urge NOSB to vote against the petition and
16 allow synthetic methionine to sunset in October
17 2017, as scheduled.

18 Viable alternatives to synthetic
19 methionine currently exist. The main factor that
20 limits the widespread adoption by organic poultry
21 product producers is the lack of available
22 commercial supplies. As demonstrated demand for

1 organic poultry feed containing non-synthetic
2 methionine is needed to show feed producers that
3 ramping up their production would be welcomed by
4 the organic industry, NOSB's decision to sunset
5 synthetic methionine will send a sorely-needed
6 market signal to the feed industry to ramp up
7 alternative systems of production.

8 That's it.

9 CHAIR RICHARDSON: Thank you very
10 much, Paige.

11 Questions? Yes, Colehour?

12 MEMBER BONDERA: Thank you.

13 Thank you, Paige.

14 You just said something that I want to
15 ask you to expand on, and I am not sure exactly
16 how to phrase it into a question. But you
17 suggested or implied that the reliance on
18 synthetic methionine is somehow correlated with
19 conventional systems or replicating conventional
20 systems.

21 I think my question is, at this point
22 in time, given where we are right now, sort of

1 somewhat independent of the sunset concept, and
2 given what the industry has developed into over
3 time, how can realistic change on the ground
4 happen? That is really, I think, what my
5 question is. Because I think a lot of people are
6 throwing up their hands saying, "What do we do
7 from here?", where we are currently, not
8 hypothetically or ideally.

9 MS. TOMASELLI: Right.

10 MEMBER BONDERA: And I don't know if
11 you can address that. Thank you.

12 MS. TOMASELLI: Yes. We believe that
13 the methionine issue and animal welfare standards
14 are inextricably linked, and that we really need
15 a strong animal welfare standard in order to
16 address the solution of breaking out of the
17 conventional model and into a more organic,
18 systems-based approach.

19 I think that as NOP develops strong
20 standards and the community is allowed to comment
21 on those standards, then we can work together to
22 promote a system that is really not being forced

1 into a square peg that is a conventional model,
2 but allowed to expand into the organic-systems-
3 based approach.

4 CHAIR RICHARDSON: Thank you.

5 Yes, Ashley?

6 MEMBER SWAFFAR: Do you think that the
7 two-square-foot and the poultry proposal that
8 came out of the NOSB, if that was adopted, that
9 would solve the methionine issue?

10 MS. TOMASELLI: We think that adequate
11 space would solve the methionine issue, but I
12 can't really speak right now to whether or not we
13 think that two square feet is enough. I think we
14 have testified in the past that two square feet
15 is not an adequate amount of space.

16 MEMBER SWAFFAR: Uh-hum.

17 MS. TOMASELLI: But, if that was the
18 standard that came out, we would have to reassess
19 as an organization whether or not we would
20 support that at that time.

21 CHAIR RICHARDSON: Tracy?

22 VICE CHAIR FAVRE: So, it seems from

1 your comments that you believe the space is the
2 issue. I actually welcome and support the
3 opportunity to look at the animal welfare
4 standards and get us more to an outdoor access.
5 I think that is very important.

6 But do you feel like space alone is
7 going to solve the problem? We also have the
8 limiting amino acids that is not available in a
9 vegetarian diet, typically.

10 MS. TOMASELLI: Yes. We don't think
11 that space alone will solve the problem. We
12 think that there needs to be a natural methionine
13 source added to the diet.

14 It hasn't been proven that consumers
15 require or are desiring a 100-percent vegetarian
16 diet in poultry production. We think that
17 poultry are naturally omnivorous and that the
18 diet could include something that is not
19 necessarily vegetarian, such as insect-based
20 products.

21 We do think there needs to be a
22 natural methionine source. We just think that

1 more research needs to be done into what that
2 source is.

3 VICE CHAIR FAVRE: One followup
4 question. Did you see in the public comments Dr.
5 Jackie Jacobs' rebuttal of Dr. Goldstein's
6 comment about the IGF growth hormone? And by the
7 way, she was the one that participated in the
8 feeding trials with him.

9 MS. TOMASELLI: Yes. I did see the
10 rebuttal, and I believe that the two scientists
11 have two differing opinions and that we need to
12 further research that. Basically, there needs to
13 be more research there to determine what the
14 adequate approach is.

15 VICE CHAIR FAVRE: For the record, Dr.
16 Goldstein is a plant breeder and Dr. Jacobs is an
17 animal nutritionist --

18 MS. TOMASELLI: Okay.

19 VICE CHAIR FAVRE: -- just for your
20 information.

21 MS. TOMASELLI: Uh-hum.

22 CHAIR RICHARDSON: Paula?

1 MEMBER DANIELS: Thank you.

2 I was going to ask the question about
3 what viable alternatives you thought might be
4 available for methionine, and you just mentioned
5 the insect-based products.

6 MS. TOMASELLI: Uh-hum.

7 MEMBER DANIELS: But, also, you
8 commented that more research needs to be done on
9 them. Are you aware of it being commercially
10 available at this moment for poultry producers?

11 MS. TOMASELLI: Insect-based products
12 are currently commercially available. We,
13 internally as an organization, have a question as
14 to whether or not those producers would need to
15 be certified organic and how that would happen.
16 But, as far as FDA approval is concerned, insect-
17 based products are currently on the market and
18 being sold, and those producers are currently
19 going through what is called the GRAS process.
20 But that is a voluntary certification-type
21 process. And so, as of right now, the insect-
22 based products are being sold on the market.

1 MEMBER DANIELS: Do you know how many
2 suppliers there are for those insect-based
3 products?

4 MS. TOMASELLI: I don't know the exact
5 number. I know there's a couple. There needs to
6 be more. I have spoken with one, EnviroFlight,
7 in the Midwest. They were interested in ramping
8 up their own production to meet organic needs.
9 So, I think that the discussion needs to be had
10 and we need to look into that further.

11 MEMBER DANIELS: Thank you.

12 MS. TOMASELLI: Uh-hum.

13 CHAIR RICHARDSON: Thank you very
14 much, Paige.

15 MS. TOMASELLI: Thank you.

16 CHAIR RICHARDSON: The next speaker is
17 John Ashby, and following him is Faith Attaguile.

18 MR. ASHBY: I'm John Ashby, speaking
19 as a citizen.

20 Under my daughter's arms is Gabriel
21 John Grisger. He was two hours old then. He is
22 a couple of weeks old now. And he has an

1 advantage my next grandchild will not have. If
2 for some reason he can't be breast-fed, John --
3 and I told my daughter I'm going to call him
4 "John," and her eyes just roll in the back of her
5 head -- John will have access to organic infant
6 formula, if he needs it. My next grandchild will
7 not because the vote of the NOSB denied those
8 non-organic nutrients from the National List and,
9 thus, made organic food not safe for infants.

10 The discussion around this issue of
11 these ingredients seemed very confused to me by
12 at least four different definitions of
13 "essential," that word "essential" coming up
14 again, all of them leading in the wrong
15 directions. And not allowing these ingredients
16 wiped out the entire category.

17 My mother was convinced that she had
18 to feed me formula. This was the knowledge of
19 the fifties. What was in infant formula then was
20 extremely primitive, very few of the nutrients
21 that are in formula now. They are in there now
22 because now we know they need to be in there.

1 I was lucky that I was one of those
2 who relatively survived this partial starvation,
3 although many health issues are now believed to
4 be the direct result of this starvation. Maybe
5 that is why I'm so dumb. Or it may be why I am
6 so charming and good-looking -- and what else? --
7 also humble.

8 (Laughter.)

9 As you are looking at these really
10 small things in these challenging times ahead of
11 you, especially the ancillary ingredients for
12 which we don't have a legal definition, nor any
13 tie to the way food or nutrition is normally
14 discussed, as you discuss these, keep in mind,
15 ask this question: am I wiping out infant
16 nutrition again? Which, by the way, is roughly
17 \$150 million. And beyond the dollars, it means
18 there is \$150 million worth of consumers who
19 wanted it for their kids. Am I wiping out infant
20 nutrition over some trivial little thing, barely
21 even a compromise?

22 Know this when you look at these

1 things, all these National List things. Know
2 this when you vote against something. Make sure
3 it is worth destroying infant nutrition again.
4 Don't throw baby John out with the bath water.

5 The world needs organic agriculture
6 worse than it needs organic infant formula. And
7 to do this, there needs to be demand for organic
8 agriculture.

9 In closing, Miles McEvoy, heroic.
10 Please don't quit or be fired.

11 (Laughter.)

12 Ancillary ingredients in guidance, not
13 annotation. We can fix a guidance much more
14 quickly if we make a mistake, and that means we
15 can fix it either way.

16 Four definitions of "essential," I can
17 use them to tell you how apples are not
18 essential.

19 Please listen to the people who are
20 the solutions. There is a tendency to listen
21 closer to the people who are louder. Don't throw
22 baby John out with the ancillary bath water.

1 Grateful thanks to you all.

2 CHAIR RICHARDSON: Thank you, John.

3 (Applause.)

4 Questions?

5 (No response.)

6 We are in awe of your presentation.

7 Thank you.

8 MR. ASHBY: Thank you.

9 CHAIR RICHARDSON: The next speaker is
10 Faith Attaguile. And the final speaker before
11 lunch will be Jim Pierce.

12 MS. ATTAGUILE: Hello. My name is
13 Faith Attaguile, and I am a member of the
14 Cornucopia Institute. I live in Encinitas,
15 California, but grew up on a New England dairy
16 farm established in 1759. While I am no longer a
17 New England farm girl, I do farm where I live. I
18 have a backyard orchard of 18 fruit and citrus
19 trees. I raise chickens. I grow organic food,
20 and I am a proud owner of four 865-gallon tanks
21 filled with rainwater currently in a period of
22 very serious drought.

1 As a member of Cornucopia Institute,
2 a citizen lobbyist, and urban organic farmer, I
3 am concerned about what an overwhelming workload
4 which you have means to the integrity of the
5 organic label. And I am concerned about ensuring
6 the NOSB's continued congressionally-mandated
7 independent advisory status and keeping its
8 representation primarily of farmer, citizen,
9 conservation, not big corporate interests.

10 This is in the face of certain non-
11 public and non-collaborative actions the NOP and
12 USDA have taken, decreasing this independent
13 advisory status and diluting the farmer, citizen,
14 conservation representation. It is wrong. It is
15 in violation of a congressional mandate.

16 Now to comments on two aspects of the
17 2017 sunset of lidocaine, relisting and
18 withholding period reduction. First, relisting.

19 Due to its importance in veterinary
20 medicine, lidocaine was one of the first
21 synthetics allowed for use in organic agriculture
22 in 1995. The Cornucopia Institute supports

1 lidocaine's relisting as an allowed synthetic on
2 the National List for these reasons:

3 One, as the most commonly-used
4 anesthetic in veterinary medicine today,
5 lidocaine has a long history of safe and
6 effective use in livestock.

7 Two, lidocaine is considered one of
8 the safest drugs on the market when used
9 appropriately.

10 Three, it is faster-acting than
11 alternatives.

12 Four, lidocaine is regularly used for
13 reducing pain during surgery, dehorning, treating
14 painful wounds, or as an epidural during birth.

15 And five, there have been no new
16 natural alternatives developed to replace
17 lidocaine for use in veterinary medicine.

18 Regarding the 90-day withholding
19 period, the Cornucopia Institute believes it is
20 excessive. Independent research, thoroughly
21 documented by Cornucopia's comments which you all
22 have, shows rapid clearance of lidocaine within

1 36 hours after use. That is a day and a half.

2 A real concern is that the current 90-
3 day withholding period may discourage livestock
4 producers from using lidocaine to reduce pain
5 when it would be in the best of the animal's
6 welfare to use this anesthetic.

7 While it is necessary to use
8 withholding periods to ensure absence of
9 lidocaine residues, based on research at hand, we
10 recommend reducing the current 90-day withholding
11 period for meat to eight days, well over the one-
12 and-a-half-day clearance period shown in the
13 study given you. And that is double the FDA's
14 current withholding period of four days for
15 conventionally-raised animals.

16 For all these reasons, Cornucopia
17 Institute supports relisting of lidocaine and
18 recommends reducing the 90-day withholding period
19 to eight days.

20 Thanks for allowing me to present this
21 testimony. Here's to a strengthening a
22 transparent, collaborative partnership between

1 the NOSB in its advisory capacity and the NOP in
2 its administrative role.

3 If you have any questions, please ask
4 the Cornucopia staff right here, and they will be
5 happy to answer you.

6 Thank you.

7 CHAIR RICHARDSON: Thank you very
8 much, Faith.

9 The last speaker before lunch is Jim
10 Pierce.

11 MR. PIERCE: Thank you.

12 I stand between you and lunch, so pay
13 attention.

14 (Laughter.)

15 Hello. My name is Jim Pierce, Global
16 Program Manager for Oregon Tilth, the best
17 certifier. I say that with all due respect to
18 the many other very fine certifiers.

19 The best certifier wants to express
20 our gratitude to, our appreciation of, and our
21 endorsement of the NOP staff and the NOSB Board.

22 Tools in the toolbox are management

1 options in essentiality versus necessity, thanks
2 to Lynn Coody. Did you know that Lynn has been
3 to 52 consecutive NOSB meetings? Not so much
4 institutional knowledge as an institution.

5 I have been involved in the NOSB
6 proceedings for a long time and remember clearly
7 advice that Kathleen Merrigan, one of our
8 heroines of the movement, told an audience and
9 the NOSB members in 2009. Following her
10 comments, Ms. Merrigan asked if there were
11 questions. In a nanosecond, before Marty and
12 Jake raised their hands, I got mine up. She
13 looked at me skeptically like I had the "gotcha"
14 question because politicians are trained to that.

15 And the question I had for her was
16 what words of wisdom she could offer the NOSB
17 Board. She smiled, turned to them, and said,
18 "Don't let the perfect be the enemy of the good."
19 She said that the farmers did good, but they knew
20 they didn't get it perfect.

21 Our movement is expanding in many
22 directions that they didn't or couldn't possibly

1 anticipate. Biofilm is a recent example of
2 perfection defeating good intention, leaving us
3 looking at mountains of plastics. So, as Ms.
4 Merrigan said, don't let the perfect be the enemy
5 of the good.

6 There are three major criteria, as you
7 know, that NOSB members weigh when considering a
8 material. Assuming that farming, as in humanity,
9 is never a zero impact, the effect of the
10 substance on human health, its compatibility with
11 a system of organic agriculture, and the
12 materials of essentiality or necessity.

13 There are two things you never want to
14 tell a farmer, what they have to do and what they
15 can't do. But we can tell ourselves what we have
16 to do, and it is going to be tough. We have to
17 make sure that farmers have the tools to do their
18 job. We must facilitate innovation and
19 development in organic tools.

20 By putting forward time and energy and
21 collaboration to make sure that tools are there,
22 we may need to create new ones; we may need to

1 keep some tools on the list until the right tools
2 or better tools for the job are developed.

3 We have to be sharing tools and work
4 collaboratively to find things that work and are
5 aligned with organic principles. We cannot work
6 in isolation, and we cannot take all the tools
7 away until sustainable, functional replacements
8 exist.

9 Farmers and processors are innovators,
10 but they need tools. They at least need baling
11 wire and duct tape or zinc sulfate or whole algal
12 flour.

13 Sustainability with a system of
14 organic production should be the highest-weighted
15 criteria. Health, environmental impact,
16 necessity are also critical, but your mandate is
17 to find appropriate tools and put them in the
18 box, and not pull tools out of the box without
19 acceptable replacements.

20 We are all curiously somewhat morbidly
21 watching how you will manage 200 votes in the
22 fall, but we are all pulling for you, willing to

1 help where we can. Get it good. Strive for
2 perfection, but don't let the perfect be the
3 enemy of the good.

4 Welcome to the freshman class.
5 Remember, teamwork makes the dream work. To all
6 of you, keep up the good work.

7 Thank you.

8 (Applause.)

9 CHAIR RICHARDSON: Thank you, Jim.

10 So, are there any questions of Jim?

11 (No response.)

12 No?

13 Let me have us take a break for lunch,
14 and I will be really mean and suggest that we get
15 back here in one hour. That is at 10 minutes to
16 2:00, because we have so much to do.

17 (Whereupon, the above-entitled matter
18 went off the record at 12:49 p.m. and resumed at
19 1:57 p.m.)
20
21
22

1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2 1:57 p.m.

3 CHAIR RICHARDSON: All right, if we
4 can get seated?

5 I know that a couple of Board members
6 went to visit Harold Austin in the hospital. So,
7 they may be a little bit delayed getting back.

8 I would like us to move through the
9 public comment. There is quite a lot of public
10 comment for us to do before we get to our
11 Handling Committee voting, or at least the
12 discussion, if not the voting, on materials this
13 afternoon.

14 So, the first speaker this afternoon
15 is Will Fantle, and Will will be followed by
16 Suzanne McMillan.

17 MR. FANTLE: Greetings, everyone.

18 My name is Will Fantle. I am the Co-
19 Director/Co-Founder of the Cornucopia Institute.
20 I live in Eau Claire, Wisconsin.

21 Welcome to the Board. Welcome to the
22 new members that are here. You've got a lot of

1 work ahead of you. We welcome the service and
2 the dedication that the members of the NOSB show
3 the organic community. We understand the
4 workload.

5 Madam Chair, I really hadn't intended
6 to address this subject, but yesterday when you
7 opened the meeting, I want to provide a brief
8 response to something that you said. The letter
9 that our organization had sent out last Friday
10 you characterized as "a letter from Will Fantle,"
11 which is me. My signature was on it.

12 But I want to put some context on
13 that. That was a letter from our organization,
14 the Cornucopia Institute.

15 In that context, I would also like to
16 add the fact that the news release that
17 accompanied that letter had comments from the
18 first certified organic dairy farmer in the
19 United States, Kevin Engelbert, a former member
20 of this Board; also, a member of Cornucopia's
21 Board and its Vice President.

22 It also had comments in that news

1 release from Barry Flamm, the first certified
2 cherry producer in the State of Montana, a former
3 member of this Board, the former Chair of this
4 Board. And he is also the Secretary of the
5 Cornucopia Board.

6 The last little piece of context I
7 want to put into that is that our Board held its
8 annual meeting in late March in St. Paul. We
9 have a National Board. And we agonized over a
10 lot of the issues that we see facing the organic
11 community, and there is a fair amount of distress
12 amongst our Board related to some of those issues
13 we see, which helped lead to the creation of that
14 letter that we sent out. So, all that aside,
15 that context I wanted to provide.

16 The NOSB agenda, I want to urge the
17 Board to retake control of its agenda. You are
18 our voice. You are the voice of the community.
19 You need to be able to bring issues and put them
20 on the table for discussion. That has happened
21 in the past. That is how some of the things that
22 you have dealt with have gotten to you for a

1 full-bodied, full-blown discussion. You need to
2 reclaim that power.

3 You have heard issues that were
4 brought here today where people were,
5 representatives of the organic community were
6 asking you to take on issues, whether that is a
7 clear definition of synthetic biology, a more
8 clear definition of the limits and constraints on
9 nanotechnology. You are our voice. Please,
10 please take control of your agenda.

11 I mentioned just the overwhelming
12 workload that you are facing. That is something
13 we sympathize with. Our staff experienced that.

14 The last thing I want to say is that
15 we have gone from the age of enforcement into
16 what of us see as the age of litigation. The
17 lawsuits that have been filed are not the last
18 lawsuits that are coming. We are concerned about
19 overreach by the Executive Branch of the United
20 States thwarting the intent of Congress in the
21 operation of this body. So, we will be engaged
22 in more activities and felt it was important to

1 share that with you. It is not going away
2 anytime soon.

3 So, thank you and good luck with your
4 work.

5 (Signal that time has expired.)

6 CHAIR RICHARDSON: Almost perfect,
7 Will.

8 MR. FANTLE: Almost. Better than.

9 CHAIR RICHARDSON: Thank you, Will
10 Are there questions for Will?

11 (No response.)

12 Thank you.

13 The next speaker is Suzanne McMillan,
14 followed by Maggie Yount.

15 MS. McMILLAN: Hi. I'm Suzanne
16 McMillan. I'm with the ASPCA, which is the
17 American Society for the Prevention of Cruelty to
18 Animals.

19 It is great to be here today on behalf
20 of our over 2.5 million supporters around the
21 country. I am glad to be here to speak about
22 issues of animal welfare in the organics system.

1 And we thank NOSB for its strong
2 leadership on animal welfare issues. We have
3 seen some strong recommendations come out of this
4 Committee in the last few years, and we have
5 echoed many of them ourselves.

6 And I come back to you today on an
7 issue that I actually am aware that you addressed
8 back in 2011 in your October 2011 species-
9 specific guidance recommendations, but they never
10 made it into the final recommendations to NOP.
11 So, I am asking you today to please revisit this
12 issue, add it to your work plan, and please make
13 recommendation to NOP.

14 And that is around the issue of
15 genetics in meat birds. So, we are talking about
16 the use of broiler chickens and turkeys who have
17 been selectively bred for unsustainable growth.

18 We have already submitted detailed
19 written comments on this topic. So, I am not
20 going to go into a lot of detail now.

21 But, essentially, meat birds are
22 generally selectively bred for very particular

1 physical traits that emphasize fast growth, heavy
2 weights, and disproportionate conformation that
3 really favors the breast area.

4 Again, the guidance recommendations
5 that you all put together actually detailed the
6 welfare problems that stem from this selective
7 breeding. But we are talking about skeletal and
8 metabolic issues. Essentially, the systems are
9 not able to keep up with the rapid onset of
10 musculature. And so, we are seeing problems with
11 even very basic behaviors, standing, walking,
12 even breathing. So, needless to say, a lot of
13 welfare concerns there.

14 We see birds spending an inordinate
15 amount of time laying in their own waste, which
16 can lead to sores and burns, which then can be a
17 gateway for bacteria. So, there is, of course, a
18 human health component to all of this as well.

19 Our reading of the organic rules is
20 actually that they current support a move towards
21 slower-growing, more balanced genetics. Looking
22 at the language in the Livestock Care Practice

1 Standard, we see it calls for selection of
2 species and types of livestock with regards to
3 suitability for site-specific conditions and
4 resistance to prevalent diseases and parasites.
5 That is a strong mandate.

6 And it is probably worth mentioning
7 here, actually, that these slower-growing, more
8 balanced birds tend to be hardier with stronger
9 immune systems. So, they do sort of have a
10 built-in better ability to be resistant to
11 pathogens.

12 So, all together, this is an important
13 issue for the organic community to address.
14 Particularly right now, there is a window of
15 opportunity with the USDA revisiting its animal
16 welfare rules. So, I am asking that you please
17 add this to your work plan and provide a
18 recommendation to NOP.

19 Thank you.

20 CHAIR RICHARDSON: Thank you very
21 much.

22 Questions? Yes, Ashley?

1 MEMBER SWAFFAR: Okay. Thanks for
2 your comments.

3 I just have a question. So, a slower-
4 growing bird has a total different conformation
5 than the typical bird that we have now. Do you
6 know if there has been much research on the
7 marketplace, if consumers are willing to accept
8 that type of bird versus what we have now?

9 MS. McMILLAN: Right. So, first of
10 all, to clarify, what we are interested in is
11 actually certainly there is a lot to be said for
12 heritage genetics. I'm not at all disputing
13 that. Heritage is wonderful for a number of
14 reasons, including welfare.

15 But what we are actually looking at is
16 an intermediate-growth bird, if you will, so a
17 bird who generally takes two to three weeks
18 longer to reach market weight. So, they are
19 capable of reaching the same slaughter weight,
20 and the conformation is not as drastically
21 different as what you would find with the
22 heritage bird. There is a bit more meat in the

1 leg area and less in the breast, not by too much,
2 though. So, that is more what we are talking
3 about.

4 And, yes, the ASPCA has a White Paper
5 out on this topic that I have brought some copies
6 of. It is online as well, and it is linked to in
7 our written testimony. So, you can find a lot
8 more there, and we have done some polling of
9 consumers and found willingness to pay more.

10 CHAIR RICHARDSON: Any other
11 questions?

12 (No response.)

13 Great. Thank you very much for your
14 comments.

15 MS. McMILLAN: Thank you.

16 CHAIR RICHARDSON: The next speaker is
17 Maggie Yount, followed by Chris Pierce.

18 MS. YOUNT: Hello. My name is Maggie
19 Yount. I am a Certified Personal Trainer and
20 wellness coach from San Marcos, California. I am
21 a member of the Cornucopia Institute, and I have
22 volunteered to help present testimony because I

1 want to ensure the integrity of organic food.

2 As a personal trainer and a survivor
3 of a near-fatal car accident, I am intimately
4 familiar with the impact food can have on our
5 health and ability to heal.

6 I am also good friends with farmers
7 who have chosen to raise 100-percent pastured
8 livestock and poultry that I would say goes
9 beyond organic. And I have eaten the meat of
10 their animals raised this way. I find it to be
11 vastly superior to meat that is simply certified
12 organic, which shows me that organic standards
13 for animals need even more improvement.

14 I would like to comment on the 2017
15 sunset of methionine as an allowed synthetic on
16 the National List. Cornucopia remains neutral on
17 the Livestock Subcommittee methionine proposal
18 because the adjustment with feed rations as
19 proposed should not be the primary focus of
20 adjusting synthetic methionine use.

21 The main issue we wish to address is
22 discontinuing the use of synthetic methionine by

1 substituting a better diet and different
2 production model, more humane and consistent with
3 organic philosophy and the expectation of
4 consumers.

5 According to the current Technical
6 Report, methionine is considered to be the first
7 limiting amino acid in corn/soy poultry diets.
8 However, poultry do not need to be raised on such
9 a restricted diet. A balanced, diverse diet of
10 omnivorous poultry includes fresh green plants,
11 insects, worms, and other animal proteins. This
12 is what poultry have evolved to eat and what they
13 would eat in the wild to obtain all of their
14 essential nutrients and amino acids.

15 Poultry have been domesticated of
16 thousands of years, during which farmers have
17 maintained healthy poultry without synthetic
18 methionine. Modern organic growers can do the
19 same.

20 Although much of the discussion has
21 centered around animal welfare, it must be
22 understood that synthetic methionine is a

1 production tool that increases productivity.
2 Approximately 16 percent of the organic egg
3 farmers in Cornucopia's 2014 national survey,
4 with flocks ranging from 100 up to 20,000 per
5 house, do not use synthetic methionine in their
6 layer ration. Although not a large percentage,
7 it illustrates the possibility for commercial
8 growers to implement alternatives to densely-
9 packed poultry houses with sorely inadequate
10 outdoor access, and calls into question the
11 essentiality of synthetic methionine use.
12 Synthetic methionine is banned in Europe, where
13 organic ags have an even higher market
14 penetration.

15 There are also human health concerns.
16 Synthetic methionine for supplementation may
17 raise levels of insulin-like growth factor, or
18 IGF-1, in liver and meat tissue in poultry.
19 Numerous studies have found a link between IGF-1
20 levels in human plasma and an elevated risk for
21 prostate, breast, and colorectal cancer.

22 Cornucopia has concerns that this

1 synthetic material is being used as a production
2 aid instead of providing more legitimate outdoor
3 access to pasture, diverse diets, appropriate
4 stock densities, and slower-growing breeds.

5 Therefore, Cornucopia remains neutral
6 on the new Livestock Subcommittee proposal and
7 continues to support pressure to remove synthetic
8 methionine with a drop-dead date, as was required
9 to get antibiotics out of tree fruit production.

10 There are too many outstanding
11 concerns for the substance to remain on the
12 National List. Therefore, we strongly support
13 aggressive research into alternatives to
14 synthetic methionine and a firm expiration date.

15 Thank you.

16 CHAIR RICHARDSON: Thank you very much
17 for your comments.

18 Questions? Calvin?

19 MEMBER WALKER: To me, I represent
20 consumers, but at the same time I still feel that
21 synthetic methionine is still needed. And so, of
22 the six public interest groups, Cornucopia was

1 neutral. You want to speak to an expiration
2 date?

3 MS. YOUNT: I would encourage you to
4 speak with the Cornucopia staff members who are
5 present at this meeting because I am a citizen
6 and not a staff member of the organization.

7 MEMBER WALKER: Okay.

8 CHAIR RICHARDSON: Great. Thank you
9 very much.

10 MS. YOUNT: Thank you.

11 CHAIR RICHARDSON: The next speaker is
12 Chris Pierce, followed by Melvin Gehman.

13 MR. PIERCE: Madam Chairman, NOP, NOSB
14 Members, and those in attendance, thank you so
15 much for allowing me to share with you today.

16 I will talk a little bit more about
17 who I am. My name is Chris Pierce. I'm from
18 Annville, Pennsylvania, which is right next to
19 Hershey. It smells like chocolate. And we are
20 involved with organic pullet and egg farming.
21 The company that I give leadership to is called
22 Heritage Poultry Management Services.

1 I have met before this Board before
2 and welcome to the new members.

3 Just to talk a little bit about who we
4 are, we are the technical side of many small egg
5 farms. We work with around 150 small egg farms.
6 I would define the small egg farm as the people
7 that own the farm are the ones doing the work,
8 and that is where their income and their labor
9 goes into it. So, it is not geared towards
10 having significant staff on the farms to do the
11 work. It is they are raising their families,
12 caring for the chickens, producing the eggs.

13 And that is very viable in my section
14 of the country, where 20 percent of the consumers
15 live, in the Northeast. And it is important that
16 we have that.

17 So, from Heritage, we bring the
18 expertise and we have a team of two poultry PhD
19 nutritionists on staff, and we have a team of
20 service technicians. We visit and support the
21 farms because the farmers we work with don't have
22 the ability to have a Director of Food Safety and

1 a Director of Operations and a "Director of
2 This," because the guy that wears the hat shovels
3 the snow, packs the eggs, shovels the manure,
4 cares for the chickens, changes the lightbulbs,
5 does everything on the farm. So, we bring that
6 expertise to them to help those small family
7 farms success and compete with the larger-sized
8 farms.

9 So, today, besides me, there is 150
10 small farmers that are busy doing their thing in
11 Pennsylvania. Their time is valuable, too, but
12 they are able to be here today.

13 But, as we look at the needs within
14 the marketplace, these small family farms are
15 coming back into farming. The position that we
16 have taken is we support the request or the
17 motion to transition to a two-pound average over
18 the life of the flock, rather than the two pounds
19 per ton.

20 As I look at some of that, I am in
21 agreement with this Board and even with my
22 friends from Cornucopia that just shared. We

1 need to find alternative methods to move away
2 from the synthetic methionine. I think we are
3 all in agreement with that, even within the
4 industry.

5 And I believe that if we move to the
6 two-pound average over the life, it actually will
7 be less, as some others have shared and other
8 comments will move, that in the earlier pullet
9 stage it will be a higher amount of methionine on
10 a per-ton basis. But, as we move into the
11 middle, latter part of the hen's life, it will be
12 significantly less.

13 And I value that I was able to be part
14 of a conference call in December with the
15 Livestock Committee. We were able to share some
16 of our personal hands-on experiences with the
17 issues that we have seen within the farms.

18 So, of that 150 farms that we work
19 with, around half are organic. Half of them are
20 certified organic, which would be pullet and
21 layer farms. We do work with one certified
22 entity. That is Pennsylvania Certified Organic.

1 So, as we look at that, the welfare
2 issue is relevant. That is not the only issue,
3 though. So, we are trying to balance out how do
4 we provide -- organic needs to be comparable to
5 all production. Organic should not be looked at
6 as the lower standard because it provides less
7 care for the birds. It should be looked at as
8 the gold standard.

9 As we look at some of the effects that
10 affect our small family farms, it does affect
11 with increased mortality. Now that is not every
12 flock has increased mortality. There are
13 variations on the time of the year that the birds
14 were raised, the time of the year that --
15 depending on what age they are. There are
16 certain breeds that have a higher tendency to
17 have more picking than other breeds. And there
18 are so many variables in there.

19 And I am very willing to talk more
20 about it, but right now this is a significant
21 concern for all egg farmers, specifically the
22 group that I represent. I mean, right now, we

1 cannot ignore that there -- and this is not part
2 of methionine, but this is part of the concern
3 that the egg farmer has. They look at the issues
4 they are trying to deal with; reduced methionine
5 or potentially no methionine.

6 And right now, their focus is we have
7 high-path avian influenza that has affected 10
8 million hens. Three percent of all the hens
9 producing eggs in the United States actually are
10 being euthanized right now.

11 (Signal that time has expired.)

12 That doesn't tie into anything to do
13 with methionine or outdoor access specifically
14 right now, but these are the valid concerns that
15 our family farms are trying to manage their
16 flocks, reduce the risk, care for the birds,
17 protect them against the challenges that they
18 face.

19 Anyway, so I just wanted to at least
20 bring that on record right now to say that there
21 are so many different factors. When we
22 compromise the bird's immune system, she is more

1 open to the challenges that we could face, which
2 includes various diseases.

3 So, I had to cover everything at once.
4 Thank you very much, Board, for all you do.
5 There are many of us here. I am willing to
6 answer any questions that you may have.

7 CHAIR RICHARDSON: Thank you.

8 MR. PIERCE: And I greatly value that
9 you are looking for the consumers' and for the
10 farmers' best interest.

11 CHAIR RICHARDSON: Thank you.

12 Let me see what questions we have from
13 our Board.

14 Francis?

15 MEMBER THICKE: Thank you.

16 The material you will pass around from
17 Heritage --

18 MR. PIERCE: Yes, that is my father-
19 in-law. He is the next generation.

20 MEMBER THICKE: Okay.

21 MR. PIERCE: He is going to be coming
22 up next, Francis.

1 MEMBER THICKE: One of the issues that
2 was brought up before was genetics and how
3 genetics influenced the need for methionine. In
4 this paper, it say, "As birds are commercially
5 selected for faster growth and greater egg
6 production, the level of amino acids needed to
7 support optimal bird health and function also has
8 likely increased."

9 So, that is something that some of us
10 are wondering about genetics. It is that we are
11 selecting for greater need for methionine. And
12 could we reverse that and select for animals that
13 could be healthy on a natural diet?

14 MR. PIERCE: I can give you my
15 response to that. Right now, we use the same
16 pool of genetics that the conventional world
17 uses. So, the 310 million hens in the United
18 States is the same genetics that the organic
19 industry, the majority of the organic industry
20 uses for egg farming. I am told that is
21 specifically layers. I don't have any knowledge
22 of broilers or turkeys. But it is the same

1 genetic pool.

2 So, there is not different breeds.

3 There is not readily-available commercial size
4 for a different genetic bird for organic than
5 there is for conventional. That would be what my
6 knowledge is.

7 And you can ask Mr. Gehman when he
8 comes up a little bit more on the detailed amino
9 acid requirements.

10 CHAIR RICHARDSON: Calvin?

11 MEMBER WALKER: Thank you, sir.

12 A nutritionist from Heritage sent
13 something to -- not something; I apologize for
14 that -- sent a document. She stated that
15 averaging, in essence, probably would not be the
16 best. She said perhaps using a maximum amount of
17 synthetic methionine would be better than
18 averaging.

19 MR. PIERCE: Okay. I don't remember.
20 That is probably Dr. Regina Harris, one of our
21 nutritionists.

22 MEMBER WALKER: Yes. And this letter

1 was dated April the 15th. It came to the
2 Livestock Subcommittee.

3 MR. PIERCE: Is that the letter that
4 Mel has?

5 MEMBER WALKER: Yes.

6 MR. PIERCE: Is that what Francis had?

7 MEMBER WALKER: Yes.

8 MR. PIERCE: You know what? You can
9 talk with Mel about the details. I didn't see
10 that document.

11 MEMBER WALKER: Okay. Thank you, sir.

12 MR. PIERCE: Thank you.

13 CHAIR RICHARDSON: Any other
14 questions?

15 (No response.)

16 Great. Thank you very much.

17 MR. PIERCE: Thank you.

18 CHAIR RICHARDSON: The next speaker is
19 Melvin Gehman, and he will be followed by Kyla
20 Smith.

21 MR. GEHMAN: Good afternoon. Good
22 afternoon, Madam Chair.

1 My name is Mel Gehman, Heritage
2 Poultry Management Services, Annville,
3 Pennsylvania.

4 And was referred to, Dr. Regina
5 Harris' letter has been sent around.

6 I want to thank the NOSB for
7 volunteering your time and the NOP for providing
8 this important process.

9 We all as an organic community need to
10 make effort to understand the insights of others.
11 We need to understand the physiological needs of
12 the animals from those who truly are
13 compassionate of their needs.

14 I am founder of Heritage Poultry
15 Management Services and have been in organic egg
16 production since 1997. We have voluntarily
17 adhered to proposed egg production standards
18 before the implementation of the National Organic
19 Program.

20 Now I have served on the Pennsylvania
21 Certified Organic Board, advisory board.

22 We have our feed supplier source

1 organic feed ingredients that are available to
2 balance the pullet and layer diets for essential
3 amino acids, including methionine, as much as is
4 possible from natural sources.

5 Environmental conditions outside and
6 inside the henhouse vary from region to region,
7 depending on the season of the year and the
8 climate and the housing type. Adequate levels of
9 total methionine need to be available for the
10 hen's nutrition requirement in 20 to 40 weeks of
11 age to meet their body growth and their egg mass
12 stage of life.

13 If available feedstuffs with natural
14 methionine sources were here now, that would be
15 great. In 2010, we thought by today we would
16 have more natural methionine choices. Even with
17 two pounds synthetic methionine, it is limited
18 for periods of time when outdoor conditions are
19 very hot and humid like in the summer in the Mid-
20 Atlantic.

21 Therefore, the amino acid density,
22 including methionine needs to be higher at the

1 stage of life when there is higher needs and
2 limited feed consumption, at the time when stress
3 and feed consumption is low. Also, in the
4 wintertime, low ventilation and cold climates,
5 diets with limited methionine need more soymeal,
6 causing a higher crude protein intake, which
7 causes stress on the kidneys in removing the
8 excess urea breakdown products from the
9 bloodstream.

10 This causes higher moisture and
11 ammonia in the laying houses. This is definitely
12 a welfare issue. The higher ammonia causes
13 respiratory damage to the trachea epithelial
14 lining and renders a hen more susceptible to
15 respiratory diseases.

16 Therefore, we support the Livestock
17 Subcommittee recommendation for poultry on
18 average for the life of the bird. This will be
19 important for broilers and laying hens.

20 (Signal that time has expired.)

21 Thank you.

22 CHAIR RICHARDSON: Thank you very

1 much.

2 Questions? Tracy?

3 VICE CHAIR FAVRE: Thank you very much
4 for coming. I think it is very helpful for those
5 of us on the Committee to hear from producers
6 themselves and actual experiences that they are
7 having.

8 Do you believe that, when the animal
9 welfare standards come out and we increase
10 outdoor access, that it will eliminate the need
11 for supplemental methionine? Or do you believe
12 that you will still have to supplement even then?

13 MR. GEHMAN: I think there will still
14 be need of supplemental methionine. We have been
15 adopting standards as they are perceived to come.
16 We have also given our birds more outdoor access
17 in the meantime. So, it won't take away the
18 requirement for the supplemental methionine of
19 some sort. If we had natural -- we are using
20 natural ingredients, but there is not enough of
21 the natural ingredients available.

22 As the organic community, organic

1 foods demand has increased and we are putting
2 more and more hens into production, we are making
3 this gap wider. So, we need to have some more
4 organic methionine available.

5 VICE CHAIR FAVRE: Thank you.

6 CHAIR RICHARDSON: Francis? And then,
7 Calvin.

8 MEMBER THICKE: I would like to go
9 back again to the genetics issue a little bit and
10 see if there is any way that we could, the
11 possibility of selecting for genetics that are
12 more able to -- animals or birds that could
13 thrive on a more natural diet.

14 I am looking at, for example, a
15 parallel with organic dairy. Now we are required
16 to graze, and many dairy farmers have mostly all
17 grazing or all grazing. Their production cuts
18 down to about half, but they find that, for a cow
19 to thrive in that system, they have to select
20 genetics for animals that can thrive on pasture
21 situations instead of standing on concrete in
22 confinement and eating corn.

1 But we don't see that at all happening
2 with the chicken side of things. Is there any
3 possibility of selecting genetics? I know it is
4 different. Dairy farmers can select their own
5 genetics. But is there a way we could select
6 genetics of birds that were not so dependent upon
7 these synthetic diets? And do we really need to
8 mimic, to have the same level of production as
9 the conventional?

10 MR. GEHMAN: That is a good
11 suggestion, and that is a great opportunity for
12 somebody to get involved in alternative genetics.

13 CHAIR RICHARDSON: Calvin?

14 MEMBER WALKER: I'm still in quandary.
15 I am an animal scientist. I have a PhD in animal
16 breeding and genetics, but not nutrition. I
17 raise chickens, and we have about 200 chickens at
18 the University.

19 I believe that synthetic methionine
20 will be needed today, tomorrow, and probably the
21 next few years. I think the question is the
22 nutritionists that sent in the comments had

1 suggested perhaps not averaging, but using a
2 maximum synthetic methionine as opposed to
3 averaging. Would you like to speak to that?
4 Because I did hear you say averaging would be the
5 best way, but --

6 MR. GEHMAN: Yes, I think averaging
7 would be the best way. And I will have to look
8 at -- I must have overlooked that, if that was a
9 comment, or maybe it is misunderstood.

10 But we need to average because like a
11 baby chick, when it is eating a little bit of
12 feed, it needs a little more.

13 MEMBER WALKER: How much more? If we
14 didn't have averaging, what would be the cap for
15 broilers, layers, what you would see?

16 MR. GEHMAN: Yes. I can't speak to
17 broilers and turkeys. In layers, if we had
18 averaging, it won't take any more and it is not a
19 gross stimulant. It is just that a healthy bird
20 meets its genetic opportunity. If it is a
21 stressed bird, it won't have as much production
22 opportunity. So, it would be less production

1 without methionine.

2 But I think there are other challenges
3 in immunity and diseases and welfare conditions,
4 as was spoke to earlier.

5 MEMBER WALKER: Thank you.

6 MR. GEHMAN: Thank you.

7 CHAIR RICHARDSON: Great. Thank you
8 very much for your comments.

9 MR. GEHMAN: Thank you.

10 CHAIR RICHARDSON: The next presenter
11 is Kyla Smith, followed by John Brunnquell.

12 MS. SMITH: Good afternoon.

13 My name is Kyla Smith. I'm the
14 Certification Director at Pennsylvania Certified
15 Organic, a USDA-accredited certifier that
16 certifies approximately 700 operations in the
17 Mid-Atlantic region of the U.S.

18 PCO certifies a significant amount of
19 organic poultry operations in our region. Given
20 this experience, I would like to further expand
21 on PCO's written comments regarding the petition
22 to revise the annotation for methionine by

1 addressing a few of the Subcommittee's concerns
2 about the documentation requirements that would
3 be necessary for a certifier to assess compliance
4 over the lifetime of the bird, as well as
5 assessing compliance when livestock products have
6 entered the marketplace, and then, it is
7 determined at the end of that flock's life that
8 the birds were above the allowable average
9 limits.

10 First, let's look at the concerns with
11 the documentation requirements. Recordkeeping is
12 nothing new to an organic operator. It is
13 certainly not their favorite part of organic
14 production, but something they are familiar with.

15 A few additional points on
16 documentation:

17 No. 1, there is precedence for
18 documents, including organic certificates, spec
19 sheets, labels, and documentation to verify
20 slaughter eligibility requirements to follow
21 organic ingredients, products, and animals
22 throughout the supply chain to ensure continued

1 adherence to the organic regulations throughout
2 this chain. This system would parallel the
3 system used in the event of pullets being moved
4 to a separately-certified layer house.

5 No. 2, certifiers and inspectors have
6 experience in conducting an average calculation,
7 as it required to verify compliance of ruminant
8 animal operations' adherence with the pastoral
9 requirements, as has been pointed out by previous
10 commenters. In addition, feed audits are already
11 being conducted during inspection looking at feed
12 ration records and mix sheets.

13 No. 3, there has been some concern
14 regarding when operators change rations and how
15 certifiers would verify this change in ration has
16 actually occurred. PCO would require that this
17 process be explained in the Operations Organic
18 System Plan, as is required by 205.201, and would
19 be verified during inspection. This process of
20 explaining procedures in an OSP, which is then
21 verified during inspection, through observation,
22 interview, and recordkeeping, is the whole

1 premise of organic certification.

2 As in verifying all other parts of the
3 regulation, when PCO has reason to suspect an
4 operation of a willful violation, we would
5 conduct an investigation which may include taking
6 a sample.

7 The combination of these factors
8 allows PCO to be confident in our ability to
9 verify organic poultry operations' compliance
10 with this annotation change.

11 No. 2 or second, let's look at the
12 concern with assessing compliance. This is
13 nothing new to a certifier. This is what we do
14 day-in and day-out. Through documentation review
15 and inspection, we assess an operation's
16 compliance against the regulation.

17 We have had the opportunity to work
18 through the very concern you have regarding this,
19 as stated in the recommendation of, quote, "how
20 certifiers would handle a situation if the flock
21 goes out of production prior to the average being
22 below the regulatory cap". End quote.

1 During the implementation of the
2 pastural rule, we have had to issue
3 noncompliances and adverse actions to operators
4 that were determined to not be in compliance with
5 the 30-percent DMI requirement at the end of the
6 grazing season. Meanwhile, organic milk had
7 already entered the marketplace. We look to the
8 enforcement procedures outlined in the
9 regulations and NOP Program Handbook for guidance
10 on how to handle these situations.

11 We fully support the development for
12 tools to enable certifiers to more easily conduct
13 these calculations, such as the calculator
14 submitted by Oregon Tilth, or further guidance
15 that could be developed by the NOP. If the Board
16 passes this recommendations today, PCO is
17 confident, as are many other ACAs that have given
18 public comment at this meeting, in our ability to
19 enforce the annotation change.

20 Thanks.

21 CHAIR RICHARDSON: Thank you.

22 Questions? Calvin?

1 MEMBER WALKER: You mentioned --

2 (Signal that time has expired.)

3 (Laughter.)

4 MS. SMITH: Sorry, your time's up.

5 (Laughter.)

6 MEMBER WALKER: You mentioned that, if
7 possibly a producer is in violation of a
8 certified, you would take a sample?

9 MS. SMITH: Potentially, yes.

10 MEMBER WALKER: Potentially?

11 MS. SMITH: Well, we would do an
12 investigation. So, we would look at various
13 parts of the Organic System Plan and conduct a
14 full investigation, which may or may not include
15 taking a sample. Likely it would, but --

16 MEMBER WALKER: And taking the sample,
17 what would you do with the sample?

18 MS. SMITH: Well, we would test it for
19 the amount of methionine because that is what we
20 are trying to look at, right?

21 MEMBER WALKER: Correct. And to do
22 one sample would cost between \$105 to about \$145.

1 That is for one sample. And we know that it
2 would take more than one. So, you are advocating
3 that you all would do that?

4 MS. SMITH: I'm saying that we take
5 documentation and evaluate that for all other
6 parts of the regulation. We take an organic
7 certificate to show that an operator is feeding
8 organic feed. We don't always test that feed to
9 see if it is GMO or not GMO, right? So, we would
10 apply the same, you know, management style here
11 in that we might take a sample and we might not.

12 And then, we would verify that against
13 what they said their feeding plan was at that
14 given time. If it didn't match, then we would
15 probably take more samples.

16 MEMBER WALKER: I would like to add
17 that, if my worker -- we have about 146 single
18 corn white lignins -- and if he would give me his
19 eight feeding schedules, it shows methionine and
20 all those. If I did not believe him, I would
21 take a sample at each of those stages and get it
22 tested for lysine, methionine, and those things,

1 to see if what he is saying is correct.

2 So, you are saying in any type of
3 guidance? It seems like another step would be to
4 take samples at the different stages to see if a
5 person is in compliance. What is your take on
6 that?

7 MS. SMITH: Just as I said, we don't
8 always take samples. I mean, again, with the
9 residue testing requirement, we are verifying
10 practices, right? We are ensuring that their
11 Organic System Plan practices in regards to
12 buffers and things along those lines are working.

13 And then, we take samples at a portion
14 of the operations to ensure that those processes
15 are, in fact, working. So, it would be the same
16 thing here. If we had reason to suspect that
17 there was a violation, then we would sample.

18 CHAIR RICHARDSON: Tracy?

19 VICE CHAIR FAVRE: I am just trying to
20 make sure I understand. But, in a current
21 inspection, if you were going in, there is a
22 current limitation and annotation on the use of

1 methionine. The ration currently changes with
2 life stage of animals anyway. So, you are
3 potentially in the same boat with just a slightly
4 different target.

5 MS. SMITH: Sure.

6 VICE CHAIR FAVRE: Is that what I
7 understand?

8 MS. SMITH: Yes. I mean, again, we
9 are verifying documentation most oftentimes.
10 But, yes, we would apply the same rules, where if
11 we had reason to believe that there was
12 violation, then, yes, we would do an
13 investigation that could involve a sample.

14 VICE CHAIR FAVRE: Thank you.

15 CHAIR RICHARDSON: Nick?

16 MEMBER MARAVELL: I am a little
17 confused here. I need to ask Calvin a question
18 with Kyla here.

19 When you run a test, can you separate
20 the synthetic methionine from the naturally-
21 occurring methionine in the feed?

22 MEMBER WALKER: No, I cannot. And

1 that is one of the dilemmas.

2 MEMBER MARAVELL: So, then, for
3 example, I'm a poultry producer. I also sell
4 poultry feed. So, you would have to go back and
5 test the inputs on the grain from the identical
6 lots that went into that feed and get the
7 methionine on all of those inputs individually.
8 Now we are talking quite a few hundred more
9 dollars. And then, you would have to test the
10 feed itself. And then, you would have to make an
11 assumption about what the amount of synthetic
12 methionine was. Is that correct?

13 MEMBER WALKER: That's correct.

14 Also, the public comment, CCOF stated
15 that it was very difficult to do. CCOF -- Oregon
16 Tilth did a great job of suggesting a way to
17 actually develop guidance and making sure that
18 individual poultry producers were in compliance.
19 It is a complicated issue.

20 And I know, if I had a large farm, I
21 definitely would not want anyone coming out and
22 sampling my rations to really find out how much I

1 am feeding. So, it is a difficult thing to do.

2 And it seems like the current step-
3 down, it seems like it is okay, than going
4 through these extra steps.

5 CHAIR RICHARDSON: Thank you.

6 I think we should leave it at that and
7 go to the next person. We are running late here.

8 So, thank you.

9 MS. SMITH: Thank you.

10 CHAIR RICHARDSON: The next speaker is
11 John Brunnquell, and after that, it is Tom Bowen.

12 MR. BRUNNQUELL: Good afternoon.

13 I'm John Brunnquell. I preside over
14 Egg Innovations, where we produce ethical eggs in
15 five different states, family farms, both organic
16 and non-organic production, and all of our birds
17 are on pasture.

18 I'm speaking today about, in part, the
19 support that we would have of moving methionine
20 to an average as opposed to a cap, for two very
21 simple reasons.

22 No. 1, as people know, I have

1 repetitively been up here on animal welfare
2 issues. It gives us a tool that adds to our
3 arsenal, that without it, we will continue to do
4 the best we can, but it broadens our arsenal to
5 deal with animal welfare issues.

6 The second is, to be very clear, I,
7 along with most of the industry, would love to
8 see a day where we eliminate synthetic methionine
9 altogether, and it allows us to continue to
10 research to push aggregate methionine consumption
11 lower.

12 Speaking as the president of our
13 company, if we have an average, our company would
14 immediately engage and begin that type of
15 research to see how we can reduce methionine
16 consumption in total.

17 Having said that, I would like to
18 challenge this Board to sometimes fly at 50,000
19 feet instead of 5,000 feet. We have an amazing
20 ability to get into the minutiae and the arcanum
21 on topics such as methionine, which goes in as a
22 synthetic at 1/10th of 1 percent of the diet, and

1 in 15 years I have never had a consumer call or
2 ask me about it.

3 However, there is broad consumer
4 topics that we don't talk about. One of them I
5 would like to bring up and begin introducing to
6 this Board for consideration is we have, in my
7 opinion, a hopelessly outdated validation process
8 on organic grain.

9 Last year our company bought over a
10 million bushels of organic grain, domestic and
11 imported. And all I have to have is a sheet of
12 paper from a vendor that says it's organic, and I
13 am not required to do any validation of any kind.

14 I am also part of Project Verified.
15 I produce non-GMO eggs. There I am required to
16 sample every load of grain, maintain a 98.5
17 purity, or I reject every load of grain that
18 doesn't meet that standard. And we can do that.

19 Our question is, why are we not having
20 that same expectation in the organic community?
21 If we are truly concerned about consumer
22 confidence, I would challenge us to sometimes

1 look at these bigger, broader topics in addition
2 to some of the minutiae we do have to delve into
3 on a regular basis.

4 Thank you.

5 CHAIR RICHARDSON: Thank you, John.

6 Questions? Calvin?

7 MEMBER WALKER: Thank you, John. I
8 appreciate you talking with all the Committee in
9 November.

10 MR. BRUNNQUELL: Uh-hum.

11 MEMBER WALKER: And certainly the
12 information you provided was very good.

13 And I think, as a consumer, I would
14 like to say I am a farmer, I'm a consumer; I'm
15 all those. And there is no way that the question
16 I will ask here is an intent to take away
17 synthetic methionine. I just believe that the
18 current step-down is working.

19 My question to you is, corn and
20 soybean, what percent methionine is in the corn
21 and soybean base diet before synthetic methionine
22 is added generally?

1 MR. BRUNNQUELL: I don't have the
2 requisite knowledge to speak to that
3 specifically.

4 CHAIR RICHARDSON: Other questions?
5 Calvin again, yes.

6 MEMBER WALKER: How can we move the
7 research along as it relates to finding
8 alternatives? I do believe that the Methionine
9 Task Force should not be solely the one to find
10 alternatives. I would hope that the 1890s, the
11 1962s, and the Hispanic-serving institutions
12 would be able to help the organic poultry
13 producers in doing research to come up with
14 alternatives. Because I think it is an undue
15 burden if we are asking the Methionine Task Force
16 to put up mostly all the money to come up with
17 these alternatives.

18 MR. BRUNNQUELL: You know, I can't
19 speak to the other organizations that you have
20 mentioned. However, I will come back to a
21 comment I made six months ago. Sometimes I have
22 a perception that this Board has a perception

1 that there is not zealous energy and continuous
2 research on an ongoing basis by the industry.
3 There is a multitude of efforts by multiple
4 companies individually and collectively as a task
5 force to continually look for alternatives.

6 Our current thinking is we need to
7 move from synthetic to natural. Then, we need to
8 work our way from natural to organic.

9 But, by giving us the average, you at
10 least begin giving us the opportunity to start
11 taking aggregate total synthetic to a lower
12 consumptive rate. That is a significant step
13 forward, where right now we are at a stall.

14 Thank you.

15 CHAIR RICHARDSON: Mac?

16 MR. BRUNNQUELL: Oh, sorry.

17 CHAIR RICHARDSON: Hold on. A
18 question.

19 MEMBER STONE: John, we have heard
20 about soldier fly larvae and some other insect
21 sort of a thing. But, then, something I read --
22 and help make sure I read it correctly -- that

1 FDA is not real crazy about putting insect parts.

2 Is there some truth to that?

3 MR. BRUNNQUELL: Correct. So, any
4 alternative we think of has to go through
5 inherently some regulatory body that oversights
6 it. As we sit here today, to the knowledge of
7 our egg industry, those are not approved
8 ingredients.

9 Forget the persona or the look that
10 might have to a consumer. Forget the
11 manufacturing facility that is going to make all
12 these flies. From a compliance point of view, at
13 this point it is not on any list of approved feed
14 ingredients.

15 CHAIR RICHARDSON: Calvin?

16 MEMBER WALKER: The EU, as you know,
17 up until 2017, No. 1, it does not require -- you
18 cannot feed synthetic methionine.

19 MR. BRUNNQUELL: Correct.

20 MEMBER WALKER: And the EU uses potato
21 meal, corn gluten meal, and they also suggested
22 to me that the way they get around it for their

1 organic poultry producers is to use a slow-
2 growing bird or, also, they would -- what? --
3 market those animals at an earlier age.

4 Any comments on how they do that as it
5 relates to synthetic methionine not being
6 required?

7 MR. BRUNNQUELL: Two comments. No. 1
8 is Europe also allows a portion of the diet to be
9 non-synthetic ingredients, which we do not. So,
10 that is the first easy workaround, is I say I can
11 have up to 5 percent of non-organics and,
12 coincidentally, that is my synthetic methionine.

13 The second, when we talk about gene
14 pools and genetics, you have to understand that
15 us in the egg industry, we are the tail on that
16 dog. We do not control the gene pools. We
17 happen to live in an industry where there are two
18 or three global companies that hold the gene
19 pools that are commercially available.

20 And so, if they were available, our
21 industry would move to that bias. But we have
22 very little influence. At this point, it is

1 generally believed that there are 10 million
2 organic layers in the United States, give or
3 take, out of a pool of about 305 million. So,
4 while we are proud of the size of our industry,
5 we are still about one-third of 1 percent of the
6 industry. And so, we have very limited influence
7 on changing gene pools when we have those
8 discussions.

9 Thank you.

10 CHAIR RICHARDSON: Great. Thank you
11 very much.

12 Oh, I'm sorry. John, I'm sorry,
13 Ashley has a question.

14 MEMBER SWAFFAR: Come on back.

15 MR. BRUNNQUELL: Yes?

16 MEMBER SWAFFAR: So, a lot of the
17 opposition to this has said that our housing
18 styles and production practices are part of the
19 reason that synthetic methionine, we need it.

20 And I heard you say you are a pasture
21 producer. So, can you kind of tell us a little
22 bit about your system and you are seeing the

1 lower methionine in your system?

2 MR. BRUNNQUELL: At the end of 2016,
3 we will have 1.2 million birds on 60 farms, all
4 of 20,000 birds, in five different states. All
5 of those birds go outside on pasture, whether
6 they are organic or not organic.

7 We do not see any significant
8 contribution in either our organic or our non-
9 organic birds with that actual field experience
10 in that breadth of distance and geography and
11 that breadth of amount of birds.

12 CHAIR RICHARDSON: I just will mention
13 to everybody we have seven more speakers on
14 methionine, and we are half-an-hour behind
15 already. So, we can go on for as long as we need
16 to and the people have patience, but just so you
17 know.

18 (Laughter.)

19 Calvin?

20 MEMBER WALKER: John, you mentioned
21 that you are not seeing any difference. Could
22 you clarify, explain a little bit more?

1 MR. BRUNNQUELL: Well, what we are
2 seeing is that the pastures do not in any
3 significant manner contribute to the methionine
4 intake of the bird to a point where we can lower
5 the dietary methionine as an offset.

6 MEMBER WALKER: Are you seeing any
7 animal welfare issues between the two?

8 MR. BRUNNQUELL: We do see a benefit
9 of the animal welfare side because what we view
10 as a diffusion effect. Giving the birds more
11 space, we do see less cannibalism and picking
12 when we are able to get the birds out. Because
13 we are in the Midwest, it is a seasonal issue.
14 Wisconsin is the last state to get out. Kentucky
15 is out virtually all year long.

16 Thank you.

17 CHAIR RICHARDSON: Thank you, John.

18 Our next speaker is Tom Bowen,
19 followed by David Will.

20 DR. BOWEN: Thank you for asking me to
21 visit with you today.

22 I am Thomas Bowen. I have been

1 feeding a few chickens for about 51 years now. I
2 have a PhD in nutrition biochemistry. I feed
3 birds from the East Coast of the United States to
4 Malaysia. So, I have some diversity of
5 experience, and it is still a learning process.

6 I work in the organic section with
7 over 200 houses of different birds, both pasture
8 and conventional and organic they have for the
9 different regions.

10 The rations that we work with are
11 basically corn/soy. The people that work with
12 that are using both domestic and imported
13 materials.

14 I am a person who believes in test and
15 verify to make sure that you are getting what you
16 say you are supposed to be getting.

17 I have submitted to the Committee some
18 points that I wanted to make aware that there are
19 several items that are quite different. I have
20 been a strong adversary probably on this straight
21 two pounds in the diet because there is an age-
22 difference requirement in the bird as she grows,

1 as she develops, as she lays eggs. And that
2 really doesn't address that.

3 The cumulative total does and could be
4 made to work. I know that some of the inspectors
5 that do the inspection will not like it very
6 well, but there are fairly simple computer
7 programs now that can keep up with the cumulative
8 intakes. We have been playing with that for the
9 last six months.

10 As far as the difference in the diets,
11 John made a point I tend to agree with; the only
12 thing I see difference on the pasture birds and
13 the housed/ranged birds on nutrition is they may
14 pick up some xanthophyll. You may see some
15 xanthophyllic pigments come through in your
16 pasture birds where you may not in your housed
17 birds or limited pastures.

18 As far as other nutrition, I have
19 tried reducing different things. We have played
20 with different things. And I see little effect.
21 The bird's requirement is the bird's requirement.
22 Body size, body mass is really the key.

1 Nutrition has evolved where the
2 biochemistry is fairly well-known. We know about
3 how much amino acid or amino acid methionine or
4 amino acids components, like methionine and
5 cysteine, that are required.

6 The layer, interestingly enough, does
7 not have a tremendous requirement for lysine,
8 unlike turkeys and broilers. So, what we address
9 in our layers is quite different in those other
10 animals.

11 When I started changing the diets --
12 and this Committee, some of the people are aware
13 -- I played with different rations. We have
14 tried no methionine. And I will say on
15 conventional, not pasture birds but on
16 conventional birds, it was a moderate disaster.
17 They just don't get enough nutrition.

18 The way we have got around, we have
19 overfed protein, crude protein. If you need 17-
20 18 grams of crude protein in your birds' intake,
21 to get the methionine from a natural source, you
22 are going to have to raise that to 21 to 23

1 grams. When we do that, there is a problem.
2 They don't need it. They don't need anything
3 except the methionine constituent that we put in.

4 So, we put that in, and the other has
5 to go somewhere. That mostly goes out through
6 the kidney. The kidneys are stressed a bit. We
7 get wetter droppings. We get ammonia, and we get
8 ammonia to the point in the Upper Midwest that it
9 is truly detrimental to the birds and to the
10 workers.

11 EPA has a limit. I have seen three
12 times that limit in the Upper Midwest of ammonia
13 in houses.

14 (Signal that time has expired.)

15 The averaging I don't think has to be
16 done, but I think the cumulatives can be made to
17 work very simply.

18 Any questions, I will be glad to try
19 to answer.

20 CHAIR RICHARDSON: Thank you.

21 Questions? Calvin?

22 MEMBER WALKER: You mentioned

1 averaging does not necessarily have to be done.

2 Could you clarify that?

3 And then, also, what we do at my
4 University, where we are dealing with the manure
5 from the layers, we just have the guys to do
6 what, clean that manure out, you know, much more
7 frequent to prevent that type of ammonia buildup
8 in the barn.

9 DR. BOWEN: The problem that you get
10 into -- and I work with some people on the East
11 Coast -- to remove the manure weekly would be
12 great, but it is pretty difficult when you have
13 got 40, 50, 60 inches of snow on the ground. And
14 that buildup is real. Over that period of time
15 until such time as you can get in there and work
16 that material, it really has been impossible.

17 The birds are stressed. They drop
18 feathers. You may have a certain amount of what
19 I call gray eye or blind from the ammonia burn,
20 as well as burning the lung tissue. So, there is
21 a significant problem there.

22 MEMBER WALKER: What we do is

1 sometimes we could use like a front-end loader,
2 you know, to move it out. And then, if the
3 weather is good, then you can always take that
4 front-end loader, then, take it to another
5 location.

6 Would that help a lot of the
7 operations that you are dealing with to get that
8 manure out, which ends up building up?

9 DR. BOWEN: Well, I will go back to
10 the East Coast. When it is 20 below zero and
11 open the end of the house to be able to go in and
12 clean that out, we have got another problem. You
13 have got to get water in there. It freezes.
14 With the wind, I feel sorry for the people off
15 the East. It has been a problem.

16 The Upper Midwest, every winter it is
17 a problem. I went to school at Lincoln,
18 Nebraska. And the week I was supposed to go to
19 work in California, it was 34 below zero at my
20 home in Lincoln, Nebraska; I didn't show up for
21 work.

22 So, you have to be prepared for the

1 areas.

2 MEMBER WALKER: Averaging is something
3 you maybe could do without. Could you --

4 DR. BOWEN: I would think it is easier
5 to keep up with on the accumulative total, so
6 that you can make the differences by age.
7 Because on young birds, normally, I would use
8 about, let's say, four pounds of methionine. If
9 you go into the peak layers, I would get up into
10 the 6.6. And if you get into old birds -- I'm
11 talking about 60 weeks of age -- I'm down to
12 about a pound and a half. So, if you have just
13 an average use for all ages, I disagree with that
14 because the biology does not agree with that.

15 MEMBER WALKER: You are saying four
16 pounds of synthetic methionine --

17 DR. BOWEN: Correct.

18 MEMBER WALKER: -- and six pounds
19 added?

20 DR. BOWEN: That is on commercial
21 birds --

22 MEMBER WALKER: Okay.

1 DR. BOWEN: -- that are in production
2 today.

3 MEMBER WALKER: Okay. Thank you, sir.

4 CHAIR RICHARDSON: Tracy, a question?

5 VICE CHAIR FAVRE: Just a point of
6 clarification. The averaging we are talking
7 about is essentially the cumulative that you are
8 talking about.

9 DR. BOWEN: I agree. I agree that
10 should be a cumulative.

11 VICE CHAIR FAVRE: Okay. Yes, we are
12 not talking about doing an average that is the
13 same across the board.

14 DR. BOWEN: Right.

15 VICE CHAIR FAVRE: We are saying that
16 the cumulative average can be no more than two
17 pounds.

18 DR. BOWEN: That is kind of what we
19 have done now with the two pounds. We have kind
20 of fixed it for the different ages. Because I
21 have a flock which I did not submit to you all,
22 but a flock record that shows on all ages, with

1 the exception of two different age groups, that
2 two pounds was the amount that went into all of
3 the diets, meeting the requirements. However,
4 the proteins sometimes were 2 percent over in
5 crude proteins.

6 CHAIR RICHARDSON: Thank you very
7 much.

8 DR. BOWEN: Thank you.

9 CHAIR RICHARDSON: The next speaker is
10 David Will, and after that, it is Patrick
11 Kerrigan.

12 MR. WILL: Good afternoon.

13 My name is David Will. I am the
14 General Manager of Chino Valley Ranchers. I sit
15 on the Methionine Task Force. I sit on the
16 Organic Egg Farmers of America, United Egg
17 Producers Organic Standards Board, and the State
18 of California Organic Board. And my comments
19 here are as my role with the Methionine Task
20 Force.

21 I would first like to thank all of you
22 for sitting through all of this. I got to sit in

1 the back, so I got to leave a little more than
2 you did. So, I appreciate all your effort.

3 My speech is 10 minutes short. So,
4 Calvin, I also just wanted to say a personal
5 thank you to you for the kind words you had for
6 my family in Louisville. I appreciate it when we
7 were going through something very rough.

8 Just to make it a little more
9 interesting, I put a slide up for you behind you.
10 I can't read it worth beans from here. Oh, even
11 better.

12 Just to give you some quick updates on
13 the Methionine Task Force, research that we have
14 done so far or works that we have worked with:

15 We did, with Dr. Ken Anderson, we did
16 a literature review of all of the methionine
17 research done throughout the world. That has
18 been submitted to you as written comment.

19 Organic Valley did a protein study on
20 potatoes, using that as a methionine replacement,
21 and it failed.

22 We did, through Organic Valley also

1 and a university, they did a high-protein corn
2 feed trial and had very little impact with that.

3 We also did a high-protein corn
4 growth, trying to get to grow the product. We,
5 basically, from that, found it is a very moist
6 seed. It didn't grow as well and it didn't yield
7 as well as organic corn.

8 UC Davis did a literature review on
9 the use of methionine as well.

10 The University of Arkansas did a
11 natural methionine trial. On that, they found
12 that the products that they were using did not --
13 it only got to a certain point in the lab, and
14 then, died out. They couldn't continue to
15 replicate it.

16 And going back to the UC Davis, that
17 was actually on heirloom breeds, that study, and
18 actually found that the heirloom breeds had a
19 very comparable, if not higher, methionine
20 requirement than the current bird that we are
21 using on the layer side.

22 And then, as to the study that Dr.

1 Bowen spoke of, we actually did a large-scale no
2 added methionine. It was commercial birds
3 because we weren't sure what the impact would be.
4 We did sisters of 30,000 bird each house, added
5 absolutely no synthetic methionine to their
6 ration from day one of age. And we had to pull
7 the plug on that experiment about 45 weeks in,
8 just due to the results.

9 Future products that the Methionine
10 Task Force is evaluating and going to fund:

11 We are working with the University of
12 California at Riverside on an entomology study.
13 It is to possible insects that we can look at.

14 We are looking at expanding the high-
15 protein corn growth trial. We are actually
16 talking to the people with that project as to
17 what we can do to help fund it or where we can go
18 with it, and what the market size would be on a
19 national picture.

20 And two things that we are also
21 looking at was we found that silkworms were
22 extremely high in methionine, but difficult to

1 get. We realized that they are a single-source
2 food. I know all of you from second grade know
3 this. They eat only mulberry leaves. We
4 actually did some look and found that mulberry
5 leaves actually contain methionine. The problem
6 is getting them into feed. And then, Brazil
7 nuts.

8 The last thing I wanted to talk on
9 real quick is the insect. We have worked with
10 FDA and talked about this. They are not crazy
11 because of the potential cross-contamination of
12 bringing the insects are growing on or the actual
13 insect material onto the farms. No one has done
14 a feed trial study on this to see how we would
15 introduce them as feed and what the flavor
16 profile would be, nor what amount we would need.

17 And in addition, the AAFCO is not a
18 big fan of using that because it is not on the
19 list of approved feed additives for poultry at
20 this time. So, we would have to get them
21 onboard.

22 I will tell you, we worked on getting

1 a simple weed put onto that list, and it took us
2 10 years to get that weed as a potential use for
3 a poultry feed. And that was just a seed.

4 (Signal that time has expired.)

5 Well, okay.

6 CHAIR RICHARDSON: Okay.

7 MR. WILL: I didn't get to the other
8 two slides.

9 CHAIR RICHARDSON: All right. Tracy?

10 VICE CHAIR FAVRE: So, by your
11 estimation, how long would it realistically take
12 to bring one of these alternative sources to
13 market?

14 MR. WILL: I don't think we even have
15 the short list yet of where that should be,
16 Tracy. I think just getting to a short list, we
17 have been working on this since 2006, and we had
18 a couple of things. I know we went back to the
19 old 2000 minutes from the National Organic
20 Standards Board of about 25 products that were
21 listed then as potential methionine replacements.
22 Those that we have looked at, again, the potato

1 and some of the other things, just haven't
2 factored out well.

3 Going through this, we still need time
4 just to come up with that short list. Once we
5 get to that, again, I think what Mr. Brunnquell
6 said is exactly right. Our look at a natural
7 replacement, it is long before we are ever going
8 to get to an organic replacement. But, as far as
9 the time, it is not short.

10 CHAIR RICHARDSON: Okay. Let's see,
11 I've got Paula, Ashley, Francis. Right? No?

12 MEMBER DANIELS: I'm interested in
13 seeing the other two slides. Do them really
14 fast.

15 MR. WILL: Just real quick, it was
16 what the current feed ratio is for, if you would
17 use an averaging. This is for birds, I believe
18 this is through 70 weeks of age. It actually
19 works out, the entire life of the bird, it is .1
20 pound or .1 average of methionine over the life
21 of the bird.

22 And if you go out, our company,

1 mostly, we molt our organic layers and go to 105
2 weeks. Using again that average, we come out to
3 .16 pounds. So, you are talking two ounces per
4 bird over the life of the flock, is how much
5 methionine we are looking at adding.

6 The averaging of this would be very
7 easy. Certifiers currently do this already with
8 dry matter intake for dairy. So, we don't think
9 this would add a lot to an organic inspection.

10 And these are a couple of rations for
11 you that show multiple ration changes that show
12 the caps and the fact that you can get -- this
13 was with the hard cap of the two-pound average.

14 The other thing is, I know in the
15 minority opinion they had discussed the fact
16 that, if you take the hard cap off, what we do to
17 the averaging. I think all of us in the industry
18 would be more than willing to accept that we
19 would never more than double, which took us back
20 to the original cap, at any one point in time
21 over the life of the bird.

22 So that, if we had to use four pounds

1 for four weeks, somewhere in there we would cap
2 that out and keep that average below two pounds
3 over the life of the bird. It is just you don't
4 feed a teenager like you do a senior citizen, and
5 that is where we are now.

6 CHAIR RICHARDSON: Ashley?

7 MEMBER SWAFFAR: Thanks, David.

8 I might need to ask Doc this. But,
9 for black soldier fly larvae, help me remember,
10 what was needed? How many pounds would need to
11 be added to the diet to make up for synthetic
12 methionine? Do you remember?

13 MR. WILL: No, I don't. You ask Doc.
14 I know it was a fair amount. It was a matter of,
15 then, balancing the ration.

16 Because, again, if you are talking on
17 a ton of feed, which we do, whenever you add
18 something to it, you have to take something out.
19 And then, you totally have to change the ration.
20 Because it is not only methionine we are
21 balancing to, it is calories; it is energy; it is
22 a multitude of items that you balance. Every

1 time you do something, you are just tipping the
2 scale or moving a problem.

3 CHAIR RICHARDSON: Calvin?

4 MEMBER WALKER: In my reading, as you
5 mention and other organic poultry producers have
6 mentioned, black soldier fly is not, you know, at
7 the stage where it can be marketed in a large
8 amount.

9 And, Ashley, what I read, it was for
10 every one pound of black soldier fly larvae,
11 because of the high methionine level, it would be
12 equivalent to four pounds of soybeans.

13 Oh, for Dave, what I do like, I am
14 glad that your wife is doing well.

15 MR. WILL: Yes, thank you.

16 MEMBER WALKER: And I said we fuss and
17 we fight as Organic Board members, but I think at
18 the end of the day --

19 MR. WILL: There are bigger stakes.

20 MEMBER WALKER: -- whatever happens,
21 it happens.

22 MR. WILL: Yes.

1 MEMBER WALKER: But I do like the
2 research that you are continuing to look at
3 dealing with the high-methionine corn because Dr.
4 Jacobs and --

5 MR. WILL: I would actually like to
6 correct you. It is a high-protein corn. It is
7 not a high-methionine corn.

8 MEMBER WALKER: Okay. But let me just
9 share with you on the work of Dr. Jacobs and Dr.
10 Goldstein. They both were authors of the same
11 paper.

12 MR. WILL: Uh-hum.

13 MEMBER WALKER: And the 2008 document,
14 they showed that the high-methionine corn was
15 comfortable as a replacement for synthetic
16 methionine. And my issue is that, as any
17 research, you still need a few more years to see
18 if that pans out because research can differ as
19 you do studies over a long period of time.

20 MR. WILL: Correct. And we have
21 actually talked to him as well and his investor
22 group. The Methionine Task Force has actually

1 spearheaded some money, along with a couple of
2 other members of our group, in order to help
3 facilitate and to expand that study. We are kind
4 of waiting for them to come back to us with what
5 they need.

6 CHAIR RICHARDSON: Thank you for your
7 comments.

8 MR. WILL: You're welcome.

9 CHAIR RICHARDSON: Good. It works.

10 (Laughter.)

11 It is the same look I give my
12 children.

13 (Laughter.)

14 The next speaker is Patrick Kerrigan,
15 followed by Les Fisher.

16 MR. KERRIGAN: Good afternoon,
17 everyone. Thank you for your time, for your
18 consideration of my comments, and for your
19 service.

20 I am here to comment on OCA's
21 opposition to increasing the levels of synthetic
22 methionine in organic poultry feed. Seventeen

1 thousand one hundred forty-eight individuals
2 signed our synthetic methionine petition, and
3 1,706 added their own comments.

4 Organic consumers expect the organic
5 poultry and egg products they purchase to come
6 from birds that spend their lives with the
7 unhindered access to the outdoors, exhibiting
8 natural behavior like sunbathing, dust bathing,
9 scratching and pecking, eating insects, worms,
10 and fresh forage.

11 After all, organic rules require
12 organic producers to provide, quote, "living
13 conditions which accommodate the health and
14 natural behavior of animals, including year-
15 around access for all animals to the outdoors,
16 shade, shelter, exercise areas, fresh air, clean
17 water for drinking, and direct sunlight," and
18 prohibit, quote, "continuous total confinement of
19 any animal indoors".

20 Organic consumers don't expect organic
21 poultry to be fed synthetic nutrients as a
22 substitute for the forage components of a natural

1 diet or as a means of stimulating increased
2 growth hormone production.

3 But the sad reality is that the vast
4 majority of organic turkeys and chicken meat and
5 eggs offered in retail stores comes from birds
6 that have been raised on an organic version of
7 the same corn- and soy-based diet the
8 conventionally-raised chickens are fed, confined
9 indoors in huge warehouses of tens or even
10 100,000 or more birds in one building, and under
11 conditions that are more factory than farm.

12 In spite of the ban on growth-
13 promoting hormones in organic poultry production,
14 organic producers are encouraged to maintain
15 their flocks indoors on a nutrient-poor diet
16 through the allowance of synthetic methionine.
17 The poultry industry has argued that natural
18 methionine is difficult to obtain in
19 sufficiently-high concentrations and it is
20 necessary to use synthetic methionine.

21 Well, synthetic methionine is also fed
22 to chickens to increase egg production in laying

1 hens, weight in broiler chickens through the
2 stimulation of IGF-1 growth hormone and
3 receptors. There are hormone-like effects of
4 methionine on layers. Quote: "The intake of
5 methionine controls the amount of egg output and
6 hens consume energy to meet the requirements for
7 this amount of egg output."

8 For broilers, quote, "Addition of
9 methionine improved animal performance by
10 stimulating synthesis and release of growth
11 factor."

12 It is clear that one advance large-
13 scale organic producers see in the use of
14 synthetic methionine versus the natural form is
15 the ease of controlling the rations. Quote:
16 "Larger poultry operations change the rations
17 frequently to keep down cost by only feeding to
18 meet the bird's needs."

19 The use of synthetic methionine is a
20 convenience of industrial production and not a
21 necessity. As the NOSB Technical Advisory Panel
22 Review pointed out, quote, "Humans have raised

1 poultry for centuries within synthetic amino
2 acids." Synthetic amino acids have become part
3 of the standard poultry diet only over the past
4 50 years or so, as production has removed from
5 extensive pasture-based nutrition to high-density
6 confinement systems.

7 The European example has also proved
8 that poultry can be raised with synthetic
9 methionine. It just takes a greater amount of
10 outdoor access and a switch to poultry breeds
11 that grow more slowly. Sadly, American organic
12 poultry management has much more in common with
13 its conventional U.S. counterpart than the
14 practices of European organic farmers.

15 The OCA, backed up by 17,000 people
16 who signed this petition, urge you to reject the
17 petition to increase synthetic methionine levels.
18 When synthetic methionine is reviewed at the next
19 sunset, it should be removed from the National
20 List.

21 Synthetic methionine is simply not
22 congruent with the principles of organic farming

1 or the expectations of organic consumers. Most
2 importantly, the National Organic Program needs
3 to get serious about enforcing the organic rules
4 that require organic producers to provide, quote,
5 "liveable conditions" --

6 (Signal that time has expired.)

7 Thank you.

8 CHAIR RICHARDSON: Thank you.

9 Okay. Tracy, I think you had a
10 question.

11 VICE CHAIR FAVRE: So, you made a
12 statement early on in your statement that animals
13 are encouraged to behave naturally in sunbathing
14 and eating natural diets. So, did you poll your
15 members or the respondents to your request and
16 ask them how they would feel about poultry
17 receiving meat byproducts? Because, really, we
18 have created the circumstance by which we need to
19 supplement methionine because we have started
20 feeding them a vegetarian diet. So, did you
21 explore that with them or did you maybe try to
22 explain the tradeoffs and consequences of where

1 we are with the methionine?

2 MR. KERRIGAN: That's a really good
3 question, Tracy. We didn't poll our members. We
4 had this conversation internally.

5 You know, chickens are omnivorous, and
6 the expectation of a vegetarian-only feed, I
7 personally would prefer byproducts as long as
8 they meet organic standards. But we haven't
9 really polled our members on that.

10 CHAIR RICHARDSON: Thank you.

11 Calvin?

12 MEMBER WALKER: As an animal
13 scientist, I struggle with the nexus of
14 methionine being a growth promoter alone.
15 Methionine does a lot of things in a poultry
16 diet, you know, growth, maintenance, production,
17 all those things. If it is a hormone as it
18 relates to it, it is just incidental.

19 But, be that as it may, how can we
20 find a consensus? This has been going on since
21 1999, and it seems like we need to cap it. You
22 know, we don't want to take anything away from

1 the organic poultry producers. Previous Boards
2 have sent a strong signal of what they wanted,
3 and consumers have an expectation.

4 So, any thought on how we can bridge
5 that gap to bring back some type of a consensus?

6 MR. KERRIGAN: Well, I mean, one of
7 the original ideas of sunseting is to encourage
8 the industry, be it poultry or whatever kind, to
9 identify alternatives and with a cutoff date.
10 That is one of the things I think that is really
11 needed, is an expiration date for the use of
12 synthetic methionine.

13 You're right, Calvin, we have been
14 addressing this issue for what? Fifteen years or
15 so. And I really think it really significantly
16 decreases the trust that consumers have in
17 organic livestock, in the organic seal in
18 general, when it is initially stated that it is
19 illegal or that it doesn't meet allowable
20 standards. That is what the NOSB originally
21 said.

22 They granted the extension when it was

1 found that it was in virtually all of the feed,
2 and then, that keeps on getting pushed down the
3 road with allowable limits increasing,
4 decreasing, increasing. I think, really,
5 consumers that are following this issue I think
6 really question the integrity of organic
7 livestock practices, given the way synthetic
8 methionine has been handled.

9 I think what we need to do is, just as
10 the NOSB Livestock Committee said in February, we
11 really need to look at alternatives and to really
12 prioritize identifying these and to phase out
13 synthetic methionine. I think the best way to do
14 that is to set a limit, a time limit, on its use.
15 Otherwise, I think we might be another 15 years
16 down the road and still having this same
17 conversation.

18 CHAIR RICHARDSON: Tracy, you had a
19 question?

20 MR. KERRIGAN: Did I answer your
21 question, Calvin? Did I miss anything?

22 CHAIR RICHARDSON: Tracy?

1 VICE CHAIR FAVRE: So, one of the
2 things we have struggled with in the Livestock
3 Subcommittee is how do we arbitrarily impose a
4 deadline on a material when there is not any
5 currently viable alternatives, nor does there
6 seem to be anything immediately on the horizon.

7 So, I would agree with you that we
8 want to move away from synthetic methionine.

9 MR. KERRIGAN: Uh-hum.

10 VICE CHAIR FAVRE: But you heard from
11 some of the previous speakers that we are years
12 away from identifying even a short list really.
13 So, do you not believe that they are incentivized
14 enough? Because it seems to me the question is,
15 do you think that we can force them to move
16 faster when it looks as though the research
17 proceeds at a certain pace and there are certain
18 requirements.

19 MR. KERRIGAN: Uh-hum.

20 VICE CHAIR FAVRE: So, what are your
21 thoughts about that?

22 MR. KERRIGAN: Yes, good questions.

1 If we look at the European model, synthetic amino
2 acids, synthetic methionine, and growth hormone
3 are not allowed in their production. They have
4 organic chicken and organic broiler production.
5 They are using breeds that might have lower
6 methionine requirements. They are not harvesting
7 them until significantly longer than is done in
8 the U.S. And they have been able to figure it
9 out.

10 I mean, my coworker raises organic
11 chickens. He uses sunflower meal. I have also
12 read that fish meal, oats, and whole wheat meal
13 are significant sources of synthetic methionine.

14 And so, you know, synthetic methionine
15 is the issue we are talking about, but it really
16 reverts -- it needs to be seen in the context of
17 outdoor access. That is the most important issue
18 that we are talking about.

19 I think two feet is really
20 insufficient. We look at, again, the European
21 model. We have way fewer birds per building. We
22 have way more square footage per bird. And then,

1 we have got -- I can't remember what my last
2 point was going to be.

3 But, anyway, they have been able to
4 figure out how to do organic chickens without the
5 need for a synthetic methionine. I think they
6 are a really good model for U.S. organic chicken
7 producers to look at.

8 CHAIR RICHARDSON: Thank you very much
9 for comments.

10 MR. KERRIGAN: Yes, thank you.

11 CHAIR RICHARDSON: I think that we
12 ought to move to the next speaker who is Les
13 Fisher. And following Les will be Mike
14 Leventini.

15 And we are running about 45 minutes
16 behind where we would like to have been by this
17 time, just as a gentle reminder.

18 MR. FISHER: Good afternoon.

19 My name is Les Fisher, and I represent
20 Bell & Evans in Fredericksburg, Pennsylvania.

21 Today I am commenting on the Livestock
22 Subcommittee's proposal to revise the current

1 amount of synthetic methionine per ton of feed
2 and for that amount to be averaged over the life
3 of the bird.

4 Bell & Evans supports this proposal.
5 Although we are concerned these changes will not
6 totally reverse the negative impact past
7 reductions have placed on the birds, it is a step
8 in the right direction, at least until a time
9 when reasonably-economical, viable, and
10 sufficient supplies of natural alternatives are
11 found.

12 In regard to animal welfare and animal
13 well-being, nutritionally, we are negatively
14 impacting the lives of birds. Feeds are not
15 balanced for amino acid, and this leads to
16 malnutrition, excessive nitrogen output, which
17 can also have a negative environmental effect,
18 increased feather pecking, cannibalism, decreased
19 immune function, and increased disease
20 challenges.

21 Organic diets are almost always higher
22 in crude protein than conventional diets due to

1 this imbalance. This ranges from approximately
2 one to three percentage points more. For every
3 1-percent increase in crude protein of the diet,
4 nitrogen output is increased some 8 to 10
5 percent, meaning that nitrogen output could be
6 increased by as much as 30 percent.

7 As a result, excessive ammonia and
8 litter moisture create opportunities with footpad
9 burns, breast blisters, and respiratory disease,
10 especially in colder months when ventilation is
11 most challenging.

12 Excess crude protein has negative
13 consequences on the GI tract of the bird. This,
14 along with moist litter conditions, creates
15 problems with coccidiosis and necrotic enteritis,
16 resulting in significant mortality.

17 The concern of how to calculate and
18 verify the use of synthetic methionine expressed
19 over the life of the bird is a valid one, but
20 records should already be available in any
21 operation to make this calculation reasonably
22 uncomplicated. These records would include feed

1 formulations for all phases of feeds fed, amounts
2 of each phase of feed fed, number of birds
3 placed, and number of birds processed. Averaged
4 finished live bird weights and feed conversion
5 ratios would allow a producer to calculate a
6 reasonable starting point for synthetic
7 methionine inclusion in each feed type, while
8 taking into account how much of each feed type
9 would be fed.

10 There is a possibility that on
11 occasion the flock would exceed the recommended
12 average and adjustments to formulation or feeding
13 amounts would need to be made, along with
14 documentation of the occurrence. A review of a
15 farm's history of these records would reveal if
16 this was an isolated incident or ongoing
17 negligence.

18 I want to thank the members of the
19 Board for their service and for the opportunity
20 to speak today.

21 CHAIR RICHARDSON: Thank you.

22 MR. FISHER: Thank you.

1 CHAIR RICHARDSON: Nick?

2 MEMBER MARAVELL: What is your crude
3 protein levels on your peak layers and mature
4 layers?

5 MR. FISHER: Well, I'm in the broiler
6 business.

7 MEMBER MARAVELL: For organic.
8 Organic.

9 MR. FISHER: I'm in the broiler
10 business.

11 MEMBER MARAVELL: Excuse me? You're
12 in the broiler business?

13 MR. FISHER: I'm broiler chickens.

14 MEMBER MARAVELL: Okay. What are
15 your --

16 MR. FISHER: So, a starter --

17 MEMBER MARAVELL: Okay. Give me
18 your --

19 MR. FISHER: A starter ration may
20 start out at 23 to 24 percent. Conventional
21 birds -- when I say "conventional," we raise
22 antibiotic-free birds -- may be only 1 to 2

1 percent difference there. But, as we go through
2 our four different stages of feed, there is more
3 of a difference.

4 MEMBER MARAVELL: Where do you end up
5 at your final stage? Then, if you are starting
6 out at, you said, 21 to 23? What did you say you
7 were starting at as your starter?

8 MR. FISHER: With the organic?

9 MEMBER MARAVELL: With the organic.

10 MR. FISHER: Organic, we could end up
11 around 18.

12 MEMBER MARAVELL: For your broiler?

13 MR. FISHER: Right.

14 MEMBER MARAVELL: Uh-hum. And you
15 figure that is about how much more than for
16 conventional at that point?

17 MR. FISHER: As far as the protein?

18 MEMBER MARAVELL: Yes.

19 MR. FISHER: We are generally around
20 2 percent.

21 CHAIR RICHARDSON: Tracy, you had a
22 question?

1 VICE CHAIR FAVRE: Yes, I was just
2 curious as to whether you could speak to the sort
3 of additional step-down that broilers got in
4 regards to they were lumped in with the layers in
5 the original recommendation, then, to two pounds.
6 If you could speak to any issues that created for
7 you?

8 MR. FISHER: As I said, we do
9 conventional antibiotic-free. Before I came
10 here, I reviewed our 2014 numbers, and I know
11 that our livability is about 2 percent less on
12 the organic. We have more challenges with the
13 coccidiosis and the necrotic enteritis on
14 occasion.

15 We can have much more varying bird
16 weight. It could be anywhere from a quarter of a
17 pound to a pound for the same aged bird.

18 In our process we do almost the same
19 things with our organic birds as we do with our
20 ABF birds. So, it is a pretty good comparison.

21 VICE CHAIR FAVRE: So, you believe the
22 difference you can attribute to the step-down in

1 methionine?

2 MR. FISHER: Yes.

3 CHAIR RICHARDSON: Nick?

4 MEMBER MARAVELL: At what age do you
5 harvest broilers conventional and organic?

6 MR. FISHER: The organic, 41 or 42
7 days, and the ABF birds, anywhere from 41 to 44.

8 CHAIR RICHARDSON: Very good. Thank
9 you very much for your comments.

10 MR. FISHER: Thank you.

11 CHAIR RICHARDSON: The next speaker is
12 Mike Leventini, followed by Randy Mitchell.

13 MR. LEVENTINI: Okay, I've got a bit
14 of a presentation here. Keep me on track.

15 I am Mike Leventini, and I represent
16 Coleman Natural Foods, so three different organic
17 operations, California, Washington, and
18 Pennsylvania.

19 Again, I am here to support the
20 current methionine proposal. We will be talking
21 about the broiler side. We have a broiler
22 business.

1 So, you have said before, methionine
2 is an essential amino acid. It is the first
3 amino acid in a plant-based diet. For us to
4 support, we want to change the average versus the
5 cap because, as we have said before, it is really
6 going to help us match what the birds need when
7 they need it. So, when we do that, we are going
8 to see less stress on the birds, improved barn
9 conditions, better feathering, and decreases in
10 mortality and morbidity. This change will impact
11 in a positive way animal welfare.

12 So, since we have done the change from
13 five pounds down to two pounds, broilers got hit
14 with a 60-percent reduction on the last change.
15 In retrospect, as a part of the Methionine Task
16 Force, we probably did a very poor job
17 articulating what that would mean to a broiler.
18 We didn't really have the data.

19 Now that we have seen what has
20 happened, as the gentleman before me has spoken
21 of a 2-percent variance, our data shows that we
22 have about a percent difference, but an 18-

1 percent mortality since we have made that change.

2 That is a couple of hundred chickens a barn,

3 every barn, every block.

4 So, if we do get the change coming
5 through, we go to an average and back to 2.5
6 percent, we are going to see a lot of this stress
7 alleviated, because now we can match the amount
8 of protein as the bird needs it. We won't have
9 to overfeed protein all the time. We will get
10 the reduction in the diet. We will see less
11 gastrointestinal stress, less ammonia in the
12 barns, less footpads. It will be a much better
13 fit.

14 I have a sample diet here. Currently,
15 I am a two-pound cap. We are feeding almost 26
16 percent in the starter with an average of the
17 flock at about 21 percent. If we go to 2.5-pound
18 average, our starter will come down below 24
19 percent and we will be at 20 percent total
20 average protein for the diet. This will get us
21 back to where we were before the last step-down,
22 and our mortality and morbidity levels should go

1 back to the same spot they were.

2 So, kind of final thoughts here. I
3 think David Will brought up that we would also
4 support a 2X max or double max. There is no
5 reason to feed any methionine beyond what the
6 bird needs. There is no advantage to feeding
7 extra methionine than that bird needs.

8 As a member of the Methionine Task
9 Force, we will continue to search and test
10 alternative sources. Trust me, we want to find
11 an alternative methionine just as much as
12 everybody else in the room. We have been doing
13 this for many years. We are committed to finding
14 a long-term solution.

15 And as I said, the biggest impact of
16 this proposal will be on the welfare of our
17 birds, and they very much support this change.

18 Thank you.

19 CHAIR RICHARDSON: Thank you.

20 Questions? Paula?

21 MEMBER DANIELS: Could you tell me
22 about the speed or comment on the speed with

1 which you are looking for alternatives? Because
2 there is that question out there as to whether
3 you are moving fast enough.

4 MR. LEVENTINI: Sure.

5 MEMBER DANIELS: You know, is there
6 cooperative funding of research and development
7 or what? I mean, now I know there are only a few
8 companies that serve black soldier fly larvae
9 alternatives or otherwise. But what sort of
10 support and deadlines are you putting on trying
11 to get more alternatives developed?

12 MR. LEVENTINI: What we have done so
13 far is, when we first started as a Methionine
14 Task Force back in 2006, we identified over 100-
15 plus materials. There's lots of research and
16 data out there that shows what you can feed
17 chickens, and then, what the percentage of
18 methionine is. And we have tested some of those
19 things.

20 But, you know, we have done trials, as
21 David Will showed. We have done all sorts of
22 things. But there are only so many things that

1 you can feed chickens that have methionine in
2 them.

3 It was brought up that they are not
4 using it in Europe. But, again, 5 percent of
5 that ration, 100 pounds per ton, can be non-
6 organic. Canada has no restrictions on
7 methionine, and Europe allows you to feed non-
8 organic materials.

9 So, to answer your question, we are
10 continuing to look, but there is just not
11 anything out there that we are grabbing a hold of
12 yet. We think that a natural source of
13 methionine is the way to go, but that is a ways
14 out.

15 MEMBER DANIELS: So, the question was,
16 is there any funding cooperative to help fund
17 research and development, and are there any
18 deadlines that you are putting on this?

19 MR. LEVENTINI: As the Methionine Task
20 Force, we have pulled together \$150,000. We have
21 run through about \$100,000 of that. But we
22 currently don't have any deadlines in front of

1 us, to answer your question.

2 MEMBER DANIELS: Okay. Thank you.

3 CHAIR RICHARDSON: Other questions?
4 Calvin?

5 MEMBER WALKER: I have a three-part
6 question.

7 MR. LEVENTINI: Of course.

8 MEMBER WALKER: Black soldier fly meal
9 is on the market. I'm curious if you would know,
10 because I certainly don't know, but that doesn't
11 mean anything that I don't know, is that, how are
12 they allowed to sell insect meal on the market?

13 And then, No. 2, you mentioned that
14 you all would try not to go beyond two times the
15 synthetic methionine inclusion. So, that means
16 you all would not go back to four pounds of
17 synthetic methionine per ton for layers, not more
18 than five pounds per ton of synthetic methionine
19 for layers, and six pounds -- for broilers -- and
20 six pounds per ton for poultry?

21 So, you are saying that you all would
22 not exceed that level? And even if you exceed

1 that level, wouldn't that take us back to 1999,
2 even using averaging?

3 MR. LEVENTINI: Is there a third part?

4 MEMBER WALKER: I forgot.

5 (Laughter.)

6 MR. LEVENTINI: Okay. First of all,
7 black soldier fly, I don't know how they are
8 selling it. But I think we determined there is
9 about 1 percent methionine in that feed. In
10 order to replace two pounds of synthetic
11 methionine, you need 200 pounds in the ration of
12 black soldier fly larvae. That's a lot of flies.

13 MEMBER WALKER: What I have, I think
14 it is more than that, isn't it?

15 MR. LEVENTINI: I have a nutritionist
16 behind me. He can answer that one. But I think
17 we just looked it up, and I think it is pretty
18 small.

19 The second question was? Oh, the max.
20 So, our nutritionist back behind us, we had a
21 three-stage feed. So, if this were to pass, we
22 would feed about 3.5 percent in the starter, 2.5

1 in a grower, and probably close to 2-2.25 at the
2 end.

3 Like I said, there is no need to feed
4 more methionine. This whole growth promotion
5 thing is really off base. Give the chickens what
6 they need in a balanced ration, and there is no
7 point to feed beyond that.

8 MEMBER WALKER: Well, you said two
9 times the level. So, what level are you
10 referring to? Two times what?

11 MR. LEVENTINI: Two and a half. So,
12 if the --

13 MEMBER WALKER: Five pounds? So, that
14 means that --

15 MR. LEVENTINI: We wouldn't go beyond
16 five pounds for a starter.

17 MEMBER WALKER: That is for your
18 operation, but that could be go beyond. So, it
19 can kind of get out of hand.

20 MR. LEVENTINI: You could, I guess.
21 That is why we said, all right, just go ahead and
22 do two. But there is no need to feed beyond what

1 the chicken needs. There is no magical
2 -- methionine isn't this magical thing that makes
3 chickens grow. It is just an amino acid. And
4 when you balance it and give the chicken what it
5 needs, there is no point to feed any more.

6 CHAIR RICHARDSON: Okay, Ashley?

7 MEMBER SWAFFAR: All right, Jean.

8 So, one thing that I picked up on your
9 comments and in your written comments, that you
10 are losing more birds every flock through
11 mortality since this step-down.

12 MR. LEVENTINI: Uh-hum.

13 MEMBER SWAFFAR: Can you tell us a
14 little bit about that?

15 MR. LEVENTINI: Sure.

16 MEMBER SWAFFAR: I'm really
17 interested.

18 MR. LEVENTINI: Sure. So, typically,
19 we lose the chickens upfront. We were losing 4.5
20 percent before in the flock. Probably 2 of that
21 4.5 percent, 2.25, almost half, are in the first
22 21 days. That chicken, the bird is young. It is

1 starting off on feed.

2 But one thing you encounter in raising
3 broiler chickens is a thing called coccidiosis.
4 So, we vaccinate these birds. And just like id
5 you give one of your kids a shot, they are going
6 to feel sick that day. Chickens go through the
7 same kind of reaction. They are building
8 immunity. They are getting a little sick. Their
9 body fights it off.

10 But, during that same timeframe, 7
11 days, 14 days, 21 days, we are feeding this
12 super-high-protein feed to give that bird enough
13 methionine. And that stress caused by the super-
14 high-protein feed, we heard from multiple people
15 about the fleshing of the birds and the stress
16 due to that. It is too much, and that is a
17 tipping point which causes more mortality.

18 You also get a little more morbidity.
19 Those birds that don't die are pulled back or
20 hurt in some way, and they have a higher tendency
21 to be a mortality in the future. That is the
22 key, is in that 14 to 21 days we are seeing it.

1 CHAIR RICHARDSON: Thank you very
2 much.

3 MR. LEVENTINI: Thank you.

4 CHAIR RICHARDSON: And our next
5 speaker will be Randy Mitchell.

6 Just before Randy talks, I would like
7 to ask Deputy Administrator McEvoy if he would
8 clarify for us the EU standard for the use of
9 methionine or not.

10 MR. McEVOY: Yes. The EU organic
11 poultry or organic livestock standards are quite
12 different than the U.S. standards. Part of it is
13 the principles that they set up their organic
14 livestock standards focus on animal welfare first
15 and the materials second; whereas, in the U.S. we
16 kind of tend to look at materials first, and
17 then, animal welfare second.

18 So, in terms of comparing the EU and
19 the U.S. organic livestock or poultry standards,
20 you have to look at the whole component of
21 requirements. For instance, there are some basic
22 requirements under the EU that the birds should

1 be organic or they should actually be born on an
2 organic or hatched on an organic operation.

3 But they have these things called
4 derogations. They have a couple of derogations
5 that are still in effect that are granted by the
6 various member states that control the organic
7 control system in each country.

8 So, methionine is not allowed, but
9 they do have derogations to allow birds to be up
10 to 18 weeks old before they are required to
11 follow organic practices, and they also have an
12 allowance for 5-percent non-organic feed as well.

13 So, though they do not allow synthetic
14 methionine to be used, they have other provisions
15 that do mitigate that. That is why you have to
16 kind of look at all the different elements of
17 their requirements in terms of comparing the EU
18 and the U.S. organic poultry standards.

19 CHAIR RICHARDSON: Thank you.

20 The next speaker is Randy Mitchell, to
21 be followed by Mohamed Mousa.

22 MR. MITCHELL: Good afternoon.

1 Thanks for your service on this Board.

2 My name is Randy Mitchell. I am with
3 Coleman Natural Foods and going to speak today on
4 the methionine proposal in front of the Livestock
5 Subcommittee.

6 My role at Coleman Natural Foods is I
7 am a nutritionist. I have 20 years of experience
8 feeding poultry of several different species, and
9 my concentration with Coleman is all of the
10 organic broilers that we raise in three states.

11 Again, I want to address the proposal
12 on synthetic methionine, specifically to allow
13 the lifetime average of synthetic methionine,
14 which will help us address the needs in the early
15 phases and, also, adjusting the broiler allowance
16 from two pounds to 2.5 pounds, which again
17 addresses the more severe reduction that broilers
18 had back in 2012.

19 One thing I want to do is really
20 address some of the concerns of the minority
21 opinion from the Subcommittee report from back in
22 February. I can't do all of them, just because

1 of the time limitations, but I do want to address
2 two specifically.

3 One was that there was no
4 justification for changing the broiler methionine
5 without addressing layers or turkeys. And
6 concern No. 2, that some producers might use the
7 lifetime average to use a very high amount of
8 methionine in certain phases of growth.

9 Now, as far as the scientific
10 justification for the allowance in broilers, here
11 you can see the NRC recommendations from 1994 for
12 poultry for methionine, the total dietary
13 methionine requirement.

14 For example, for turkeys, it is .55
15 percent and for broilers it is .5 percent. And
16 their allowance of methionine under the current
17 rules are 3 versus 2 percent, so a 10-percent
18 higher methionine requirement for turkeys, but
19 yet, their allowance, synthetic methionine
20 allowance, is 50-percent higher.

21 Also, you will see that for white
22 layers, in particular, in production their actual

1 requirement is 20 percent or over 20 percent
2 lower, but, yet, they have the same allowance.

3 So, if we look at the amount of total
4 methionine required on a pounds-per-ton basis,
5 just so we can kind of put it in perspective with
6 how many pounds of synthetic methionine we would
7 use, we could see that under the current proposal
8 only 20 percent of the total methionine is
9 allowed to come from synthetic for broilers;
10 whereas, turkeys and layers are up 27, 26, and 33
11 percent, depending on stage of production. Under
12 the proposed regulation, broilers will close to,
13 but not exceed or even quite meet, that
14 percentage under the 2.5-pound proposal.

15 Now, as far as the lifetime average,
16 one thing I want to reiterate here is methionine
17 is an amino acid used to build protein. It is
18 not a growth stimulant. It would be
19 irresponsible and counterproductive to feed
20 excess synthetic methionine at any one stage.
21 Feeding excessive methionine exclusively does not
22 improve production parameters. There is no

1 benefit to overfeed methionine for production.

2 That would be completely counterproductive.

3 To remove this concern, we would be in
4 favor of the 2X max inclusion on synthetic
5 methionine at any stage. I can see no
6 circumstance where that would be a -- okay.

7 As far as a practical implementation
8 of this program, this is a proposal which is
9 something I would follow extremely close to that
10 where we would have maybe 3.5 pounds in the
11 starter feed, 2.5 in the grower, and maybe 2.25
12 in the finisher feed.

13 (Signal that time has expired.)

14 That would actually end up lower than
15 the 2.5 pounds.

16 I just want to also point out that
17 this does not create a high-density feed, as many
18 people have proposed.

19 CHAIR RICHARDSON: Thank you.

20 Tracy?

21 VICE CHAIR FAVRE: So, based on that
22 example you gave us where you came at 2.48 pounds

1 on the average, is it your belief that if we
2 allow you to adjust it when it is needed, that
3 the overall total usage of methionine over the
4 life of the bird will decrease?

5 MR. MITCHELL: It would less than the
6 maximum allowance. We would set up our system so
7 you would never exceed that with a 99.9-percent
8 probability. Something would really have to
9 happen badly with a flock for that to happen.

10 VICE CHAIR FAVRE: And just as a
11 followup to that, if I may, we have seen comments
12 to the fact that it is used, methionine is
13 potentially as growth stimulating, similar to
14 rBST, and I know you said that it is not. But
15 can you speak to -- I am assuming you have seen
16 the comments in regards to how it activates
17 certain hormones in the body. Can you speak to
18 that a little bit more as a nutritionist?

19 MR. MITCHELL: Yes, I can. I'm really
20 glad you asked that question because I think
21 there is really a lot of misinformation and
22 misunderstanding about that.

1 The growth factor IGF-1 has been
2 mentioned several times. It is a growth factor
3 that is used to build, it signals genes to turn
4 on to build muscle and build bones and build
5 tissue.

6 If you don't have a component of those
7 products -- the body has natural feedback
8 mechanisms -- if you don't have methionine or
9 other amino acids, lysine, threonine, any
10 essential amino acid, and the research has been
11 done on those. Everybody talks about just
12 methionine. If you are deficient in lysine, if
13 you are deficient in any essential amino acid,
14 IGF-1 goes down because you cannot build tissue
15 if you are in a deficient state, and you don't
16 want the mechanism to build because you don't
17 have anything to build with.

18 When you are in a deficient state and
19 you, then, replace that deficient state with
20 enough nutrients to grow, then you need the
21 signals to the cells to turn on the mechanisms to
22 produce protein. But that is just going from a

1 deficient state, where there is not enough, to a
2 sufficient state.

3 If you take a malnourished animal and
4 check its levels of growth hormones or any other
5 numerous things, you will find out that they are
6 way out of whack. You nourish the animals, and
7 those will become normal again.

8 CHAIR RICHARDSON: Calvin?

9 MEMBER WALKER: Okay. Thank you very
10 much.

11 Could you share with us -- it has been
12 a couple of years -- what is the update on
13 alternatives as it relates to the Methionine Task
14 Force? Are you a part of that group?

15 MR. MITCHELL: I sit more as an
16 advisory on that Board for that.

17 MEMBER WALKER: Could you give us an
18 update?

19 MR. MITCHELL: Sure. You know, we
20 have looked at, you know, we have talked a lot
21 today about the black soldier fly deal. I became
22 very interested in that, and I have done some

1 research on that. There's a lot of problems with
2 that.

3 It is a good source of methionine. It
4 is about probably 40 percent higher than soybean
5 meal is. However, it is deficient in other amino
6 acids that would limit its use. You could not
7 get very high with that product because it is
8 deficient in other amino acids. It is not a
9 solution at all.

10 It may be a partial solution, which I
11 think that is what we are going to end up with.
12 Eventually, there may not be one solution total.
13 The high-protein corn is also a thing that could
14 help. It would not be a total replacement
15 because it just doesn't have enough methionine in
16 there.

17 The silkworms had spoken about
18 earlier, that would be a great thing, I think.
19 That would be something; it is very balanced and
20 the mulberry leaves, but where do you get
21 silkworms to feed all these chickens?

22 (Laughter.)

1 I mean, the Brazil nut meals, that is
2 a great product. If everybody wants to donate
3 their Brazil nuts to feed chickens, I would love
4 it. I mean, it would be great.

5 (Laughter.)

6 But, you know, you just can't find it.
7 It is not available.

8 CHAIR RICHARDSON: So, on that note,
9 could we move maybe to the next speaker? And I
10 will say thank you very much.

11 We are running about an hour behind,
12 just so you are aware.

13 Mohamed Mousa, followed by Trace
14 Tipton.

15 MR. MOUSA: Well, good afternoon,
16 everybody.

17 Thank you very much for all the
18 members and, also, the team and the leadership of
19 NOP for serving our organic industry.

20 What I am going to do here, I am
21 really going to leave a lot of things, and I am
22 going to put in your mind to think, and the

1 audience here, too.

2 This animal rights should have nothing
3 to do with our emotion, our people, or the
4 consumer. This animal has rights. That is why
5 the Europeans has animal rights first. Can we do
6 that? Can we look to the birds over here and say
7 we are going to take here from here the tools to
8 grow, that this animal over here can have the
9 rights which they deserve?

10 I am not here to represent a company.
11 I am representing those animals here.

12 Okay, what is methionine? Look at it.
13 It is hydrogen, oxygen, carbon, and so forth. It
14 is not raw material that is in there. What does
15 this do to the egg? What does that bird produce?

16 The bird would not have created it.
17 It is being created by other authority. The bird
18 takes that methionine, break it to its component,
19 and builds from it protein, which that protein is
20 very essential to that animal to grow. The bird
21 growth is not hormone embedded. The growth of
22 this animal is natural, like what we are here

1 grown from a baby to who we are today.

2 Methionine has sulfur in it. It is
3 containing proteinogenic amino acid. It is
4 encoded by a single codon which is the AUG. What
5 does this do? This is translation from the
6 message from the RNA, ribonucleic acid.

7 It is very essential. Without
8 methionine, this bird will not grow. Without
9 methionine, we will be harming this animal, and
10 we don't want to do that.

11 A lot of speakers before me spoke to
12 a lot of things. I am just going to concentrate
13 over here. What will happen to this animal if it
14 does not have its immune system developed, its
15 hormones to mobilize or to function its own life
16 on a daily basis?

17 We are talking about the birds going
18 over outside and practice their natural behavior.
19 Well, we are taking away their tools. We are
20 putting those birds to be in morbidity stage.

21 Methionine is a methyl donor. It
22 means it goes to be building blocks for a lot of

1 other things, changing cells from the body,
2 building feathers.

3 We wear clothes; the bird has
4 feathers. Without methionine, you are not going
5 to have a very nice feather, okay? And I will
6 show you a picture here. Maybe it will make me
7 sick. I don't know how everybody else feels.

8 But I worry about those animals. I
9 have been doing this for 40 years. This is my
10 hobby also, not only my profession.

11 The glands which secrete different
12 type of hormones, the pituitary gland, the
13 hypothalamus, the thalamus, the kidneys, the
14 thalamus gland need that building block from
15 methionine to retain its own function. Okay.

16 Look at this here. It is a very
17 famous picture everybody knows. If you take
18 methionine out, all amino acid function is going
19 to go down. You are not only taking methionine
20 down as an amino acid; you are taking, also,
21 every other building blocks of protein, and this
22 is a waste not only of the bird's life, but also

1 money for the producers.

2 Why do we need to add methionine? Why
3 do we want to add it? It is less than 0.1
4 percent. The Europeans allow 5 percent synthetic
5 material. You know why? They look for animal
6 welfare. Should we? I believe we should.

7 (Signal that time has expired.)

8 Okay, thank you. I am sorry for that.

9 I would like you to look to that bird,
10 and I am not going to say too much. There is not
11 a single feather in here. They ate the feathers
12 off. It is right here.

13 CHAIR RICHARDSON: Sir, do you want
14 questions now? Is that right?

15 MR. MOUSA: Yes, if my time is up.

16 CHAIR RICHARDSON: Is that right,
17 Michelle? Yes.

18 Thank you.

19 Questions for Mohamed? Tracy?

20 VICE CHAIR FAVRE: Can you go back to
21 the picture of the chicken, please?

22 So, the chicken in that flock, in that

1 flock that is represented there, can you tell me
2 what stage of life they are in and tell me about
3 the outdoor access for those birds right there?

4 MR. MOUSA: This picture, I got it
5 from a friend. These birds go outside. He has
6 5,000 birds. He worked with a company; I cannot
7 mention the name; I am not authorized.

8 But I wanted to show -- this is a
9 neutral picture. The birds go outside, yes.
10 They did not gain, like the other speakers before
11 me said. There is not a significant gain from
12 the outside access. What's out there? Let's
13 discuss that. Where is the source of methionine
14 or amino acid out there? Birds are not a grazing
15 animal.

16 We are human. We put those birds in
17 this condition. We need to take care of them.

18 I want also to add to this. One
19 speaker talks about genetic and selecting
20 genetics. I want to tell you that the entire
21 genetic pool in the world is owned by Europeans,
22 including Hy-Line, which is here in the United

1 States. It is owned by Lohman Breeding, a German
2 company. There is not any owned breeding company
3 in the United States money. It is all owned by
4 Europeans.

5 So, they don't have special breeds.
6 This is the genetic pool we have. We cannot
7 manufacture new ones at this time.

8 CHAIR RICHARDSON: Harold?

9 (No response.)

10 That was strange, wasn't it?

11 (Laughter.)

12 Okay. Dr. Walker?

13 MEMBER CHAPMAN: We want to get him
14 off the operating table.

15 MEMBER WALKER: Yes.

16 I would like to also say I appreciate,
17 since being on the Board, Mohamed, you have
18 always provided me information, and it has been
19 very beneficial.

20 MR. MOUSA: Thank you.

21 MEMBER WALKER: And I still appreciate
22 that.

1 MR. MOUSA: Thank you.

2 MEMBER WALKER: And that's why I work
3 so hard to try to find a consensus, to try to
4 help organic producers, stakeholders, and respect
5 previous Board intent.

6 The bird, was that indicative of the
7 whole herd?

8 MR. MOUSA: Yes.

9 MEMBER WALKER: And if so, was that an
10 organic herd? And if so, what did they do to
11 remedy that situation?

12 MR. MOUSA: These people, they did a
13 lot of things, but it did not include any source
14 of methionine. They lost the feathers, the neck
15 feather which is the birds peck first. And some
16 from the birds, and if you look in the nest,
17 there is quite a few of the birds that spend the
18 most of their time, when they get to that stage
19 in the nest, they don't go outside like what
20 everybody thinks. This bird does not feel good.
21 Believe me, birds have feeling. I walk the
22 houses and I know. They have feeling.

1 When she feels that she is not
2 covered, she is not pretty, she doesn't go out
3 there much. She runs out and comes right back
4 in. And some from those birds get to the nest
5 and sits in there.

6 And one former speaker talked about
7 high mortality. That is the place in which they
8 pile on the top of each other and die,
9 suffocation because they don't feel like going
10 out. This is bird behavior.

11 I serve on several boards related to
12 animal welfare, and I can tell you a lot of other
13 things. But I want to concentrate. Why do we do
14 this? Why don't we feel that? This animal has
15 rights. I know that. I know. I'm sorry for my
16 passion, but I tell you I feel sad for them.

17 MEMBER WALKER: Thank you, Mohamed.

18 MR. MOUSA: Thank you. Thank you,
19 sir.

20 CHAIR RICHARDSON: Thank you very
21 much.

22 MR. MOUSA: Thank you.

1 CHAIR RICHARDSON: The next speaker is
2 Trace Tipton, followed by Pierre Sleiman.

3 MR. TIPTON: Good afternoon, and thank
4 you very much for your efforts and the chance to
5 briefly comment.

6 My name is Trace Tipton. I work with
7 Regulatory Affairs with a company called Suterra
8 up in Bend, Oregon.

9 I have testified and submitted
10 comments before. So, I was a bit reluctant to
11 make your day any longer, but I have promised to
12 make this super-brief.

13 My comments are about the 2017 sunset
14 inerts that are currently being looked at; more
15 specifically, pheromones, traps and lures,
16 ethanol, and EPA List 4 inerts. These materials
17 have been allowed in organic production for many
18 years. We believe they should continue to be
19 used and they are compatible with organic
20 production, and that there are not any non-
21 synthetic alternatives.

22 We all come here with different

1 perspectives about what should be and shouldn't
2 be allowed. It is a full spectrum. We have
3 everything from those who do not believe that any
4 synthetic material should ever be allowed to
5 those that believe that a few of the most benign
6 synthetics that have been previously rigorously
7 reviewed should continue to be allowed. Coming
8 up with that balance is just one aspect of your
9 most difficult job here.

10 A good example of this balance are
11 arthropod pheromones that are used for monitoring
12 and for direct pest control via the mating-
13 disruption technique. Anyone involved with
14 production agriculture, especially with tree
15 fruits and nut crops, is aware of the value of
16 using pheromones. Well, it is impractical to go
17 out and squash billions of bugs to try to get
18 that pheromone. So, the same molecule is
19 produced synthetically and it is used as the
20 active ingredient in crop protection products.

21 I don't think anyone in their right
22 mind would want to outlaw pheromones because of

1 this. I think it is a good example of the give-
2 and-take that has to happen.

3 Now, concerning the List 4 inerts,
4 four minutes are definitely not enough to delve
5 into all of these. I can tell you that our
6 company uses quite a few of them.

7 One example, though, is cellulose.
8 This is a material that the brochures upfront are
9 printed on. Old-school guys like me write our
10 notes on them. Yet, it is defined as synthetic.
11 It is benign. It has been used for years. It
12 has been on List 4 from the start, and we think
13 it should be continued to be allowed.

14 Another example is impermeable
15 polymers. It is not possible to take a bottle of
16 pheromone and just spray it out in the field and
17 achieve mating disruption for more than a few
18 hours. There is good qualities of these
19 pheromones that make them decompose very quickly,
20 and that is a good thing, but they need to be
21 protected in order to have a product that is
22 viable for farmers to want to buy and that is

1 going to last for several days or weeks. We do
2 not believe there are any acceptable synthetic
3 alternatives.

4 I don't hear a lot of commotion about
5 synthetic irrigation pipes delivering water to
6 the fields. Basically, what you have with
7 impermeable polymers is something that is
8 delivering pheromone to the field.

9 We believe that although substances
10 like insect pheromones, cellulose, traps and
11 lures, ethanol, and certain common polymers are
12 not completely natural, they are still compatible
13 with organic production and they are a crucial
14 part of many organic operations.

15 A careful and judicious use these
16 types of materials are good examples of the
17 necessary give-and-take that has to occur to
18 provide organically-acceptable crop protection
19 products such as those that utilize arthropod
20 pheromones.

21 So, thank you very much. I wish the
22 best with all of your tough deliberations and

1 decisions on so many of the important issues.

2 (Signal that time has expired.)

3 CHAIR RICHARDSON: Questions?

4 (No response.)

5 Thank you very much.

6 MR. TIPTON: Thanks.

7 CHAIR RICHARDSON: The next speaker is
8 Pierre Sleiman, and followed by Dereck Casady.

9 MR. SLEIMAN: Good afternoon, and
10 thank you for your time.

11 My name is Pierre Sleiman. I'm the
12 first person in my family to ever farm. I grow
13 certified organic leafy greens here in San Diego,
14 and I also serve on the Board of Directors of the
15 San Diego County Farm Bureau.

16 I use a recirculating system that most
17 would call hydroponic. I say "most" because I
18 don't consider ourselves to be so different from
19 potted-soil growers.

20 When I first started farming six years
21 ago, there was no option in my mind as to whether
22 or not I wanted to be organic. I was also drawn

1 to hydroponics for its ability to conserve water
2 and land. For example, our operation uses 80
3 percent less water than an outdoor farm would. I
4 don't think I need to say how important that is
5 here in California.

6 After much trial and error, I found
7 the right formula of OMRI-approved materials, I
8 complied with all NOP guidelines, and we received
9 our organic certification.

10 As a young first-time farmer,
11 everything was new to me. I thought that organic
12 farming was just getting the nutrient source
13 right. Over time, however, I have learned about
14 the underlying philosophy of organic and began to
15 understand that organics isn't just about the
16 inputs; it is about how biology and soil matter
17 work together and form a sustainable ecosystem.

18 Thus, I evolved my operation. We used
19 to use inert growing media. We now use organic
20 soil and paper pots. We used to simply purchase
21 OMRI-labeled organic inputs. We now have started
22 to make our own compost for our soil mix.

1 As you are all aware, in 2010, the
2 NOSB made a recommendation that hydroponics not
3 be certifiable for the following reason, which I
4 have pulled up just an excerpt here on this
5 slide. The main reason, as I highlight, being
6 that growing media used to produce crop
7 transplants should also be capable of supporting
8 a natural and diverse soil ecology.

9 This statement applies to the majority
10 of hydroponic operations that I would agree
11 should not be classified as organic. However,
12 there are systems that look like a hydroponic
13 system, but, in fact, rely on a diverse and
14 natural soil ecology.

15 Here I have put up a picture. On the
16 left you have an inert media plug, and on the
17 right you have a soil plug, as what we would use
18 in our operation. The plug on the left does not
19 meet the definition, as we have just seen. The
20 plug on the right is, in fact, a diverse
21 ecosystem of soil.

22 Now I have put up here on the board a

1 magnified slide at 100 times of what you would
2 find in that plug, which you can see tons of
3 algae. Actually, it is out there on the loop.
4 You can see tons of biology going. If you zoom
5 in at 400X, you could actually see the organisms
6 moving around, very similar, if not identical, to
7 what you would find if you took soil and put it
8 on a slide.

9 Here I am showing a synthetic system
10 on the left, and on the right a compost-based
11 system using soil plugs, achieving identical
12 results, all based on an organic system.

13 What is very interesting is that we
14 also performed an experiment where the organic
15 inputs we put into the system. And then, we ran
16 a side-by-side experiment where we did not
17 inoculate it with biology. The very interesting
18 thing is that the system without the biology did
19 not grow at all almost because the biology was
20 not there to break down that organic matter into
21 a plant-usable food.

22 Here is a worm casting bin that we

1 have that we use to extract and put material into
2 our soil plugs. This is not an unfamiliar sight
3 of a compost row that we have where we also
4 compost our materials and use it for our soil
5 plugs.

6 There are several definitions of
7 hydroponics floating around. Most of those, I
8 would agree, should not be certifiable, either.

9 (Signal that time has expired.)

10 I want to just say my last statement
11 here. The overall purpose of my comment is to
12 educate and highlight the fact that the current
13 definition of hydroponics does not consider all
14 methods of production. I hope to make you aware
15 that there are methods outside of the stated
16 definitions that not only meet our organic
17 philosophies and guidelines, but offer some
18 solutions to land and water scarcity as well.

19 Thank you.

20 CHAIR RICHARDSON: Thank you.

21 Questions?

22 (No response.)

1 Thank you very much for your comments.

2 MR. SLEIMAN: Thank you.

3 CHAIR RICHARDSON: The next speaker is
4 Dereck Casady, and then, Marty Mesh.

5 MR. CASADY: Good afternoon.

6 I'm Dereck Casady. I'm a retailer. My
7 wife and I operate the vegetarian organic food
8 co-op here in San Diego.

9 And we are also climate change
10 activists. We are passionate about organic food
11 because we understand that, if the whole country
12 would grow food organically, it would help
13 sequester carbon and help us in our battle
14 against excessive carbon in the atmosphere.

15 I have volunteered to help present
16 testimony today as a member of Cornucopia
17 Institute because I want to ensure the integrity
18 of organic food.

19 I will all too quickly comment on five
20 of the Handling Subcommittee 2016 sunset reviews,
21 the boiler chemicals octodecylamine,
22 diethylaminoethanol, cyclohexylamine, as well as

1 two processed food ingredients, sodium acid
2 pyrophosphate and tetrasodium pyrophosphate.

3 Sounds like I'm in a chemistry lab
4 instead of discussing organic foods.

5 The boiler chemicals fail all three
6 OFPA criteria. They are clear candidate for
7 sunseting. Only the trade lobby group Juice
8 Products Association wrote in support of
9 relisting these materials, although they didn't
10 make a case for essentiality and, instead, just
11 stated that they are FDA-approved for use as a
12 secondary direct food additive. Several other
13 handlers and trade associations recommended
14 delisting.

15 A separate steam generator may be used
16 at the point of contact in which packaging
17 sterilization is needed rather than using steam
18 generated from the boilers that feed an entire
19 facility.

20 Sodium acid pyrophosphate is a
21 leavening agent used in a variety of baked goods
22 approved in 2006 for the National List. This

1 material can hardly be considered essential,
2 despite what some industrial food processors may
3 claim, because natural leavening, commercial
4 yeast, and sodium bicarbonate, baking soda, will
5 do the job.

6 The NOSB should consider recent
7 scientific findings on the potential impacts on
8 human health from the widespread use and
9 consumption of phosphate food additives. Also,
10 the manufacturing of SAPP produces phosphoric
11 acid waste. So, it may fail the effects on the
12 environment criteria of OFPA. Therefore, the
13 Cornucopia Institute cannot support the relisting
14 of this material at this time.

15 Tetrasodium pyrophosphate is a dough
16 conditioner for imitation meat produced, added to
17 the National List in 2006. For the first
18 Technical Review conducted in 2002, two of the
19 three expert reviewers recommended that TSPP not
20 be added to the list. Yet, it was approved
21 anyway by the full Board.

22 The latest limited-scope TR

1 demonstrates that there are many alternatives to
2 this substance such as fish, soy, pea, milk, and
3 fungal-based ingredients. Certified organic
4 vegan foods can be made without TSPP. There are
5 many meat replacement products on the marketplace
6 such as seitan and tempeh, along with many veggie
7 burgers and soy hotdogs that do not use this
8 substance.

9 The widespread use of phosphate food
10 additives in processed foods collectively cause
11 unnecessary risks to consumers. WhiteWave and
12 IFAC wrote in support of this material being
13 relisted, although it should be noted that, other
14 than the obviously toxic and nonessential boiler
15 additives, they supported every material that
16 they commented on.

17 So, in summary, toxic amine boiler
18 additives TSPP and SAPP all fail the essentiality
19 criteria and should be removed from the National
20 List.

21 As a San Diego retailer, I want to
22 welcome you all to San Diego, and it is exciting

1 to have the Organic Standards Board here.

2 Thank you.

3 CHAIR RICHARDSON: Thank you very much
4 for your comments.

5 Marty, last but not least.

6 MR. MESH: All right. My name is
7 Marty Mesh. My organic growing involvement in
8 natural foods started in 1972; on a larger scale,
9 farming in 1976 with the formation of Bellevue
10 Gardens Organic Farm, a farm that is still in
11 business today.

12 We started Florida Certified Organic
13 Growers and Consumers, a nonprofit which is doing
14 business as FOG, in 1987, and changed the name of
15 our accredited certification program to Quality
16 Certification Services. It certifies currently
17 in about 36 states and 10 different countries.

18 It has been my life's work to grow
19 organic agriculture and to help heal the planet,
20 and to protect the farm workers and farmers from
21 the exposure to toxic chemicals.

22 Thanks to the NOP staff, the USDA, and

1 all the Board members, and a welcome to the new
2 Board members, for your service.

3 A few technical corrections, and I
4 might as well start at the top and work my way
5 down.

6 So, Keith Jones was actually the very
7 first NOP boss then that came from the community.

8 Miles, animal welfare you had
9 mentioned by the end of the year, but, actually,
10 Secretary Vilsack just recently stated that it
11 would be this summer. Please clarify that this
12 issue that is so important to the industry can
13 keep on track with what the Secretary said, if
14 that is true.

15 Finally, Jim Pierce, you're just
16 wrong.

17 (Laughter.)

18 OTCO is not the best certifier.

19 (Laughter.)

20 So, I will touch on a few quick
21 points. And then, if I run out of time, you can
22 feel free to ask me about copper, GMOs, inerts,

1 or even ORCA update.

2 I thought John Ashby and Jim Pierce
3 articulated good points. I will also echo their
4 comments with the notable exception of Pierce's
5 fantasy.

6 (Laughter.)

7 I am a consumer as well and have been
8 for decades and would rather buy organic food and
9 organic cotton T-shirts to support the fiber
10 industry than other stuff.

11 Hearing John Ashby and expecting my
12 granddaughter there that was born a year ago
13 while I was at this meeting, as well as my unborn
14 daughter that will be born during the first week
15 of watermelon season, I hope that we won't need
16 formula. But, if we were, what I know is that my
17 wife would rather support and choose to support
18 an organic formula with some ancillary stuff and
19 support organic farmers, rather than the
20 alternative that John mentioned. No one would be
21 forcing us to buy it; it would be our choice.

22 We are all organic consumers, and the

1 people that I represent are organic consumers as
2 well. What I want is a viable planet, one for my
3 children and grandchildren to inherit, which
4 means changing the way we currently do food
5 production on the planet.

6 We support not limiting the few tools
7 in the toolbox for organic farmers.

8 I would like to thank the Board and
9 the committees' work for their efforts on organic
10 farming, on behalf of organic farmers, seed and
11 grain traders, and the industry, from GMO
12 contamination. GMO contamination and chemical
13 trespass have already caused enormous harm to the
14 organic producers and the industry. This is an
15 issue of grave concern, and the industry supports
16 the effort.

17 I am concerned about the earlier
18 comment about shared responsibility. I believe
19 the focus of that responsibility on any
20 coexistence should directly lie with the patent-
21 holders and maybe to a lesser degree the actual
22 users of the technology who profit from utilizing

1 the technology, and they should be required to
2 have an adequate buffer and compensate organic
3 farmers for their chemical and genetic trespass.

4 On copper, we issue non-compliances.
5 We test for buildup of copper in the
6 certification program.

7 Calvin, you know, your comments
8 earlier about not wanting people to come to test
9 would put you in a higher-risk-based category --

10 (Signal that time has expired.)

11 And there you have it. So, I just
12 want you to know that. If we certified you, you
13 would be elevating to a higher-risk base for
14 unannounced inspections and residue testing.

15 (Laughter.)

16 CHAIR RICHARDSON: All right. Thank
17 you, Marty.

18 MR. MESH: Questions?

19 (No response.)

20 Let's go have a break, huh?

21 CHAIR RICHARDSON: Well, okay. So,
22 first of all, I would like to say thank you very

1 much, well, of course, to Marty, but also to all
2 the other presenters. Enormously appreciated,
3 even though it did take us -- what? -- about 13
4 hours or so. But great, although we did go on a
5 bit long. But, still, it is all important stuff.

6 I would like us, in fact, to take a
7 five-minute break, but only a bathroom basically
8 because we do have a lot of stuff to get through,
9 and we are about an hour and a quarter late in
10 terms of where we had hoped to be by now.

11 And the Handling Subcommittee would
12 like to get through as many of the proposals and
13 certainly the 2016s, if we can do, today in terms
14 of our discussion and possibly votes on each of
15 them.

16 So, five minutes, please, only five
17 minutes.

18 (Whereupon, the above-entitled matter
19 went off the record at 4:15 p.m. and resumed at
20 4:23 p.m.)

21 CHAIR RICHARDSON: All right. So now,
22 we get to the work for which all those public

1 comments are so important, along with all the
2 other written materials.

3 The first item for us to deal with, as
4 we move into the Handling Subcommittee for today,
5 and it will apply also to all of the other
6 committees where there will be any votes, is I
7 would first like to ask the members of the Board
8 if there are any conflicts of interest which they
9 would like to disclose at this time, reminding
10 everybody for the record that the conflict-of-
11 interest sheet has been circulated around the
12 Board by Michelle during the last few weeks. And
13 everyone has responded to those. So, this is
14 just any additional public disclosure that any
15 Board member would like to make.

16 Zea?

17 MEMBER SONNABEND: Thank you, Jean.

18 Well, for the interest of public
19 disclosure, I would like to mention that I do
20 work for a certifier, CCOF, which may or may not
21 approve products that contain any or all of the
22 materials that we may be voting on today.

1 And me, as a farmer, do not use
2 anything that we are going to be voting on today,
3 but when we get to the 2017 sunsets that we are
4 going to be discussing, many of these are the
5 classic materials used on organic farms, and we
6 do use some of those.

7 CHAIR RICHARDSON: Thank you.

8 Are there any other conflicts of
9 interest or disclosures that any of the other
10 members of the Board would like to disclose for
11 the record?

12 (No response.)

13 I see none.

14 Let me say, next, the rules of
15 procedure here. The way we do our subcommittees
16 and the discussions and the votes, and so on, we
17 are governed by an interesting mix of rules and
18 procedures.

19 We have to deal with FACA to be sure
20 we do what FACA committees are required to do.

21 We have the NOSB Policy and Procedure
22 Manual, which provides us with guidance.

1 We have Robert's Rules of Order, but
2 not all of them can apply for things. Like, for
3 example, we can't always do amendments.

4 And then, there is tradition. I will
5 do my best as Chair to be obviously very fair, to
6 make sure that all these discussions go
7 appropriately and fairly. Of course, eventually,
8 the buck stops with me. And so, it will be my
9 rulings, and I will always try to do the right
10 thing.

11 I will be guided by Dr. Brines, who
12 will be our parliamentarian. And for the next
13 sections of the meeting, she is sitting up here,
14 so she can frown at me when it looks like I'm
15 doing wrong.

16 We will have vote counting.
17 Typically, it is done by the Secretary. Harold
18 is not here. And so, Vice Chair Tracy Favre will
19 be doing vote counting. And in addition, most
20 Board members, especially including Dr. Walker,
21 will be also tracking all the votes as well as we
22 go through the next two or three days.

1 Let's see, what else do I say here.

2 Oh, yes. I would like to be able to turn over to
3 the Handling Committee at this point, recognizing
4 for the record that Harold Austin is in a
5 hospital and that the Vice Chair of that
6 Subcommittee, Tom Chapman, has graciously agreed
7 to chair this. And he will be assisted by all of
8 us appropriately on the Board in order to make
9 sure that things go smoothly. So, be patient
10 with us.

11 So, over to you, Tom.

12 MEMBER CHAPMAN: Thank you, Madam
13 Chair.

14 Our thoughts are with Harold Austin at
15 this time as he prepares for surgery, and I hope
16 he makes a full and quick recovery.

17 I am lucky that Harold is more the
18 planner type than the wait-until-the-last-minute
19 type, as I have his notes prepared.

20 (Laughter.)

21 April 1st, 2015, Draft No. 2.

22 (Laughter.)

1 And lucky for us and our scheduling,
2 I would prefer to be brief and have edited
3 Harold's or hacked Harold's intro down.

4 (Laughter.)

5 Welcome to the Tuesday afternoon
6 session of the spring NOSB meeting. This will
7 begin the Handling Subcommittee presentation to
8 the full NOSB Board of this past semester's work
9 for review, discussion, and voting where
10 applicable.

11 The agenda items of the Handling
12 Subcommittee work plan for this afternoon's
13 presentations will carry over to tomorrow morning
14 and include the following:

15 We have six proposals for discussion
16 and voting.

17 We have 10 2016 sunset material
18 reviews that have been posted for their second
19 public comment period that will be brought before
20 the National Organic Standards Board for
21 discussion and vote, as required by the Organic
22 Foods Production Act. These materials come to

1 the full Board as a seconded motion to remove.

2 We will, then, follow up with the 104
3 short list of 2017 sunset materials that have
4 been recently posted for public comment, the
5 first of two mandatory postings for discussion
6 and recap of public comments. These materials
7 will not be up for a vote at this time; merely
8 discussion and information-gathering to help
9 assist the Handling Subcommittee and the entire
10 NOSB with the official sunset review process, as
11 required by OFPA. These will be read as
12 groupings based on their listing, but will be
13 discussed individually.

14 I would remiss if I would cut this
15 section out from Harold's intro, again, written
16 in early April. So, this is Harold's words.

17 "This past semester was extremely a
18 work-packed few months, to say the least. Even
19 with five additional calls, we finished our
20 scheduled work agenda with a whopping three
21 minutes to spare."

22 (Laughter.)

1 "We lost some seasoned pros while
2 gaining three very energetic new members to our
3 Subcommittee. A past Board member once told me
4 that it takes three years to figure out how to
5 navigate this process. On the fourth year, you
6 settle into a routine. And before you know it,
7 it all makes sense and your five years are up.

8 "Thus, to our new Board members,
9 welcome to the NOSB. Thank you for stepping in
10 at such a hectic time. And just think, you're
11 just getting started."

12 Truer words have never been said,
13 Harold.

14 (Laughter.)

15 We have tremendous amount of work to
16 cover, so let's get started. In respect to the
17 materials we have to review, I ask that we keep
18 our comments and discussions as precise and
19 concise as possible.

20 Our first agenda material is glycerin,
21 which was referred by the full NOSB back to the
22 Handling Subcommittee at our fall meeting in

1 Louisville for further review and modification.

2 Dr. Brines, if you would be so kind as
3 to give NOP's opening statement for this
4 material, please?

5 DR. BRINES: Thank you.

6 The petition for glycerin was received
7 on January 4th, 2013 and was submitted by Draco
8 Natural Products.

9 The petition requests the removal of
10 glycerin from Section 205.606(b) of the National
11 List.

12 The current listing reads as follows:
13 "Glycerin produced by hydrolysis of fats and
14 oils".

15 Of note for the Board, there is
16 another listing for glycerin on 205.603 of the
17 National List, but that listing for livestock use
18 is outside the scope of this petition.

19 In support of its review, the Handling
20 Subcommittee did a request a Technical Report for
21 glycerin. That report was prepared and posted
22 for the public in 2013, and as you previously

1 noted, this petition has been on the agenda of
2 two previous Board meetings, last October, but
3 also April of 2014.

4 Thank you.

5 MEMBER CHAPMAN: Thank you, Dr.
6 Brines.

7 I will now turn it over to Tracy, who
8 will present our Subcommittee proposal and
9 recommendation to the full NOSB and the NOP at
10 this time.

11 Tracy?

12 VICE CHAIR FAVRE: Thank you, Tom.

13 Many of you have already gone through
14 this. I believe this is probably Version No. 7
15 or so on this proposal, at least internally.

16 As Dr. Brines said, the petition was
17 to remove glycerin from 205.605(b). After much
18 discussion and wrangling and wrestling it to the
19 ground, we came up with a proposal to classify or
20 to agree to the motion to remove from 205.605 and
21 to list on 205.606, with a motion to classify as
22 agricultural when derived from agricultural

1 source materials and processed using biological
2 or mechanical/physical methods described under
3 205.270(a).

4 Generally, the public comments, we did
5 have some concerns from various folks writing in
6 about the potential or the ability to classify
7 glycerin from hydrolysis of fats and oils as
8 agricultural on 606, but I would say, generally,
9 the public comments were in favor of the motion.

10 There was some concern about
11 commercial availability of organic glycerin, and
12 that is actually really what led us to put it on
13 606 to offer incentive for continued growth of
14 organic glycerin in the marketplace while still
15 allowing for the fact that there might be some
16 shortfalls in the commercial availability.

17 MEMBER CHAPMAN: Okay. For the
18 record, there are three motions in this proposal
19 before the Board.

20 The first is a classification motion.
21 Motion to classify glycerin as agricultural when
22 derived from agricultural source materials and

1 processed using biological or mechanical/physical
2 methods described under 205.207(a). The motion
3 was by Tracy, seconded by Zea, and passed by six
4 in favor, none opposed, two absent.

5 The second is a listing motion.
6 Motion to list glycerin at 205.606, produced from
7 agricultural source materials and processed using
8 biological or mechanical/physical methods as
9 described under 205.207(a). Motion by Tracy,
10 seconded by Zea. The motion was carried by six
11 in favor, zero opposed, two absent.

12 And then, the final motion is a
13 listing motion. Motion to remove glycerin
14 produced from hydrolysis of fats and oils from
15 205.605(b). It was moved by Tracy, seconded by
16 Zea, carried by six in favor, zero opposed, and
17 two absent.

18 Is there any discussion on this item
19 by the Board?

20 (No response.)

21 Seeing none, are we ready for the
22 question? Shall I call the question?

1 VICE CHAIR FAVRE: I so move to call
2 the question.

3 MEMBER CHAPMAN: We have a motion. Is
4 there a second?

5 CHAIR RICHARDSON: The question has
6 been called. So, we appear to be ready for a
7 vote on the first of these three motions.

8 We will start the roll call over by
9 Paula, since you're the first one there, Paula.

10 So, the first motion that we have that
11 we are voting on is the classification motion.
12 Does everybody understand the motion?

13 MEMBER DANIELS: I'm sorry, I just
14 need clarification. So, a yes on the motion
15 means to support the Committee recommendation?
16 Is that correct?

17 CHAIR RICHARDSON: We are voting on
18 each of the motions in sequence.

19 MEMBER DANIELS: Right.

20 CHAIR RICHARDSON: So, the first
21 motion is simply a motion to classify. And then,
22 after that, we vote on the second motion, which

1 is the listing motion. And then, after that, we
2 will vote on the second listing motion. So, we
3 just take each one in sequence.

4 MEMBER DANIELS: Yes.

5 CHAIR RICHARDSON: So, a yes vote
6 supports that motion.

7 MEMBER DANIELS: Yes.

8 CHAIR RICHARDSON: Paula voted yes.

9 MEMBER TAYLOR: Yes.

10 MEMBER MARAVELL: Yes.

11 MEMBER BECK: Yes.

12 MEMBER SWAFFAR: Yes.

13 VICE CHAIR FAVRE: Yes.

14 MEMBER CHAPMAN: Yes.

15 MEMBER BONDERA: Yes.

16 MEMBER SONNABEND: Yes.

17 MEMBER DE LIMA: Yes.

18 MEMBER WALKER: Yes.

19 MEMBER THICKE: Yes.

20 MEMBER STONE: Yes, ma'am.

21 CHAIR RICHARDSON: The Chair votes
22 yes.

1 VICE CHAIR FAVRE: Fourteen yes. I'm
2 sorry. The motion carries, 14 yes, zero no. No
3 abstentions. No recusals.

4 CHAIR RICHARDSON: Thank you.

5 The next vote is on the listing motion
6 as written. Does everybody understand that
7 motion?

8 We will start the vote on that with
9 Jennifer.

10 (No response.)

11 Jennifer, are you ready?

12 MEMBER TAYLOR: Oh, okay.

13 CHAIR RICHARDSON: The listing motion.

14 MEMBER TAYLOR: Yes.

15 MEMBER MARAVELL: Yes.

16 MEMBER BECK: Yes.

17 MEMBER SWAFFAR: Yes.

18 VICE CHAIR FAVRE: Yes.

19 MEMBER CHAPMAN: Yes.

20 MEMBER BONDERA: Yes.

21 MEMBER SONNABEND: Yes.

22 MEMBER DE LIMA: Yes.

1 MEMBER WALKER: Yes.

2 MEMBER THICKE: Yes.

3 MEMBER STONE: Yes, ma'am.

4 CHAIR RICHARDSON: The Chair votes
5 yes.

6 MEMBER DANIELS: And I vote yes also.

7 CHAIR RICHARDSON: Sorry, Paula.

8 (Laughter.)

9 MEMBER DANIELS: That's okay.

10 CHAIR RICHARDSON: This is the first
11 time around. I'll get the hang of it again in a
12 minute.

13 MEMBER DANIELS: I won't let you leave
14 me out.

15 VICE CHAIR FAVRE: Okay, that comes to
16 a count of 14 yes, zero no. No abstentions. No
17 recusals, and one absent.

18 And I neglected to make that inclusion
19 on the last one.

20 The motion passes.

21 CHAIR RICHARDSON: Thank you.

22 The third motion on glycerin is as

1 written. It is a listing motion to remove
2 glycerin from 205.605(b) as written.

3 All those in favor of that motion,
4 starting with Nick.

5 MEMBER MARAVELL: Yes.

6 MEMBER BECK: Yes.

7 MEMBER SWAFFAR: Yes.

8 VICE CHAIR FAVRE: Yes.

9 MEMBER CHAPMAN: Yes.

10 MEMBER BONDERA: Yes.

11 MEMBER SONNABEND: Yes.

12 MEMBER DE LIMA: Yes.

13 MEMBER WALKER: Yes.

14 MEMBER THICKE: Yes, ma'am.

15 MEMBER STONE: Yes, ma'am.

16 MEMBER DANIELS: Yes, ma'am.

17 (Laughter.)

18 MEMBER TAYLOR: Yes.

19 CHAIR RICHARDSON: And the Chair votes
20 yes.

21 VICE CHAIR FAVRE: Okay. Once again,
22 that's 14 yes, zero no. Zero abstentions. Zero

1 recusals, and one absent. The motion carries.

2 MEMBER CHAPMAN: Okay, that brings us
3 to the second item on our agenda, whole algal
4 flour. This was referred back from the full NOSB
5 back to the Handling Subcommittee at our fall
6 meeting in Louisville for further review and
7 modification.

8 Dr. Brines, if you would be so kind to
9 give us the NOP's opening statement.

10 DR. BRINES: Yes. The petition for
11 whole algal flour was submitted by Solazyme on
12 September 6th, 2013. There was an addendum to
13 the petition that was submitted on January 21st,
14 2014. And both the original petition and
15 addendum are posted on the NOP website.

16 The petition requests the addition of
17 whole algal flour to Section 205.606 of the
18 National List. No Technical Report was requested
19 for the consideration of this substance by the
20 Handling Committee, and as you had mentioned,
21 this petition was also on the agenda for the
22 previous Board meeting in October last year.

1 Thank you.

2 MEMBER CHAPMAN: I will give the
3 summary of this item in Harold's place.

4 Whole algal flour is manufactured from
5 micro-algae by fermenting and harvesting
6 cultures, a non-toxigenic strain of color. The
7 petitioner originally requested the listing on
8 205.606, but, upon review of the Handling
9 Subcommittee, it has been proposed to classify as
10 non-synthetic and place on 205.605(a).

11 Its primary proposed use would be a
12 whole food ingredient used as a replacement or
13 partial replacement for food ingredients that
14 provide dietary fat and or protein, as a
15 shortening or as an added ingredient for texture
16 and mouth-feel enhancement.

17 A summary of the most recent public
18 comment, nine comments were received in support
19 the petition, including members of the industry
20 and public; seven comments in opposition to
21 petition, including members of the public and
22 interest groups. And there was one comment

1 seeking further information submitted by a
2 material review organization.

3 Issues raised in the public comments
4 focused around excluded methods, ancillary
5 substances, human health, necessity, and
6 compatibility with organic production. I will
7 briefly review these five.

8 On excluded methods, some commenters
9 were concerned that excluded methods could be
10 used in the manufacture of whole algal flour now
11 or in the future. However, this does contradict
12 information provided by the petitioner and did
13 not address why 205.105(e), the prohibition on
14 excluded methods, is not sufficient.

15 Other opposition commenters were
16 concerned with the potential GMO status of the
17 feedstocks.

18 Second, ancillary substances. Several
19 comments were received stating ancillary
20 substances were unavailable for review due to
21 CBI. These were provided as part of the public
22 comment in the fall 2014 meeting, and it can be

1 found at [regulations.org/ams/nop/14-0063-0757](https://www.regulations.org/ams/nop/14-0063-0757).

2 The third issue, human health.

3 Opponents noted that the GRAS status is
4 insufficient to demonstrate the material is not a
5 threat to human health, but also did not provide
6 information specifically about how whole algal
7 flour was a threat to human health.

8 Necessity, the fourth. The product
9 has been marketed as an alternative to organic
10 cream, milk, eggs, and/or butter for lower fat or
11 allergen avoidance. The opposition commenters
12 note that whole algal flour is petitioned as an
13 alternative to organic foods and, therefore,
14 these organic foods themselves are alternatives,
15 and thus, whole algal flour is not necessary.

16 Similarly, opposition has raised
17 concerns that whole algal flour would replace
18 organic food ingredients. And proponents state
19 that whole algal flour is necessary due to the
20 unique needs of those allergic to dairy and eggs
21 and those seeking a vegan diet. Similarly,
22 proponents have suggested that this will increase

1 the use of organic ingredients, as the
2 opportunity cost of not allowing whole algal
3 flour would be new products developed with whole
4 algal flour but without non-organic ingredients.

5 Lastly, compatibility with organic
6 production was raised as a concern. Opponents
7 note that whole algal flour never comes in
8 contact with the soil or sun and are entirely
9 removed from ecological systems. Proponents
10 noted that the protection method is similar to
11 other non-synthetic materials such as yeast and
12 microorganisms.

13 The Subcommittee has two seconded
14 motions before the Board.

15 The first motion is to classify whole
16 algal flour as -- sorry, I am on the wrong one --
17 classify whole algal flour as non-synthetic. The
18 motion was made by Harold, seconded by Jean, and
19 carried by a vote of five to zero, with three
20 members absent.

21 The listing motion was to add whole
22 algal flour to 205.605(a), non-agricultural/non-

1 organic substances. It was a motion by Harold,
2 seconded by Jean, and it failed by a vote of zero
3 in favor, six against, with two absents.

4 I will now open it up for discussion
5 by the Board.

6 CHAIR RICHARDSON: Paula?

7 MEMBER DANIELS: I would benefit from
8 discussion from the Board members that have been
9 on the Board longer than I have in my four whole
10 months, largely because there are questions here,
11 it seems to me, of precedent with which I am not
12 familiar.

13 But I am interested in this particular
14 -- shall I call it an ingredient? And I do see
15 the navigation that is occurring between what
16 type of listing it has and what ramifications
17 that has. I mean, that is something that I would
18 like more familiarity with.

19 But, in general -- and I think I have
20 expressed this over the course of the last day or
21 so -- I think it is something for us to consider
22 as to whether or not different methods of food

1 production, such as with hydroponics, such as
2 with recirculating tanks, are acceptable in
3 organic, whether it needs to be entirely soil-
4 based, because I understand the concerns about
5 this is that it is not grown the way a plant
6 would. But it is a small-cell organism.

7 I am somebody who consumes a lot of
8 spirulina powder. So, I see that as a food
9 ingredient. In some of the other products that I
10 consume there are products like this in it.

11 So, it does seem, at least for the
12 interest of those who are vegan -- I'm not -- but
13 for those who are, to have some kind of a
14 substitute that is healthy might be valuable.

15 On the other hand, I do recognize the
16 concerns raised about genetic modification, and I
17 do think that is a very important consideration.
18 But we were assured by the manufacturer that they
19 do not use genetically-modified organisms in this
20 product.

21 So, I don't know how to resolve the
22 question of the substrate and would invite

1 discussion on that.

2 MEMBER CHAPMAN: Zea, do you want to
3 respond to that?

4 MEMBER BONDERA: I apologize for
5 interrupting your question, Paula, because that
6 wasn't my intent, but I have a procedural
7 question that I would like either Lisa and/or our
8 Chair to address.

9 I just want to clarify for the record,
10 just because I wasn't clearly enough informed in
11 advanced, are we following all of the
12 Subcommittee's motions and seconds on all of
13 these things, and at this Board meeting the Board
14 members will not be making motions and seconds
15 that are different from what the Subcommittees
16 have done in the past? Has that been decided and
17 that is what we are going to --

18 CHAIR RICHARDSON: Let me clarify --

19 MEMBER BONDERA: Because that is not
20 clear to me.

21 Thank you.

22 CHAIR RICHARDSON: Let me clarify for

1 you. Under this, we will follow Robert's Rule of
2 Order.

3 The motions, all the motions come from
4 subcommittees as seconded motions. We start with
5 those motions which are the seconded motions, and
6 those are the first ones that we will deal with.
7 If, by any chance, someone would like to see a
8 different motion there, then there would need to
9 be a vote -- or there's two ways or several ways
10 to do it, but the simplest one would be for the
11 person who made the motion, seconded the motion,
12 to withdraw it, so that another motion could be
13 put on the table.

14 MEMBER CHAPMAN: Zea?

15 MEMBER SONNABEND: Okay. I will do my
16 best with little historical background in what is
17 still to me a somewhat murky policy regarding
18 aquatic plants and how they are treated.

19 We were approached some years ago --
20 well, I shouldn't say "we" because I wasn't on
21 the NOSB then, but the NOSB was approached some
22 years ago to allow the use of Chilean nitrate for

1 organic spirulina production.

2 The companies, of which there were
3 two, from Hawaii, indicated that they could grow
4 spirulina organically with no problem except for
5 supplying a clean nitrogen source without a lot
6 of other organic matter in it which interfered
7 with their water biochemistry to produce the
8 spirulina.

9 So, it was allowed with an expiration
10 date. And I am not clear enough to tell you
11 exactly what date it was, but it expired before
12 the rest of the spirulina annotation, in the
13 hopes that they would research alternatives and
14 find them.

15 Now I'm not sure in culture how much
16 different chlorella is from spirulina. And
17 granted, that this was Harold's material. And
18 when it first came in as CBI, I sort of gave up
19 on it. And so, I didn't start asking these
20 questions right from the beginning.

21 But what occurs to me now is like, why
22 can't the chlorella be grown organically. And

1 this is fermented chlorella, but they have to
2 have produced the chlorella first in order to be
3 able to ferment it. And so, unless I'm wrong
4 there, there might be potential for this to be
5 organic.

6 However, there aren't really clear
7 standards other than what is the existing soil-
8 based practice standards for how to grow any
9 aquatic plants organically. So, kelp and those
10 things are all sort of up in the air as far as
11 production.

12 And then, there is a whole bunch of
13 materials petitioned for aquatic plants that are
14 tied up in the aquaculture thing. But, then,
15 there aren't going to be standards released for
16 aquatic plants, only for aquaculture. And so, I
17 feel like we are in a limbo about moving forward
18 any sort of aquatic organic production of plants.

19 And then, of course, there is, does
20 this tie into the hydroponics thing or not?

21 So, that is the best I can do for
22 history. This product is very sort of new, and I

1 don't feel that comfortable with it in terms of
2 all of the unanswered -- you know, could there be
3 an organic alternative? It is pretty clear that
4 it is used to replace organic things like eggs
5 and milk mostly. And so, I don't believe it is
6 necessary to produce organic food with this.

7 MEMBER CHAPMAN: Any further
8 discussion?

9 (No response.)

10 Are we ready for the question?

11 CHAIR RICHARDSON: It looks like it.

12 Okay, there are two motions, again,
13 for us to deal with on this material.

14 First the classification motion. Move
15 to classify whole algal flour as non-synthetic.

16 On this, we start with -- who do we
17 start with now? Let's see, Carmela.

18 MEMBER BECK: Yes.

19 MEMBER SWAFFAR: Yes.

20 VICE CHAIR FAVRE: Yes.

21 MEMBER CHAPMAN: Yes.

22 MEMBER BONDERA: Yes.

1 MEMBER SONNABEND: Yes.

2 MEMBER DE LIMA: Yes.

3 MEMBER WALKER: Yes.

4 MEMBER THICKE: Yes.

5 MEMBER STONE: Yes, ma'am.

6 MEMBER DANIELS: Yes.

7 MEMBER TAYLOR: Yes.

8 MEMBER MARAVELL: Yes.

9 CHAIR RICHARDSON: The Chair votes

10 yes.

11 VICE CHAIR FAVRE: The vote is 14 yes,

12 zero no. Zero abstentions. Zero recusals. One

13 absent. The motion carries.

14 CHAIR RICHARDSON: Sorry, Tracy.

15 The next motion on this material is

16 the listing motion. The motion is to add whole

17 algal flour to 205.606(a).

18 Starting with Ashley.

19 MEMBER SWAFFAR: No.

20 VICE CHAIR FAVRE: No.

21 MEMBER CHAPMAN: No.

22 MEMBER BONDERA: No.

1 MEMBER SONNABEND: No.

2 MEMBER DE LIMA: No.

3 MEMBER WALKER: No.

4 MEMBER THICKE: No.

5 MEMBER STONE: No, ma'am.

6 MEMBER TAYLOR: No.

7 MEMBER MARAVELL: No.

8 MEMBER BECK: No.

9 CHAIR RICHARDSON: The Chair votes no.

10 VICE CHAIR FAVRE: The vote is zero

11 yes, 14 no. Zero abstentions. Zero recusals.

12 One absent. The motion fails.

13 MEMBER CHAPMAN: The next item on the
14 agenda is the proposal of ammonia hydroxide.

15 Dr. Brines, if you could read the
16 intro?

17 DR. BRINES: Sure. Thank you.

18 The petition for ammonium hydroxide
19 was submitted on November 2nd, 2012, by Dr.
20 Richard Theurer. The petition requests the
21 addition of ammonium hydroxide to Section 205.605
22 of the National List.

1 In support of the review, the Handling
2 Subcommittee accessed a previous Technical Report
3 for ammonium hydroxide which was prepared in 2001
4 in response to a previous petition for the
5 material. This petition was also on the agenda
6 for the April 2014 meeting, a year ago.

7 Thank you.

8 MEMBER CHAPMAN: Madam Chair?

9 CHAIR RICHARDSON: As the lead person
10 on ammonium hydroxide, I would like to just read
11 the following into the record.

12 Ammonium hydroxide was initially
13 petitioned for addition to the National List in
14 2001, way back, but, for a variety of reasons
15 which I discussed in detail in the Handling
16 Subcommittee proposed, as posted for this
17 meeting, that listing did not take place.

18 The Subcommittee proposal for this
19 meeting is in response to a petition sent in 2012
20 to add ammonium hydroxide to the National List as
21 a boiler water additive.

22 The Subcommittee reviewed this

1 substance in depth against the OFPA criteria,
2 compared it with other boiler additives presently
3 on the list, sought additional information,
4 reviewed detailed public comments received over
5 the last two years, including some for this
6 meeting. And the Handling Subcommittee voted
7 five to zero not to add ammonium hydroxide to the
8 National List.

9 On March the 19th, 2015, after the
10 Subcommittee recommendation had been posted, the
11 petitioner emailed the NOP requesting that the
12 petition be withdrawn. The NOSB Posting and
13 Procedural Manual presently allows petitioners to
14 withdraw petitions. Thus, the NOSB will not be
15 voting as a full Board today on ammonium
16 hydroxide.

17 However, the Handling Subcommittee
18 would like the public record of this meeting to
19 reflect that the Subcommittee and the public,
20 based on the OFPA criteria, do not recommend
21 addition of ammonium hydroxide to the National
22 List, as it fails to satisfy criteria of human

1 health, environment, compatibility with organic
2 practices, and there are alternative practices to
3 the use of this chemical as a boiler water
4 additive.

5 Thank you.

6 MEMBER CHAPMAN: The next item on our
7 agenda is PGME.

8 Dr. Brines?

9 DR. BRINES: Thank you.

10 The petition for polyalkylene glycol
11 monobutyl ether, also known as PGME, was
12 submitted on December 27th, 2012. There was also
13 an addendum to the petition that was submitted on
14 December 4th, 2014. The petition was submitted
15 by Pellet Products, Incorporated, and requests
16 the addition of PGME to Section 205.605 of the
17 National List.

18 In support of the review, the NOSB
19 Handling Committee requested a Technical Report
20 for PGME, which was completed in 2013. In
21 addition, a Supplemental Technical Report was
22 requested to respond to specific additional

1 information, and the Supplemental Technical
2 Report was completed earlier this year. Both of
3 those Technical Reports as well as the petition
4 and the addendum are posted on the NOP website
5 and were available in advance of the opening of
6 the comment period for this meeting. This
7 petition was also on the agenda at the April 2014
8 NOSB meeting last year.

9 Thank you.

10 MEMBER CHAPMAN: I will now turn it
11 over to Madam Chair, who will present the
12 Subcommittee proposal and recommendation to the
13 full Board.

14 CHAIR RICHARDSON: I'm presenting this
15 as the lead person.

16 PGME is a polymeric fluid. It is a
17 boiler steam additive petitioned for use in feed
18 pellet mills, and the petition specifically is
19 requested with a restriction of a minimum
20 molecular weight of 1,500 in accordance with
21 conditions that are required under 21 CFR Section
22 173.310.

1 The Subcommittee voted seven to zero
2 not to add PGME to the National List as
3 petitioned.

4 This material was petitioned
5 originally in 2012. And initially, the
6 information provided in the Technical Report
7 which we requested indicated that the PGME did
8 not come into contact with the organic product
9 because it is non-volatile, precipitates at
10 boiler temperatures, and is not delivered with
11 the steam, but stays in the boiler as a
12 precipitate until the boiler cools down below the
13 cloud point and may be removed during boiler
14 blowdown.

15 So, the NOP determined that,
16 therefore, there was no contact with the organic
17 and it didn't need to be petitioned. However,
18 based on public comment and other discussions,
19 the Handling Subcommittee requested an additional
20 limited-scope TR and further information and
21 clarification from the petitioner.

22 The petitioner did provide additional

1 information for us in a letter of December 2014,
2 and the limited-scope TR we got in January this
3 year. The limited-scope TR was asked to address
4 the following questions:

5 What evidence is there that there is
6 entrainment of PGME in water droplets during
7 normal use?

8 And secondly, if used as petitioned,
9 would the PGME come into contact with the organic
10 product, which is pelleted feed?

11 Response from both the petitioner and
12 from the TR indicated that there can be contact
13 of PGME with organic product. The TR states that
14 there have been no reported effects of PGME on
15 human health. However, public comment received
16 for this meeting and for the meeting in 2014
17 provides scientific literature submitted to the
18 EPA indicating significant pathological lung
19 damage at molecular weights of 4,000.

20 Public comment received for this
21 meeting from a broad cross-section of the organic
22 stakeholders indicates a strong support not to

1 add PGME to the National List.

2 In considering all of the OFPA
3 criteria and additional criteria at 205.600(b),
4 it appears that PGME does come into contact with
5 the organic product and that there is a potential
6 for adverse impacts; and, further, that pelleted
7 feed can be produced without the use of PGME.

8 MEMBER CHAPMAN: There are two motions
9 before the Board.

10 Classification motion to classify PGME
11 as synthetic. The motion was made by Jean,
12 seconded by Tracy, and passed seven in favor,
13 zero opposed, one absent.

14 There is also a listing motion to list
15 PGME on 205.605(b) of the National List with the
16 annotation "with molecular weight greater than
17 1500 for use as a boiler additive in pellet feed
18 production". The motion was made by Jean,
19 seconded by Tracy. The motion failed, zero in
20 favor, seven against, one absent.

21 I will open it up for discussion.

22 (No response.)

1 Seeing no discussion, we will call the
2 question.

3 CHAIR RICHARDSON: Technically, you
4 should do it.

5 VICE CHAIR FAVRE: Okay. Because Jean
6 is actually the lead on this, I will take over
7 the request for the vote, a little bit tricky
8 because I was actually the first one up. Should
9 I still go ahead and vote first?

10 CHAIR RICHARDSON: Sure. Go for it.

11 VICE CHAIR FAVRE: Okay.

12 This is the motion to classify PGME as
13 synthetic.

14 I vote yes.

15 MEMBER CHAPMAN: Yes.

16 MEMBER BONDERA: Yes.

17 MEMBER SONNABEND: Yes.

18 MEMBER DE LIMA: Yes.

19 MEMBER WALKER: Yes.

20 MEMBER THICKE: Yes.

21 MEMBER STONE: Yes, ma'am, squared.

22 (Laughter.)

1 MEMBER DANIELS: Yes.

2 MEMBER TAYLOR: Yes.

3 MEMBER MARAVELL: Yes.

4 MEMBER BECK: Yes.

5 MEMBER SWAFFAR: Yes.

6 CHAIR RICHARDSON: The Chair votes
7 yes.

8 VICE CHAIR FAVRE: Okay. The motion
9 is 14 yes, zero no. Zero abstentions. Zero
10 recusals. One absent. The motion carries.

11 Okay. The second motion on the Floor
12 is the motion to list PGME at 205.605(a).

13 The voting will start with Mr.
14 Chapman.

15 MEMBER CHAPMAN: No.

16 (Pause.)

17 MEMBER BONDERA: No.

18 MEMBER SONNABEND: No.

19 MEMBER DE LIMA: No.

20 MEMBER WALKER: No.

21 MEMBER THICKE: No.

22 MEMBER STONE: No, ma'am.

1 MEMBER DANIELS: No.

2 MEMBER TAYLOR: No.

3 MEMBER MARAVELL: No.

4 MEMBER BECK: No.

5 MEMBER SWAFFAR: No.

6 VICE CHAIR FAVRE: No.

7 CHAIR RICHARDSON: The Chair votes no.

8 VICE CHAIR FAVRE: The vote is zero
9 yes, 14 no. No abstentions. No recusals. One
10 absent. The motion fails.

11 MEMBER BONDERA: Point of order.

12 CHAIR RICHARDSON: Yes, point of
13 order.

14 MEMBER BONDERA: I apologize, but I
15 don't want the record to read what I heard, and I
16 may have misheard. But, when she read the
17 motion, I heard her say -- that's why I hesitated
18 to vote -- I heard her say (a), 205.605(a), and
19 my record shows (b). And so, if we voted on the
20 wrong one and/or the record shows (a), I would
21 like that to be corrected.

22 VICE CHAIR FAVRE: Actually, I think

1 I read just 205.605, because that is what I've
2 got listed on here. I might not have specified
3 either way. But I'll accept that.

4 CHAIR RICHARDSON: Let the record so
5 reflect. Thank you, Colehour.

6 MEMBER CHAPMAN: Okay. Our next
7 proposal is triethyl citrate.

8 Dr. Brines, if you could give the
9 opening?

10 (Pause.)

11 VICE CHAIR FAVRE: This is what
12 happens when you let an amateur run the motions.

13 All right. So, we have been informed
14 that I made a whoopsie on that. So, we will need
15 to redo the motion to list PGME at 205.605(b), as
16 in Bondera.

17 (Laughter.)

18 We will start the voting with Mr.
19 Chapman.

20 MEMBER CHAPMAN: Still no.

21 (Laughter.)

22 MEMBER BONDERA: No.

1 MEMBER SONNABEND: No.

2 MEMBER DE LIMA: No.

3 MEMBER WALKER: No.

4 MEMBER THICKE: No.

5 MEMBER STONE: No, ma'am.

6 MEMBER DANIELS: No.

7 MEMBER TAYLOR: No.

8 MEMBER MARAVELL: No.

9 MEMBER BECK: No.

10 MEMBER SWAFFAR: No.

11 VICE CHAIR FAVRE: No.

12 CHAIR RICHARDSON: No.

13 VICE CHAIR FAVRE: And I know it's no

14 drama, but the motion is -- or the vote is zero

15 yes, 14 noes. Zero abstentions. Zero recusals.

16 One absent. And the motion again fails.

17 My apologies.

18 MEMBER CHAPMAN: Okay. The next item

19 on the agenda now is triethyl citrate.

20 Dr. Brines, if you would give the

21 opening?

22 DR. BRINES: Thank you.

1 The petition for triethyl citrate was
2 submitted by Michael Foods on February 10th,
3 2014. The petition requests the addition of
4 triethyl citrate to Section 205.605 of the
5 National List as a whipping enhancer.

6 In support of the review, the Handling
7 Subcommittee requested the development of a
8 third-party Technical Report, which was completed
9 in 2014.

10 And that is all I have got on that
11 one.

12 Thank you.

13 MEMBER CHAPMAN: Thank you.

14 I will now turn it over to Madam
15 Chair, who will present the Subcommittee proposal
16 to the full Board.

17 CHAIR RICHARDSON: See how hard this
18 Subcommittee made me work? It's really not fair.

19 Triethyl citrate is a synthetic
20 substance petitioned in 2014 to be added to the
21 National List at 205.605 as a food additive, and
22 its intended use is a whipping enhancer for egg

1 whites during processing.

2 Triethyl citrate is an ester of citric
3 acid. It is colorless, odorless liquid used as a
4 food additive to stabilize foams, especially as a
5 whipping aid for egg whites. There are
6 alternative non-synthetic substances that can be
7 used for this purpose.

8 The Handling Subcommittee proposes not
9 to recommend this material to be added to the
10 National List.

11 The petitioner states that triethyl
12 citrate is a natural ingredient flavor and is
13 also used by the egg industry as a pasteurized
14 egg white whipping enhancer in baking, such as
15 for angel food cakes, because pasteurized eggs,
16 if you beat them up, it is hard to get them stand
17 up, for all of those who bake or make angel food
18 cakes.

19 The Technical Report, which the NOSB
20 requested, states that the main reason that TEC
21 is added to egg whites is to recreate textures
22 and related properties which are lost during

1 pasteurization.

2 The petitioner considers TEC non-
3 synthetic based on 100-percent raw materials, but
4 the TR indicated that the commercial sources of
5 TEC are produced from the reaction of citric acid
6 and ethyl alcohol, both of which are fermentation
7 products from the microbial digestion of a carbon
8 substrate.

9 There are several alternative
10 substances which can be used instead of TEC, such
11 as sugar, some gums, and most especially cream of
12 tartar, which is potassium acid tartrate, which
13 is already on the National List at 205.605(b).

14 TEC is not permitted in organic
15 processing in Canada, the EU, or by IFOAM or the
16 Codex, and it is not listed in the Japanese
17 Agricultural -- JAS. I forget the acronym.

18 The Handling Committee voted seven to
19 zero not to add TEC to the National List because
20 it fails to meet the OFPA criteria relating to
21 essentiality and fails to meet Section
22 205.600(b)(4) because TEC recreates texture and

1 related properties and is, thus, incompatible
2 with organic processing.

3 Public comment received on TEC
4 supports, strongly supports, the Handling
5 Subcommittee recommendation.

6 MEMBER CHAPMAN: There are two motions
7 that have come out of Subcommittee that are
8 before the Board.

9 The first is a classification motion.
10 Motion to classify TEC, triethyl citrate, as
11 petitioned as synthetic. The motion was made by
12 Jean, seconded by Zea. The motion carried, seven
13 in favor, zero against, one absent.

14 The second motion is a listing motion.
15 Motion to list triethyl citrate as petitioned to
16 205.605(b) of the National List without
17 annotation. The motion was made by Jean. It was
18 seconded by Zea. There was zero in favor, seven
19 against, one absent. The motion did not carry.

20 I will open it up to discussion at
21 this time.

22 MEMBER BONDERA: Thank you.

1 I'm just curious -- and I apologize
2 for admitting my ignorance -- but I would just
3 appreciate a little bit more information as to
4 why the petitioner was requesting this if there
5 is such simplistic alternatives that the need
6 wasn't perceivable, because I just can't wrap my
7 brain around what was being sought.

8 CHAIR RICHARDSON: Well, I'm not sure
9 I can tell you exactly what the petitioner was
10 thinking.

11 (Laughter.)

12 But how can I answer that? I don't
13 think I -- oh, look, we have got an answer from
14 you.

15 MEMBER CHAPMAN: I don't particularly
16 have an answer. But the petitioner did provide
17 public comment that did respond to several of the
18 Subcommittee's citations on alternatives,
19 speaking to why, in their opinion, it was a non-
20 equivalent. They ranged based on the form. I
21 don't think I will read them here. But they did
22 not share the same conclusions as the

1 Subcommittee.

2 CHAIR RICHARDSON: Well, and as I
3 recall, the petitioner preferred it to the other
4 choices as being a more reliable for them to be
5 able to get the kind of standing-up texture, like
6 in the angel food cake example, to get the
7 results that they wanted to get. And it gave
8 them another choice, although, apparently, the TR
9 did refer to Martha Stewart, who apparently uses
10 something else quite different.

11 (Laughter.)

12 Martha, in the TR she was quoted -- it
13 is a good scientific source there -- as using
14 potassium acid tartrate. So there.

15 MEMBER CHAPMAN: Any further
16 discussion?

17 (No response.)

18 If not, then the question will be
19 called.

20 VICE CHAIR FAVRE: Okay. The first
21 thing is a motion to classify triethyl citrate,
22 CAS No. 77-93-0, as petitioned as synthetic.

1 And the voting will start with
2 Colehour.

3 MEMBER BONDERA: Yes.

4 MEMBER SONNABEND: Yes.

5 MEMBER DE LIMA: Yes.

6 MEMBER WALKER: Yes.

7 MEMBER THICKE: Yes.

8 MEMBER STONE: Yes, ma'am.

9 MEMBER DANIELS: Yes.

10 MEMBER TAYLOR: Yes.

11 MEMBER MARAVELL: Yes.

12 MEMBER BECK: Yes.

13 MEMBER SWAFFAR: Yes.

14 VICE CHAIR FAVRE: Yes.

15 MEMBER CHAPMAN: Yes.

16 CHAIR RICHARDSON: The Chair votes
17 yes.

18 VICE CHAIR FAVRE: The vote is 14 yes,
19 zero no. Zero abstentions. Zero recusals. One
20 absent. The motion passes.

21 The next motion is to list triethyl
22 citrate, CAS No. 77-93-0, as petitioned at

1 205.605(b).

2 I don't want to make that mistake
3 again.

4 And the voting will start with Zea.

5 MEMBER SONNABEND: No.

6 MEMBER DE LIMA: No.

7 MEMBER WALKER: No.

8 MEMBER THICKE: No.

9 MEMBER STONE: No, ma'am.

10 MEMBER DANIELS: No.

11 MEMBER TAYLOR: No.

12 MEMBER MARAVELL: No.

13 MEMBER BECK: No.

14 MEMBER SWAFFAR: No.

15 VICE CHAIR FAVRE: No.

16 MEMBER CHAPMAN: No.

17 MEMBER BONDERA: No.

18 CHAIR RICHARDSON: The Chair votes no.

19 VICE CHAIR FAVRE: The vote is zero
20 noes -- I'm sorry -- zero yes, 14 noes. Zero
21 abstentions. Zero recusals. One absent. The
22 motion fails.

1 MEMBER CHAPMAN: The next item on the
2 agenda is the proposal on ancillary substances
3 for microorganisms.

4 Dr. Brines, if you give the
5 introduction?

6 DR. BRINES: Thank you, Tom.

7 This particular agenda item is not a
8 result of a petition. It was work following a
9 specific request from the NOSB, and it is not
10 specifically in response to a sunset item.
11 Therefore, I don't have anything to present for
12 this proposal.

13 Thank you.

14 MEMBER CHAPMAN: I would now turn this
15 over to Zea, who will present the Subcommittee
16 proposal and recommendation to the full NOSB.

17 MEMBER SONNABEND: Thank you, Tom.

18 Okay. It is a little funny. One of
19 the oddities of the new sunset structure is we
20 get to discuss the ancillary substance proposal
21 before we discuss the main proposal for
22 microorganisms. And so, I'm not going to rehash

1 everything that it says in the microorganisms
2 proposal until later, but we are just going to
3 mostly focus on the ancillary substance proposal.

4 I think my experience on this to date
5 can be summed up very blatantly in the lines of
6 the song, "The More that You Give, the More It
7 Will Take to the Thin Line Beyond Which You
8 Really Can't Fake".

9 (Laughter.)

10 And so, I haven't reached that thin
11 line, so I'm not faking it. But there is going
12 to get to be a point where I may have to fake it.

13 Okay. We did receive a few comments,
14 not very many because it is very arcane subject.
15 The people who did comment, though, are -- oh,
16 what do I want to say? -- very engaged in the
17 subject. And so, I am going to address some of
18 those comments in our assessment of this.

19 So, ancillary substances are added to
20 formulated generic handling substances on the
21 National List. They do not have a technical or
22 functional effect in the finished product and are

1 not considered part of the manufacturing process
2 that has already been reviewed by the NOSB.

3 Some of the commenters indicated that
4 our definition of ancillary substances still
5 needed some work, and the definition was spelled
6 out in our proposal in 2013, I think -- well, our
7 previous proposal that set up this structure for
8 reviewing ancillary substances.

9 Concerns were raised about wanting
10 this definition to be in the rule and not in
11 guidance, which has been our intention, to keep
12 it in guidance, and to make clear that if it only
13 applied to things that were removed from the
14 final product or that might remain in the final
15 product.

16 We also presented, along with dairy
17 cultures in the 2017 sunset, the concept that
18 really dairy cultures are subset of these. And
19 so, therefore, the ancillary substances and the
20 two listings might be combined. We are going to
21 be considering that, I think, in the next several
22 months before we come to the dairy cultures vote

1 at the fall meeting. And dairy cultures have
2 supplemental ancillary substances to these that
3 were presented in the chart that we will have to
4 look at.

5 There are those who said, still, even
6 though we have passed a structure that doesn't
7 say this, that each substance should be evaluated
8 and be on the National List separately. And
9 there are those who said that the review answers
10 to the criteria were inadequate.

11 For those commenters, I suggest you
12 apply to be on the NOSB. And when you get on,
13 you can do the exact full review of every single
14 one of these dozens of ancillary substances.

15 I have found, being on the Board, that
16 I have to pick my battles, and I have chosen to
17 try to keep GMOs out of the world of organic
18 rather than pick apart every ancillary substance.

19 That's all I'm going to say about
20 that.

21 (Laughter.)

22 We particularly asked, although we had

1 asked this two or three times before, for
2 additions to the list to be brought forward, to
3 the extent that we could.

4 So, we didn't exactly get concrete
5 additions to the list. We got some things where
6 people said, "Oh, how about these?" But, when
7 trying to dig further, some of them really
8 weren't ancillary substances. They were
9 nutrients that were consumed by the
10 microorganisms or other things that were really
11 already on the list, but just a different name or
12 something, with the exception of a few that are
13 in dairy cultures, but not in the rest of the
14 microorganisms.

15 And the lists that are in dairy
16 cultures, but not the rest of the microorganisms
17 is fairly lengthy, too long to really put
18 together and coalesce for this meeting. So, we
19 have to take it under advisement.

20 The one good point that came in from
21 Oregon Tilth, that we have a category for
22 cryoprotectives used to freeze dry, but not

1 create frozen microorganisms. And so, really, we
2 should amend it to be "freeze and freeze dry,"
3 which is also a valid consideration and a good
4 point.

5 Okay. We put forward a couple of
6 motions on this.

7 And the first one is to accept the
8 chart, to approve the ancillary substances as
9 enumerated.

10 As I mentioned, opponents think they
11 had not been reviewed enough. People brought up
12 some concern, particularly about the phosphates.
13 And I think we will talk more about the
14 phosphates in the main sunset 2017 listings
15 because, if we are going to look at them, we need
16 to look at them in the main listings on the
17 National List first before we branch out into
18 ancillary substances.

19 Many people of the commenters
20 suggested a concern that the list is never going
21 to be truly complete and there needs to be a
22 mechanism to amend it between sunsets. And then,

1 several commenters brought out that a
2 standardized template or affidavit is worthwhile
3 to develop.

4 And so, I would like someone from the
5 Department, Miles or Emily or Lisa, to just give
6 a little statement about how we anticipate this
7 going into a guidance and being able to be
8 amended or dealt with the future before the five
9 years is up.

10 MR. McEVOY: Yes. Well, I guess we
11 kind of started this back in 2011 by sending a
12 memo to the Board to take a look at ancillary
13 substances. It was the memo to look at other
14 ingredients, what we called "other ingredients"
15 at the time, because there were more specific
16 review criteria and allowances for other
17 ingredients in pesticide formulations and
18 healthcare products, the excipients under the
19 livestock regs or livestock section. So, this
20 conversation has been going on for quite some
21 time, and probably will continue for quite some
22 time as well.

1 The way that we are looking at
2 guidance on materials, a model of that is the
3 draft guidance that we have out on materials for
4 organic crop production. And so, the concept
5 there is that we can issue a draft guidance, get
6 public comment, and then, finalize the guidance
7 based on the public comment. That is a list of
8 those materials used in organic crop production
9 that include the natural materials as well as the
10 materials that are allowed under 601, the
11 synthetic materials that are allowed under 601.

12 And then, when we first set that up,
13 we thought that that could be relatively-easily
14 updated because guidance is a lot more easily
15 updated than a rulemaking process. But I guess
16 the caution on using guidance is that it is maybe
17 easier than rulemaking, putting it in the
18 regulations, but it is still quite a process to
19 amend guidance as well. We still have to go
20 through quite a process to go through the legal
21 review and get a guidance updated.

22 So, what we thought would be a

1 relatively-easy mechanism of having a guidance on
2 materials that are allowed for organic crop
3 production is a mechanism, but it is not
4 something that we can amend very quickly or
5 easily. It sometimes might take some time to do
6 that.

7 MEMBER SONNABEND: Okay. I'm not sure
8 how much that helped exactly, but --

9 (Laughter.)

10 You see where some of us have to fake
11 it at times.

12 (Laughter.)

13 All right. So, the second motion that
14 we put forward on this was organic sources of
15 ancillary substances must be used when available.
16 This came out of our Subcommittee discussions
17 about particularly some of the substrates when
18 you are producing, say, a vinegar mother or a
19 sour dough starter, or any of these things that
20 are multiplied in bulk and, then, carried on.
21 There is really no reason why you shouldn't be
22 using organic vinegar and organic sponge for your

1 sour dough starter, and things like that.

2 However, we actually clearly didn't
3 think it through enough because we didn't
4 distinguish between the source, like if it is
5 maltodextrin, whether it has to be organic
6 maltodextrin or just the core in the maltodextrin
7 is to be organic, and all the huge amount of
8 different secondary ingredients.

9 We heard from certifiers who were very
10 concerned about the paperwork burden of this. We
11 did never intend this to be in the National List
12 rule as an annotation. This was strictly for
13 guidance, which means that it wouldn't have the
14 absolute force of law, but, then, just be an
15 encouragement to people to use organic when
16 available.

17 And we forgot the word "commercially,"
18 which we fully intended to say "commercially
19 available" rather than just "available". And, of
20 course, a lot of people noticed that.

21 So, we think we have more work to do.
22 And one of the good features about not having to

1 do this during the sunset process is that we can
2 withdraw it and take it back to the Subcommittee
3 to work on further. And during the next six
4 months or less, we will look at some of the
5 issues that I have raised here, combining it with
6 dairy cultures, how the Department is going to
7 deal with changes, and getting wording right, if
8 we are going to keep an organic commercial
9 availability clause in there, which we may or may
10 not decide to keep.

11 So, with that, I am going to propose
12 -- or do I move to withdraw the two motions?

13 MEMBER CHAPMAN: Jean, would you like
14 to explain?

15 CHAIR RICHARDSON: Miles?

16 MR. McEVOY: Yes, I just wanted to
17 also reiterate that, as you said, guidance
18 doesn't have that regulatory authority, that
19 guidance is something that is used to explain the
20 regulations, gives a way to comply with the
21 regulations. So, if you put this in guidance, it
22 is what is a way to comply with the requirements.

1 It doesn't have the same authority as putting it
2 into the regulations.

3 CHAIR RICHARDSON: Okay. So, the
4 simplest and friendliest way for us to do this
5 would be for Zea, Tom, and Tracy, who were the
6 people who made the two motions that are before
7 us, if they would agree that they would like to
8 withdraw that motion. That's is the first step.

9 Would you like to withdraw that
10 motion?

11 MEMBER SONNABEND: Yes, I would like
12 to.

13 MEMBER CHAPMAN: Yes.

14 VICE CHAIR FAVRE: Yes.

15 CHAIR RICHARDSON: Jolly good.

16 Then, what we will do is we will say,
17 would you like to make a new motion? Zea?

18 MEMBER SONNABEND: I would like to
19 move that we send this subject and both motions
20 back to the Handling Subcommittee for further
21 work.

22 CHAIR RICHARDSON: Second?

1 MEMBER CHAPMAN: I'll second.

2 CHAIR RICHARDSON: There is a motion
3 made and seconded to send this -- what's it
4 called? -- ancillary substances permitted in
5 microorganisms proposal back to the Subcommittee.
6 This requires only a simple majority.

7 We will go around in the usual
8 sequence and take your votes. You will be voting
9 to send this back to Subcommittee.

10 Who are we starting with? I have lost
11 track.

12 MEMBER DE LIMA: Me.

13 CHAIR RICHARDSON: Oh, Lisa, jolly
14 good. There you go.

15 MEMBER DE LIMA: Yes.

16 MEMBER WALKER: Yes.

17 MEMBER THICKE: Yes.

18 MEMBER DANIELS: Yes.

19 MEMBER TAYLOR: Yes.

20 MEMBER MARAVELL: Yes.

21 MEMBER BECK: Yes.

22 MEMBER SWAFFAR: Yes.

1 VICE CHAIR FAVRE: Yes.

2 MEMBER CHAPMAN: Yes.

3 MEMBER BONDERA: Yes.

4 MEMBER SONNABEND: Yes.

5 MEMBER STONE: Yes, ma'am.

6 CHAIR RICHARDSON: The Chair votes
7 yes.

8 Do you have a question? Yes, sir?
9 Point of order or what?

10 MEMBER STONE: Yes, curiosity. No,
11 not about the vote.

12 So, I guess some of my ignorance on
13 some -- if you are talking about commercial
14 availability, why is it not a 606 item instead of
15 605(a)?

16 CHAIR RICHARDSON: Is this to the
17 motion?

18 MEMBER STONE: No, it's just a
19 conversation about it

20 CHAIR RICHARDSON: Well, could we
21 count up the results of the motion first? And
22 then, you could ask that as a point of technical

1 information or some such.

2 Tracy, did you add it up?

3 VICE CHAIR FAVRE: I did.

4 We had 14 yes, zero no. No
5 abstentions. No recusals. One absent. The
6 motion passes.

7 CHAIR RICHARDSON: Mr. Stone, you have
8 a question?

9 MEMBER STONE: Yes. So, it is kind of
10 two-part. So, Miles, if it is guidance, but if
11 we are putting amending the National List, then
12 that takes it out of guidance into rulemaking?
13 And then, if that is the case, I'm confused, if
14 we are talking commercial availability, why it is
15 not 606.

16 MEMBER CHAPMAN: Zea, please.

17 MEMBER SONNABEND: Okay. It is 605(a)
18 because this only goes with the microorganisms,
19 and the microorganisms are on 605(a).

20 MR. McEVOY: Right. So, it is similar
21 to yeast, which is also on 605 and has a
22 commercial availability clause.

1 But I would say that this motion would
2 be very confusing for us if it had passed
3 because, if you wanted it to be guidance, it
4 looks like it is an amendment to the rule. So,
5 it doesn't look like guidance from what this
6 motion says.

7 MEMBER STONE: Right. That is why I
8 brought it up, if we are going to consider it.

9 MEMBER CHAPMAN: Okay. So, this
10 proposal has now been sent back to Subcommittee.

11 And that concludes the six proposals
12 that were before the NOSB from the Handling
13 Subcommittee.

14 We will now move on to the 2016 sunset
15 review items. I would like to remind the Board
16 that these items all come from the Subcommittee
17 as seconded motions to remove in order to allow
18 the full Board to vote on the sunset items.

19 The first one on the list is egg white
20 lysozyme.

21 Dr. Brines, if you could give the
22 introduction?

1 DR. BRINES: Sure. Thank you.

2 Egg white lysozyme is currently listed
3 under Section 205.605(a) of the National List
4 under non-synthetics allowed. The listing reads,
5 "Egg white lysozyme, CAS No. 9001-63-2". The
6 most recent Technical Report for this substance
7 was completed in 2011.

8 Thank you.

9 MEMBER CHAPMAN: Thank you.

10 I would like to hand it over to Tracy
11 to give the Handling Subcommittee recommendation.

12 VICE CHAIR FAVRE: Thank you, Tom.

13 As most of you know, egg white
14 lysozyme is a purified enzyme preparation
15 extracted from chicken egg whites. It is using
16 an inert polymer resin. It is used primarily as
17 a bacterial during fermentation or food
18 processing, and it is quite often seen or is
19 purported to be seen and used in winemaking and
20 cheesemaking.

21 The public comments, we actually as a
22 Subcommittee raised the question, "Seeks input

1 from the public and industry as to whether there
2 currently exists egg white lysozyme manufacturers
3 using organic egg whites to make this material."

4 We didn't actually receive a great
5 deal of input on this, although there were,
6 again, concerns raised about the fact that the
7 egg whites used in the manufacture of this
8 ingredient could be from conventionally-raised
9 eggs. And we also did not receive a great deal
10 of information about ancillary substances
11 generally. There was a fair amount of support in
12 removal of egg white lysozyme and a couple of
13 supporters of relisting.

14 MEMBER CHAPMAN: Thank you.

15 So, the motion before the Board is the
16 Handling Subcommittee found -- that is not it.
17 Yes. The motion is to remove the egg white
18 lysozyme from 205.605(a). The motion was made by
19 Tracy, seconded by Jean. The motion failed with
20 zero in favor, five against, zero abstaining,
21 zero recusing, and three absents.

22 I will now open it up for discussion.

1 Colehour?

2 MEMBER BONDERA: Yes. And I again
3 apologize. As a senior at this table, I am
4 following procedural questions because this is
5 really the first time that the NOSB has gone
6 through this process, and some of the procedures
7 being used are as of yet confusing to me,
8 although to some of the new members they are
9 going to seem absolutely normal because no one
10 has done it.

11 And so, I would like to ask, because
12 I am aware and I can't cite out of my own
13 personal -- so, I can't cite in handling specific
14 examples, but I remember seeing Harold showing me
15 that he had used some checklist forms for some of
16 the handling sunset materials. I am not positive
17 on that. So, I am not going to be held to that.

18 But I know that I was not the only one
19 in this last process to use our traditional
20 checklist forms on sunset materials. However, I
21 am curious to hear if those things have been
22 somehow summarized or all of those different

1 comments from those checklists which aren't
2 appearing in these documents, where that
3 information is.

4 And again, I don't know if it applies
5 to this particular item. I am not saying it
6 does. So, it is a procedural question.

7 Thank you.

8 CHAIR RICHARDSON: Let me see if I can
9 take a shot at answering that very valid question
10 that you are raising, Colehour.

11 As you know, the checklist, you know,
12 the document that has those yeses and noes, where
13 sometimes we fit in both yes and no, that is a
14 document that was developed sort of in-house over
15 the years. It certainly is a very useful
16 document for helping us focus, be sure we are
17 asking the right questions as we develop
18 materials, but it is not required by OFPA. OFPA
19 obviously has the criteria that we are trying to
20 address as we look at each one of these
21 materials.

22 There are so many materials coming up

1 for sunset that in the discussions on the
2 Handling Subcommittee we discussed the idea of
3 using the concepts that there are in the
4 checklists. Some folks actually sent in -- I
5 can't remember if people did send in the
6 checklists or not, quite frankly.

7 But the analysis of what is in the
8 checklist should appear in an abbreviated form,
9 the way in which each of the presenters put their
10 information into these new templates that we are
11 using as part of this new procedure.

12 So to speak, those checklists would be
13 in the work product of each of the Committee
14 members, especially the lead people would have in
15 their own documents. But they have been
16 synthesized into a verbal format that we hope
17 meets the intent of OFPA rather than take up
18 another 1,000 pages of Federal Register by having
19 checklists. Since they are not required and
20 there are so many materials, the Handling
21 Subcommittee felt that this was a very reasonable
22 way to approach it.

1 You could, of course, if you have
2 questions, additional questions you want to ask,
3 obviously, this is the time to bring it out on
4 each of the individual materials.

5 MEMBER CHAPMAN: Colehour?

6 MEMBER BONDERA: Thank you, Chair.

7 Yes, if Lisa had something, that's
8 fine.

9 MEMBER CHAPMAN: Lisa?

10 DR. BRINES: Sure. Thank you for the
11 question.

12 Just in support of what Jean had said,
13 the checklists are designed as a tool to help the
14 Board document the evaluation of materials
15 against the OFPA criteria. So, they are
16 typically used with petitions. They can be
17 particularly useful where the Board hasn't looked
18 at a material before to make sure that there is a
19 documented review against each of the criteria.

20 For sunset materials, those previous
21 checklists and tools are certainly available for
22 review by the Board. But, again, the checklist

1 is just one tool that is available. The
2 requirement is to evaluate the substance against
3 OFPA, not necessarily using the particularly
4 checklists. So, they are optional for that
5 purpose.

6 Thank you.

7 MEMBER CHAPMAN: I had Colehour, then
8 Zea.

9 MEMBER BONDERA: Again, I apologize
10 for fixating on this distraction. However, it
11 was not made clear to me that the checklists --
12 like I mentioned, Harold showed me at least one,
13 and I don't know on what material, that he had
14 prepared, that were prepared. And I prepared a
15 number of them. Especially on items that are up
16 for sunset that there is in the record no
17 checklist on. Even though they are in sunset,
18 that had not ever been done.

19 It is concerning to me that the
20 materials were prepared and are now not in the
21 record at this time because they were perceived
22 as extra materials that we were using internally.

1 That was not made clear to me, that they wouldn't
2 become part of the record.

3 Thank you.

4 MEMBER CHAPMAN: Zea?

5 MEMBER SONNABEND: I believe those
6 checklists are posted online. We received a
7 number of comments from people who read them
8 online and commented on checklists. They are. I
9 mean, I know they are. I prepared one for TSPP,
10 for instance.

11 MEMBER CHAPMAN: Paula?

12 MEMBER DANIELS: Colehour, I just have
13 a question for you. Independent of the
14 checklist, is there some information that you
15 know of in it that you would want to express at
16 this point regarding this particular ingredient?

17 MEMBER BONDERA: No, and I apologize.

18 MEMBER DANIELS: Okay.

19 MEMBER BONDERA: It was a procedural
20 question that was outside the scope of this
21 particular item. I only brought it up because of
22 the context.

1 MEMBER DANIELS: Right.

2 MEMBER BONDERA: And I think if what
3 Zea said is verifiable, which I sort of sensed at
4 some level was happening, but I wanted to put it
5 in the record that that is where these documents
6 are, if that is the case. So, if what Zea said
7 is accurate, then very good.

8 Thank you.

9 MEMBER CHAPMAN: Tracy?

10 VICE CHAIR FAVRE: Colehour, to your
11 question that you weren't made aware, we had at
12 least two separate conversations in the Handling
13 Subcommittee that I remember distinctly where we
14 had discussions on whether or not we would be
15 doing checklists on all the materials.

16 And the general consensus of the group
17 was that it wasn't required, and if someone
18 wanted to use them to help structure the
19 framework and the decisionmaking process, that's
20 fine. But we don't have checklists on every
21 single one of these materials.

22 MEMBER CHAPMAN: Any further

1 discussion on the motion?

2 Mac?

3 MEMBER STONE: Having said that,
4 Tracy, there is a history of necessity and use
5 for these since they came in with the original or
6 most of them came in back in the '01 days, right?
7 There seems to be a long history here, I think.

8 MEMBER CHAPMAN: I can speak to the
9 little bit of it. Again, echoing what Madam
10 Chair had said, our review is contained within
11 the section of this proposal, if you want to
12 scroll up on the screen, entitled "Subcommittee
13 Review," in which we examine that criteria and
14 any new information that was provided.

15 Any further questions?

16 (No response.)

17 Hearing none, I do have a statement on
18 this proposal.

19 Given that there was a limited amount
20 of support from the industry for egg white
21 lysozyme, I am having a hard time justifying its
22 necessity.

1 Without any further debates, the
2 question on the motion will be called.

3 CHAIR RICHARDSON: The question is
4 being called on egg white lysozyme on a motion to
5 remove sunset 2016 material.

6 Does everyone understand the motion?
7 If you vote yes on this motion, it is a motion to
8 remove. If you vote no, you will be keeping it
9 on the list.

10 I won't do that for every one of them,
11 but just a reminder that we are doing things a
12 little bit differently than in the past.

13 So, we start with Calvin?

14 MEMBER WALKER: Yes.

15 MEMBER THICKE: Yes.

16 MEMBER STONE: No.

17 MEMBER DANIELS: Yes.

18 MEMBER TAYLOR: Yes.

19 MEMBER MARAVELL: Yes.

20 MEMBER BECK: No.

21 MEMBER SWAFFAR: Yes.

22 VICE CHAIR FAVRE: Yes.

1 MEMBER CHAPMAN: Yes.

2 MEMBER BONDERA: Yes.

3 MEMBER SONNABEND: Yes.

4 MEMBER DE LIMA: Yes.

5 CHAIR RICHARDSON: The Chair votes no.

6 VICE CHAIR FAVRE: The vote is 11 yes,
7 three noes. No abstentions. No recusals. One
8 absent. The motion passes.

9 MEMBER CHAPMAN: The next item on the
10 agenda is L-malic acid.

11 Dr. Brines, if you could read the
12 introduction?

13 DR. BRINES: Thank you.

14 The current listing for L-malic acid
15 is on Section 205.605(a) of the National List
16 under non-synthetics allowed.

17 The current listing reads, "L-malic
18 acid, CAS No. 97-67-6". The most recent
19 Technical Report available from this substance
20 was prepared in 2003.

21 Thank you.

22 MEMBER CHAPMAN: Thank you.

1 Ashley, would you present the
2 Subcommittee review?

3 MEMBER SWAFFAR: The Handling
4 Subcommittee found no concerns regarding the
5 continued relisting of L-malic acid on the
6 National List.

7 We had several public comments from
8 several users of the product, items from snack
9 foods to mayonnaise to salad dressings, to chips,
10 to salsa. And they all said that it was
11 essential to keep it in there. They said there
12 were alternatives, but did impair the taste.
13 There were a couple that did oppose the
14 relisting.

15 MEMBER CHAPMAN: Thank you. Thank
16 you, Ashley.

17 The motion from the Subcommittee
18 before the Board is the motion to remove L-malic
19 acid, CAS No. 97-67-6, from Section 205.605(a).
20 The motion was made by Joe Dickson, seconded by
21 Tracy. The motion failed with zero in favor,
22 five opposed, no abstentions, no recusals, and

1 three absent.

2 Is there any discussion on this item?

3 Yes, Calvin? And then, Zea.

4 MEMBER WALKER: Just to help me, I
5 seen that the Committee voted zero yes, five no.
6 Was that a real vote no or just to get it to the
7 full Board?

8 MEMBER CHAPMAN: With a vote like
9 this, I believe it was the Subcommittee's
10 intention for this material to remain listed,
11 since it was a vote against sunset removal.

12 Zea?

13 MEMBER SONNABEND: Well, this one is
14 a classic case of, you know, it is hard to get
15 producers to comment, which is why we asked
16 certifiers how many that they certify used it.
17 And that information wasn't presented here in the
18 summary because I know some of it was only handed
19 to us at the last minute.

20 But I just know from firsthand
21 experience that it is used pretty extensively in
22 the making of hard cider from apples. Of course,

1 apples product malic acid. But because you can't
2 use any sulfites in hard cider, it is very
3 important to adjust the acidity properly, and the
4 apples going in don't always have the correct pH.
5 And so, the malic acid helps balance the tannins
6 and the acidity, which you need to make good hard
7 cider. And it is really considered essential in
8 hard cider making, although that comment was
9 really not submitted by anyone directly.

10 MEMBER CHAPMAN: I had seen a decent
11 amount of support from the industry and did not
12 find public comments that raised new concerns
13 related to the OFPA criteria.

14 Any other further discussion on this
15 item?

16 Colehour?

17 MEMBER BONDERA: Thank you.

18 Yes, I have to admit I am not up-to-
19 speed on L-malic acid. My question is -- I don't
20 know if it is to Ashley or to the Subcommittee --
21 but where things are at in terms of a TR or
22 updated information sought upon review. Since

1 the background doesn't show anything that recent,
2 I am curious where that process, how that went
3 within the Subcommittee.

4 Thank you.

5 MEMBER CHAPMAN: Ashley?

6 MEMBER SWAFFAR: So, this was before
7 my time, actually. This was a Joe ingredient.
8 So, as it says here, the last year we had was
9 from '03. I don't show where they have asked for
10 anything.

11 But, if anybody else on the Committee
12 would like to help on that? Zea? Zea?

13 MEMBER SONNABEND: For this particular
14 round, back -- it was what? -- two years ago now
15 that we had to decide on a TR request. There was
16 quite a limited budget, and it was in between
17 contracts for TRs. And so, we were not able to
18 do very many. We focused on the microorganisms
19 and one or two other. We did the hydrogen
20 chloride, but we did not do TRs on all of these.

21 MEMBER CHAPMAN: And I would like to
22 read from the Subcommittee review that says, "Two

1 other commenters expressed concern that the
2 original TAP review evaluated DL-malic acid, the
3 synthetic form, rather than L-malic acid, the
4 non-synthetic form currently listed. However,
5 the review of the 2003 TAP showed that the
6 reviews very clearly accounted for the fact that
7 there were two forms of this substance and very
8 clearly recommended the synthetic will not be
9 listed and L-malic acid be listed on 604(a)."

10 Any further discussion on this item?

11 (No response.)

12 Seeing none, call the question.

13 CHAIR RICHARDSON: The question has
14 been called.

15 Does everyone understand the motion on
16 the Floor? There is a motion to remove L-malic
17 acid from the National List.

18 Who do we start with? Francis.

19 MEMBER THICKE: No.

20 MEMBER STONE: No, ma'am.

21 MEMBER DANIELS: No.

22 MEMBER TAYLOR: Yes.

1 MEMBER MARAVELL: No.

2 MEMBER BECK: No.

3 MEMBER SWAFFAR: No.

4 VICE CHAIR FAVRE: No.

5 MEMBER CHAPMAN: No.

6 MEMBER BONDERA: Yes.

7 MEMBER SONNABEND: No.

8 MEMBER DE LIMA: No.

9 MEMBER WALKER: No.

10 CHAIR RICHARDSON: The Chair votes no.

11 VICE CHAIR FAVRE: The vote is two

12 yes, 12 no. Zero abstention. Zero recusals.

13 One absent. The motion fails.

14 MEMBER CHAPMAN: The next item on the
15 agenda is microorganisms.

16 Dr. Brines, if you would give the
17 intro?

18 DR. BRINES: Thank you.

19 The current listing for microorganisms
20 is on Section 205.605(a) of the National List
21 under non-synthetics allowed. The current
22 listing reads as follows: "Microorganisms. Any

1 food grade bacteria, fungi, and other
2 microorganisms".

3 The most recent Technical Report for
4 this substance was prepared for the sunset 2016
5 review.

6 And we did note one typo in the
7 meeting materials for this where it lists on the
8 screen, under sub-letter (b), but it is (a) under
9 the non-synthetic listing.

10 Thank you.

11 MEMBER CHAPMAN: Thank you.

12 I would now like Zea to present the
13 Subcommittee review.

14 MEMBER SONNABEND: Thank you.

15 Well, microorganisms is a wide
16 category with very many uses in organic handling.
17 These uses are very vital and used to make all
18 different types of products.

19 In the first round of comments, we
20 were asked to give a better definition for
21 microorganisms and to make it clear which things
22 were and were not included in the listing, and to

1 discuss some of the issues around it, like
2 verifying fermentation, and the ancillary
3 substances, of course, was a big one.

4 Pretty much everybody agrees that
5 microorganisms should remain listed. And most
6 people did appreciate us giving a clearer
7 definition to indicate that what this listing
8 includes is living organisms. And the ones that
9 are either dead or extracted have to have their
10 own listing if they are going to be on the
11 National List and are not automatically included
12 in this.

13 And then, also, algae was not covered
14 in the TR and not considered to be part of this
15 listing.

16 Since the TR covered bacteriophage, we
17 included it here even though it was a relatively-
18 newer thing that has not been reviewed or in
19 historic use for quite as long as the other
20 microorganisms.

21 Let's see, are there any other key
22 points I have to make? Oh, yes.

1 Because of the concern on the
2 ancillary substances list about having it to set
3 in and not able to change it very easily, we
4 decided to remove the table from the main listing
5 of microorganisms.

6 And is that up? Michelle, do you have
7 the version I gave you with the yellow
8 highlighting?

9 MS. ARSENAULT: I do.

10 MEMBER SONNABEND: Okay. And we are
11 proposing making two small changes to what was
12 presented, neither of which the Department has
13 declared to be substantive.

14 So, one of them is to remove the
15 table, and the table will be thoroughly covered
16 in the ancillary substance proposal. But we are
17 just going to refer in this document to that.
18 And so, under the ancillary substances section
19 where it says, "The following were reviewed," the
20 wording is -- and Michelle will put this up in
21 just a minute -- but the wording is going to
22 change to say, "The following functional classes

1 were reviewed," and then just give the classes
2 that were in the lefthand side of the table:
3 anti-caking and anti-stick agent; colors and
4 fillers, both agricultural non-synthetic and
5 synthetic; preservatives; stabilizers;
6 cryoprotectant, and substrate. "See the separate
7 ancillary substance proposal for a full list of
8 the specific substances within these categories."
9 So, that makes it very clear to everybody.

10 And then, because of the recent public
11 comment that has come in about the bacteriophage,
12 we have decided that we are going to remove that
13 word from our definition at the moment and make a
14 separate recommendation for that at our future
15 meeting. So, that will give us more chance to
16 take a look at some of the concerns that were
17 raised and also look at the TR more closely and
18 see if we need to say separate things about
19 bacteriophage.

20 So, is everyone clear on that?

21 Now we can, you know, if people more
22 time to review it, since Michelle still doesn't

1 have it on the screen, we can put the voting off
2 until Thursday. I know I circulated it to the
3 Handling Committee, but not necessarily to
4 everyone on the Board. But we can do that.

5 MEMBER CHAPMAN: We'll open up for
6 discussion.

7 Colehour?

8 MEMBER BONDERA: Thank you.

9 Zea, just for the sake of clarity,
10 when I try to look at it very briefly while you
11 are saying what you are saying, it appears to me
12 that the table that is in what you had drafted as
13 a proposal, which is now going back to
14 Subcommittee, is exactly the same as the table
15 that is in this document that you are slightly
16 modifying. Is that correct?

17 MEMBER SONNABEND: It is exactly the
18 same. But, if we change the other one, then it
19 won't be exactly the same, which is why we have
20 to take it out.

21 MEMBER BONDERA: That makes sense.
22 Thank you. That is what I understand, but I just

1 wanted to make sure that I wasn't missing some
2 detail.

3 Thank you.

4 MEMBER CHAPMAN: There we go.

5 MEMBER SONNABEND: So, the will of the
6 Chair or the Subcommittee Chair voting today
7 versus voting Thursday, or more discussion on
8 this?

9 MEMBER CHAPMAN: I am comfortable with
10 voting now. I am interested in hearing from the
11 Board how comfortable they are or uncomfortable,
12 I should say.

13 VICE CHAIR FAVRE: I'm ready to vote.

14 MEMBER SONNABEND: The yellow part is
15 where the table used to be.

16 MEMBER CHAPMAN: Any further
17 discussions?

18 Colehour?

19 MEMBER BONDERA: Thank you.

20 Yes, I have, I guess, two minor
21 questions. And one is on your final sentence, on
22 what is highlighted there in yellow. I don't

1 know why when I first read it, but the word
2 "separate" confuses me a little bit. And I just
3 wonder if it just said, "See the ancillary
4 substance proposal," but I don't want to
5 wordsmith. It just makes it sound like it is
6 somehow associated, even though it is separate.
7 Partly because it doesn't exist yet is partly why
8 I am wondering.

9 MEMBER SONNABEND: Well, it does
10 exist. It got sent back to Subcommittee, though.

11 MEMBER BONDERA: Right, right.

12 MEMBER SONNABEND: And imagine you are
13 reading this in, say, five years --

14 MEMBER BONDERA: Yes, yes.

15 MEMBER SONNABEND: -- when it is the
16 only thing you find.

17 MEMBER BONDERA: Thank you.

18 And I guess I would like to ask you
19 -- and I apologize to have you repeat -- but can
20 you either repeat or clarify for me what the
21 commentary that came regarding this particular --
22 the public commentary that was brought in that

1 you reviewed in terms of the support, could you
2 summarize it again for me? Especially, it
3 sounded like there was some support, but it
4 sounded like it was a balance a little bit. And
5 I couldn't --

6 MEMBER SONNABEND: For microorganisms
7 in general or for removing the list?

8 MEMBER BONDERA: Removing the list.

9 MEMBER SONNABEND: Oh, okay.

10 MEMBER BONDERA: Thank you.

11 MEMBER SONNABEND: Well, many, many of
12 the commenters on the ancillary substances were
13 concerned that having it actually be in the
14 official motion would set it in stone for only
15 those, and if a new one came up, it would be very
16 hard to change it and very hard to keep a table
17 in this proposal in sync with the table in the
18 separate proposal, which I have to admit to be
19 true because, even in creating it, we changed it
20 a little bit. And then, I forgot to go back and
21 change it in both places until the last day. I
22 caught it before we had to turn it in.

1 MEMBER CHAPMAN: Any further
2 discussion?

3 MEMBER DANIELS: I'm getting a bit
4 lost.

5 MEMBER CHAPMAN: Yes.

6 MEMBER DANIELS: So, what are we going
7 to vote on?

8 MEMBER CHAPMAN: The motion before the
9 Subcommittee -- Michelle, if you could scroll
10 down? I have it right here.

11 MEMBER DANIELS: It's the motion that
12 was presented in our materials?

13 MEMBER CHAPMAN: It is the motion to
14 remove. The Subcommittee found no concerns
15 regarding the continual listing of
16 microorganisms. The suggestion for this motion
17 is the whole NOSB needs to consider the vote on
18 each material rather than just the Subcommittee
19 motion to remove microorganisms from 205.605(b).
20 The motion was made by Zea, seconded by Jean.
21 The motion failed. That is zero in favor, six
22 against, two absent.

1 Do you have further questions?

2 MEMBER DANIELS: I thought Zea had
3 mentioned taking this back to Committee, but it
4 sounds like we are going to vote on it now.

5 MEMBER CHAPMAN: I believe the taking
6 it back to Committee was related directly to the
7 ancillary substances.

8 MEMBER DANIELS: Yes.

9 MEMBER CHAPMAN: And then, there was
10 a correction or a change in the narrative section
11 of the review where there was an ancillary
12 substance table --

13 MEMBER DANIELS: Okay.

14 MEMBER CHAPMAN: -- to reference that
15 proposal.

16 MEMBER DANIELS: I'm tracking now.

17 Thank you.

18 MEMBER CHAPMAN: No problem.

19 Any other further discussion?

20 MEMBER SONNABEND: Lisa, did you have
21 your hand up?

22 DR. BRINES: Thank you.

1 I just wanted to confirm that the
2 removal was from 205.605(a), non-synthetics
3 allowed.

4 MEMBER SONNABEND: Okay. This is
5 where the mistake is. Okay.

6 DR. BRINES: Thank you.

7 MEMBER CHAPMAN: Yes, it should be
8 from 205.605(a), "A" for Austin.

9 Okay. Seeing no other debate, I will
10 re-read the motion to be clear and, then, call
11 the question.

12 The motion is to remove microorganisms
13 from 205.605(a). Motion made by Zea, seconded by
14 Jean. They were zero in favor, six against, and
15 two absent.

16 I call the question.

17 CHAIR RICHARDSON: The voting I think
18 starts with Mac.

19 MEMBER STONE: No, ma'am.

20 MEMBER DANIELS: No.

21 MEMBER TAYLOR: No.

22 MEMBER MARAVELL: No.

1 MEMBER BECK: No.

2 MEMBER SWAFFAR: No.

3 VICE CHAIR FAVRE: No.

4 MEMBER CHAPMAN: No.

5 MEMBER BONDERA: No.

6 MEMBER SONNABEND: No.

7 MEMBER DE LIMA: No.

8 MEMBER WALKER: No.

9 MEMBER THICKE: No.

10 CHAIR RICHARDSON: The Chair votes no.

11 MEMBER SONNABEND: And so, will the
12 Chair note that the issue of bacteriophage will
13 be referred back to Committee for the next round?

14 CHAIR RICHARDSON: The Chair notes
15 that bacteriophage will be referred back to the
16 Subcommittee for further discussion.

17 VICE CHAIR FAVRE: Okay. The count on
18 the vote was zero yes, 14 no, one absent. The
19 motion fails.

20 MEMBER CHAPMAN: The next item on the
21 agenda is activated charcoal.

22 Dr. Brines, if you could give the

1 introduction?

2 DR. BRINES: Thank you.

3 The current listing for activated
4 charcoal is on Section 205.605 of the National
5 List, paragraph (b), synthetics allowed. The
6 current listing reads, "Activated charcoal, CAS
7 Nos. 7440-44-0, 64365-11-3, only from vegetative
8 sources for use only as a filtering aid."

9 The most recent Technical Report for
10 this substance was completed in 2002.

11 Thank you.

12 MEMBER CHAPMAN: Thank you, Dr.
13 Brines.

14 This material was under Harold's
15 review. I will attempt to give a summary.

16 Activated charcoal is an important
17 filter aid used in organic handling. It is
18 widely used to filter water and various other
19 substances that are used in organic handling such
20 as refined oils, grape juice, clear liquid
21 products, and used in many distilleries.

22 Nine comments were received in support

1 of activated charcoal, mostly speaking to its
2 continued necessity in organic handling.

3 The opposition commenter did not
4 support relisting as it is currently listed. The
5 commenter questioned activated charcoal's impacts
6 on the environment and health, necessity,
7 compatibility with organics, and the ancillary
8 substances. The opposition cited a previous TR.
9 However, it did not bring new information related
10 to the environmental or health impacts,
11 necessity, or compatibility. The opposition
12 disagrees with the Handling Subcommittee's
13 finding of no ancillary substances present.

14 The Subcommittee found no concerns
15 regarding the continued listing of activated
16 charcoal. The item comes to the full Board as a
17 seconded motion to sunset remove. It was moved
18 by Harold and seconded by Tracy.

19 The motion -- I will read it -- is "to
20 remove activated charcoal, CAS No. 7440-44-0 and
21 64365-11-3, from 205.605(b)."

22 Any discussion on this item?

1 Paula?

2 MEMBER DANIELS: I do have a question
3 regarding the annotation. It does seem that it
4 had an annotation previously, and at this point
5 it does not. So now, this is where, being new, I
6 am getting confused about procedural issues. But
7 can the annotation carry forward or -- yes?

8 MEMBER CHAPMAN: I will try to answer
9 it, and then, refer to Dr. Brines, that the
10 annotation does carry forward. And that was
11 probably just a shorthand in the reading of the
12 motion.

13 Dr. Brines?

14 DR. BRINES: That is my understanding.
15 Yes, we wouldn't remove the material without
16 removing its associated annotation.

17 MEMBER DANIELS: Okay. Thank you.

18 MEMBER CHAPMAN: So, to be clear, I
19 will re-read the motion as "Motion to remove
20 activated charcoal, CAS No. 7440-44-0 and
21 64365-11-3, from 205,605(b), only from vegetative
22 sources for use only as a filter aid."

1 Any further discussion on this item?

2 (No response.)

3 CHAIR RICHARDSON: Ready for the
4 question, and I think we start with --

5 MEMBER CHAPMAN: I was going to speak
6 just real quick.

7 CHAIR RICHARDSON: Well, I beg your
8 pardon.

9 MEMBER CHAPMAN: Yes. I did find the
10 comment from the industry continued to state its
11 support, and I believe it should remain listed as
12 necessary for organic handling.

13 Thank you.

14 CHAIR RICHARDSON: Ready for the vote,
15 starting with Paula.

16 MEMBER DANIELS: Okay. So,
17 procedurally, no.

18 CHAIR RICHARDSON: Right.

19 (Laughter.)

20 (Pause.)

21 Okay. Jennifer?

22 MEMBER TAYLOR: I was asking a

1 question about how to interpret a yes or no vote,
2 if you can explain that again.

3 CHAIR RICHARDSON: So, a reminder that
4 these are sunset materials. And so, it is motion
5 to remove. If you wish to remove it, you would
6 say yes. If you wish it to stay on the list, you
7 would say no.

8 MEMBER TAYLOR: Okay.

9 CHAIR RICHARDSON: It is your vote.

10 MEMBER TAYLOR: Oh. Yes.

11 MEMBER MARAVELL: No.

12 MEMBER DANIELS: No.

13 MEMBER BECK: No.

14 MEMBER SWAFFAR: No.

15 VICE CHAIR FAVRE: No.

16 MEMBER CHAPMAN: No.

17 MEMBER BONDERA: No.

18 MEMBER SONNABEND: No.

19 MEMBER DE LIMA: No.

20 MEMBER WALKER: No.

21 MEMBER THICKE: No.

22 MEMBER STONE: No, ma'am.

1 CHAIR RICHARDSON: The Chair votes no.

2 VICE CHAIR FAVRE: The vote is one

3 yes, 13 noes, one absent. The motion fails.

4 MEMBER CHAPMAN: The next item on the

5 agenda is peracetic acid.

6 Dr. Brines, if you could give the

7 intro?

8 DR. BRINES: Thank you.

9 The current listing for peracetic acid

10 is included at Section 205.605 of the National

11 List under paragraph (b), synthetics allowed.

12 The current reads as follows: "Peracetic acid,

13 peroxyacetic acid, CAS No. 79-21-0. Peracetic

14 acid, peroxyacetic acid" -- sorry, there is a

15 duplication in the published materials. "For use

16 in wash and/or rinse water according to FDA

17 limitations, for use as a sanitizer on food

18 contact surfaces."

19 The most recent Technical Report

20 prepared for peracetic acid was completed in

21 2000.

22 Thank you.

1 MEMBER CHAPMAN: This was my item to
2 review. And you can't say the organic industry
3 doesn't get along on everything because this
4 material did provide, had overwhelming support in
5 favor of it.

6 Peracetic acid is an important
7 sanitizer used in organic handling. It is widely
8 used as a sanitizer on food contact surfaces and
9 as a disinfectant on fruits and vegetables.

10 Public comment was overwhelmingly in
11 support, with 18 comments in support from a
12 cross-cutting of the community, including members
13 of the public, industry, trade associations, and
14 interest groups. One comment was neutral, and no
15 comment was in opposition. We received two
16 comments on the ancillary substances from
17 material review organizations, one stating the
18 review is sufficient and another asking for a
19 more explicit acknowledgment.

20 The Subcommittee found no concerns
21 regarding the continued listing of peracetic
22 acid. This item comes to the full Board as a

1 seconded motion to sunset remove. It was moved
2 by myself, Tom, and seconded by Zea. The motion
3 failed, zero yes, seven no, one absent.

4 We will open it up for discussion at
5 this time.

6 Zea?

7 MEMBER SONNABEND: I think also one
8 other comment was justified, that there are some
9 ancillary substances in this and the other
10 sanitizers.

11 We had decided, because this was a
12 2016 sunset and we were going to start with
13 microorganisms, that we are not going to try and
14 attempt to grapple with all of the ancillaries
15 and all of the other 2016 sunsets. And this
16 issue did not come forward in our first posting
17 on this material.

18 The thrust of the comments seemed to
19 be that, since the sanitizers are somewhat
20 different in classification, that maybe all
21 ancillaries and sanitizers should not be dealt
22 with in the same as the rest of the ingredient-

1 type items.

2 I sort of wonder if the Department has
3 any thoughts on that, because I am not exactly
4 sure how to proceed. But I think it is important
5 for us to acknowledge that issue.

6 MS. BROWN ROSEN: Well, I will just
7 speak to the peracetic acid issue here. That is
8 that the peracetic acid has a specific reference
9 to FDA allowance, and we believe that covers the
10 inert ingredients that are found in the peracetic
11 acid products, which are registered pesticides.
12 So, we didn't think there's coverage here. We
13 might want to revisit the sanitizer issue in the
14 future for the other materials. I think that
15 would be a good idea.

16 MEMBER SONNABEND: Thank you, Emily.

17 MEMBER CHAPMAN: Any further
18 discussion?

19 (No response.)

20 Seeing none, call the question.

21 CHAIR RICHARDSON: The question is
22 being called, the motion to remove peracetic

1 acid.

2 Does everyone understand the motion?

3 Jennifer we start with you.

4 MEMBER TAYLOR: No.

5 MEMBER MARAVELL: No.

6 MEMBER BECK: No.

7 MEMBER SWAFFAR: No.

8 VICE CHAIR FAVRE: No.

9 MEMBER CHAPMAN: No.

10 MEMBER BONDERA: No.

11 MEMBER SONNABEND: No.

12 MEMBER DE LIMA: No.

13 MEMBER WALKER: No.

14 MEMBER THICKE: No.

15 MEMBER STONE: No, ma'am.

16 MEMBER DANIELS: No.

17 CHAIR RICHARDSON: The Chair votes no.

18 VICE CHAIR FAVRE: The vote is zero

19 yes, 14 no, one absent. The motion fails.

20 MEMBER CHAPMAN: The next item on our

21 agenda are the three boiler chemicals. The

22 motion from the Subcommittee handled these all

1 together. And so, we will discuss them together
2 and have Dr. Brines read them one after another.

3 Dr. Brines?

4 DR. BRINES: Thank you.

5 Yes, there are three listings under
6 consideration for the upcoming motion. I will
7 read into the record the three materials,
8 including their full annotation.

9 First is cyclohexylamine, listed at
10 Section 205.605(b), synthetics allowed. The list
11 reads as follows: "Cyclohexylamine, CAS No.
12 108-91-8, for use only as a boiler additive for
13 packaging sterilization."

14 The second listing under
15 consideration, also under 205.605(b), is
16 "Diethylaminoethanol, CAS No. 100-37-8, for use
17 only as a boiler water additive for packaging
18 sterilization."

19 And finally, the third material under
20 205.605(b) is "Octadecylamine, CAS No. 124-30-1,
21 for use only as a boiler water additive for
22 packaging sterilization."

1 The most recent Technical Reports
2 prepared for these material are from, it looks
3 like 2000 and 2001, depending on the material.

4 Thank you.

5 MEMBER CHAPMAN: Thank you, Dr.
6 Brines.

7 I would like to turn it over to Tracy
8 to provide the Subcommittee's review.

9 VICE CHAIR FAVRE: Thanks, Tom.

10 These three boiler water additives are
11 all considered volatile amines. Definitely have
12 high toxicity, high corrosion potential. They
13 are designed to prevent corrosion in boiler water
14 distribution lines. All three of them share
15 similar, but slightly different, characteristics
16 in regards to how they prevent that corrosion,
17 but all three of them can pose serious health
18 risk to human health and the environment, and are
19 definitely irritants and should be handled as
20 such. Sometimes they are used in combination.

21 There was a very informative and quite
22 exhaustively-detailed boiler water paper, as we

1 are fond of covering it, put together by OMRI,
2 which helped influence the discussion in the
3 Committee.

4 In general, in the Committee we all
5 felt that these no longer really serve their
6 purpose. Public comment supported that. I did
7 not find any public comment in favor of retaining
8 these materials on the National List, and feel as
9 though, since their original introduction to the
10 National List, other methodology has evolved to
11 allow for prevention of boiler water corrosion.

12 MEMBER CHAPMAN: Thank you.

13 Is there any discussion on the three
14 items?

15 Zea?

16 MEMBER SONNABEND: Tracy, did any
17 certifiers submit that they had clients using
18 these?

19 VICE CHAIR FAVRE: I do believe there
20 was one certifier that submitted that they did
21 have a client that might be using them. But,
22 generally, their comments were supportive of

1 removal as well.

2 MEMBER CHAPMAN: Any further
3 discussion?

4 Mac?

5 MEMBER STONE: So, the motion includes
6 all three of these, but, then, they are
7 delineated out separately in our book. Are we
8 voting on all three at once?

9 MEMBER CHAPMAN: Yes, the motion --
10 and I should read it, so thank you -- the motion
11 is as follows: Motion to remove boiler amines
12 cyclohexylamine, CAS No. 108-91-8,
13 diethylaminoethanol, CAS No. 100-37-8, and
14 octadecylamine, CAS No. 124-30-1. All three with
15 the annotation for use only as a boiler water
16 additive for packaging sterilization from Section
17 205.605(b).

18 The motion was made by Tracy, seconded
19 by Jean. The motion carried with five in favor,
20 zero no, zero abstaining, zero recusing, and
21 three absent.

22 Any further questions, Mac?

1 Thank you.

2 MEMBER STONE: No, I just wanted to
3 hear you say it.

4 (Laughter.)

5 MEMBER CHAPMAN: I appreciate that.

6 (Laughter.)

7 I would like to comment that, due to
8 the lack of comment from the industry, I find it
9 hard to find these necessary as well. And to the
10 contrary, I have received comments in favor of
11 its removal.

12 Any further discussion?

13 VICE CHAIR FAVRE: I would only like
14 to add that I neglected to mention that there was
15 a request in some of the comments to allow an
16 appropriate time for some of the smaller
17 producers to switch over to some of the other
18 alternative methods for prevention of corrosion,
19 whether it was stainless steel lines, or
20 whatever. That is going to happen through the
21 rulemaking probably anyway.

22 MEMBER CHAPMAN: Any further

1 discussion?

2 (No response.)

3 Hearing none, we'll call the question.

4 CHAIR RICHARDSON: The question is
5 being called.

6 Does everybody understand the motion?
7 The motion deals with all three boiler amines at
8 the same time. A vote yes will be to remove. A
9 vote no will keep them on the list.

10 Starting with Carmela.

11 MEMBER BECK: No.

12 CHAIR RICHARDSON: Oh, it's Nick.
13 Sorry. Sorry, Nick.

14 MEMBER MARAVELL: Yes, cubed.

15 MEMBER BECK: Yes.

16 MEMBER SWAFFAR: Yes.

17 VICE CHAIR FAVRE: Yes.

18 MEMBER CHAPMAN: Yes.

19 MEMBER BONDERA: Yes.

20 MEMBER SONNABEND: Yes.

21 MEMBER DE LIMA: Yes.

22 MEMBER WALKER: Yes.

1 MEMBER THICKE: Yes.

2 MEMBER STONE: Yes, ma'am.

3 MEMBER DANIELS: Yes.

4 MEMBER TAYLOR: Yes.

5 CHAIR RICHARDSON: The Chair votes
6 yes.

7 VICE CHAIR FAVRE: The vote was 14
8 yes, zero no, one absent. The motion passes.

9 MEMBER CHAPMAN: The next item on the
10 agenda is sodium acid pyrophosphate.

11 Dr. Brines, if you could give the
12 intro?

13 DR. BRINES: Thank you.

14 Sodium acid pyrophosphate currently
15 appears on Section 205.605 of the National List
16 under paragraph (b), synthetics allowed. The
17 current listing reads as follows: "Sodium acid
18 pyrophosphate, CAS No. 7758-16-9, for use only as
19 a leavening agent."

20 The most recent Technical Report
21 available for this substance was completed in
22 2001 for sodium phosphates as a group.

1 Thank you.

2 MEMBER CHAPMAN: Thank you.

3 I would like to now turn it over to
4 Lisa to provide the Subcommittee review to the
5 Board.

6 MEMBER DE LIMA: Sodium acid
7 pyrophosphate, SAPP, was originally petitioned
8 for use as a leavening acid in baked goods and
9 was given the annotation "for use as a leavening
10 agent" when originally recommended for listing by
11 the NOSB.

12 It is an acid used to react with
13 sodium bicarbonate, baking soda, to produce a
14 controlled release of CO2 that leavens the baked
15 good.

16 SAPP is prepared by partial
17 neutralization of phosphoric acid with sodium
18 hydroxide or sodium carbonate to form monosodium
19 phosphate, which is followed by molecular
20 dehydration of that substance under controlled
21 condition at 250 degrees Celsius to form SAPP.

22 The public comment has been mixed.

1 Those in favor of relisting include three
2 organizations and two producers. One producer
3 states essentiality and that other leavening
4 agents on the National List do not have the same
5 properties as SAPP. And one organization reports
6 that multiple numbers stated that loss of this
7 input would result in discontinuation of mixes
8 and/or poor product performance, and thereby,
9 loss of sales.

10 Those in favor of delisting included
11 five organizations opposed because SAPP doesn't
12 meet the criteria, or they don't believe it meets
13 the criteria of lack of harm to the environment
14 and human health, essentiality, and
15 compatibility, and they ask that recent
16 scientific findings on potential human health
17 impacts be considered.

18 MEMBER CHAPMAN: Thank you.

19 The motion before the Board is a
20 "Motion to remove the sodium acid pyrophosphate,
21 SAPP, CAS No. 7758-16-9, for use only as a
22 leavening agent, from 205.605(b)"

1 The motion was made by Joe. It was
2 seconded by Tracy. The motion failed, zero in
3 favor, five against, three absent.

4 Any discussion on this item?

5 Paula?

6 MEMBER DANIELS: Again, this is one
7 where I did not review it. I was not part of
8 this Committee. So, I would appreciate some
9 information from those Board members who might be
10 more familiar with this as to whether or not
11 there are other ingredients that could be used
12 other than this one as a leavening agent, and the
13 extent of any potential harm to the environment,
14 as was raised by some commenters. I just don't
15 have any way to evaluate it.

16 MEMBER CHAPMAN: Is there anyone who
17 could speak specifically to that question?

18 Zea?

19 MEMBER SONNABEND: Okay. This was not
20 my material, so I am not an expert it. But it
21 has been on the list here since 2002, 2003, with
22 a petition for expanded use.

1 Its unique functionality has to do
2 with -- and we heard public comment about this,
3 but, again I'm not expert -- but it works better
4 than plain baking powder for some certain types
5 of baked goods which they just can't get enough
6 leavening for.

7 As far as the concerns raised
8 relatively recently concerning all of the
9 phosphate products, I think those may be valid
10 concerns and are submitted in a timely way for
11 our 2017 sunset deliberations, but come in only
12 at the second posting for this particular
13 substance.

14 So, I am going to propose that the
15 Handling Subcommittee put the investigating
16 validity of these phosphate concerns and doing
17 more research about the phosphates onto our
18 research priorities agenda for the fall. I can't
19 do that here. We will do that back in
20 Subcommittee, but I will bring it up here, so
21 that people who feel that there should be more
22 investigation, we can sift through it in our

1 research priority framework that we have. But
2 that would not stop me from voting to renew the
3 substance here, and then, see if we have enough
4 concern when we look at further in the fall about
5 the other sodium phosphates.

6 MEMBER CHAPMAN: Does that answer your
7 question?

8 MEMBER DANIELS: Yes. Thank you.

9 MEMBER CHAPMAN: Thank you.

10 Colehour? Then, Francis.

11 MEMBER BONDERA: Thank you, and thank
12 you, Paula and Zea, because I think you have
13 pretty much addressed what I was going to ask.
14 However, based on what you said, Zea, big yellow
15 flags go up for me in terms of this new sunset
16 review process because it is unclear, to me at
17 least, when, what, can and should and will be
18 considered and incorporated into a conclusion
19 from our subcommittees.

20 And so, I think that is great that it
21 would go in the future into the research agenda
22 and be considered, these concerns that are

1 raised, but I am left feeling a little bit
2 awkward about the process of, therefore, not
3 including it in our consideration at this time.

4 MEMBER CHAPMAN: Francis?

5 MEMBER THICKE: Just a procedural
6 question. I see Joe made the motion. In the
7 sense we are going to be voting now, is it still
8 valid that he is the person making the motion?

9 MEMBER CHAPMAN: That's an excellent
10 question, but this is actually the second item
11 that Joe made a motion on. We had already voted
12 on one.

13 (Laughter.)

14 So, it can be done.

15 (Laughter.)

16 No. We had discussed this. We had
17 discussed this at the Subcommittee, and the
18 thinking was it was fine because at the time Joe
19 made the motion he was in the seat. He was a
20 member that could vote.

21 MEMBER MARAVELL: Well, I think Joe is
22 here.

1 (Laughter.)

2 At least he was.

3 MEMBER CHAPMAN: Does any other member
4 want to speak to that in greater certainty?

5 (No response.)

6 Okay. Continuing on, then, Colehour.

7 MEMBER BONDERA: I apologize, but I am
8 not sure procedurally on that comment because,
9 since the person who made the motion isn't
10 present, if there were any -- I feel slightly
11 uncomfortable procedurally in terms of the fact,
12 if that person wanted to for some reason withdraw
13 or request modification, or something, they
14 aren't part of us to do that. So, I am not sure
15 that this system has that much logic to it in
16 terms of piece-to-piece implementation. So, I am
17 raising that flag of concern, but carry forth.

18 CHAIR RICHARDSON: What would be your
19 recommendation for dealing with that, Colehour?
20 Would you like this motion to be considered a
21 moot motion because the maker of it is no longer
22 here, and make another motion yourself, for

1 example?

2 MEMBER BONDERA: I would suggest that
3 the subcommittees, if motions were made or
4 seconded by people who are no longer NOSB
5 members, that those people have to be somehow
6 replaced in the process. I don't know your
7 system that you guys have come up with, but, from
8 my perspective, it is a little bit hard to move
9 it into another year.

10 CHAIR RICHARDSON: Would you be more
11 comfortable if we considered this a moot motion
12 because the person is not here and allow a new
13 motion to be made by any person here on the
14 Board?

15 MEMBER BONDERA: I would.

16 CHAIR RICHARDSON: Okay.

17 MEMBER CHAPMAN: I will motion to
18 remove sodium acid pyrophosphate, CAS No.
19 7758-16-9, for use only as a leavening agent,
20 from 205.605(b).

21 MEMBER SONNABEND: I'll second it.

22 MEMBER CHAPMAN: There's a motion and

1 a second.

2 We will now proceed to discuss the
3 motion. Any further discussion on this motion?

4 (Pause.)

5 CHAIR RICHARDSON: I will comment that
6 the parliamentarian tells us that we should have,
7 we could have voted on the original motion. She
8 considers to be technically correct. However, we
9 now have another motion on the Floor. So, let's
10 get on with the vote.

11 MEMBER CHAPMAN: Any further
12 discussion on the motion?

13 (No response.)

14 Okay. Call the question.

15 CHAIR RICHARDSON: Question is being
16 called. There's a motion on the Floor. Does
17 everybody understand the motion?

18 I think we start with Carmela.

19 MEMBER BECK: No.

20 MEMBER SWAFFAR: No.

21 VICE CHAIR FAVRE: No.

22 MEMBER CHAPMAN: No.

1 MEMBER BONDERA: Yes.

2 MEMBER SONNABEND: No.

3 MEMBER DE LIMA: No.

4 MEMBER WALKER: No.

5 MEMBER THICKE: No.

6 MEMBER STONE: No, ma'am.

7 MEMBER DANIELS: No.

8 MEMBER TAYLOR: Yes.

9 MEMBER MARAVELL: No.

10 CHAIR RICHARDSON: The Chair votes
11 yes.

12 VICE CHAIR FAVRE: The vote is three
13 yes, 11 noes, one absent. The motion fails.

14 MEMBER CHAPMAN: We have one last item
15 on our 2016 sunset agenda. That is tetrasodium
16 pyrophosphate.

17 Dr. Brines, if you could read the
18 intro?

19 DR. BRINES: Thank you.

20 The current listing for tetrasodium
21 pyrophosphate is on Section 205.605 of the
22 National List under paragraph (b), synthetics

1 allowed. The current lists reading as follows:

2 "Tetrasodium pyrophosphate, CAS No. 7722-88-5,

3 for use only in meat analog products."

4 In support of its review, the Handling
5 Subcommittee did request an updated limited-scope
6 Technical Report, and that report was completed
7 in 2014.

8 Thank you.

9 MEMBER CHAPMAN: Thank you.

10 I just closed my book early. Who was
11 the -- Zea? Okay. I would like to turn the
12 Floor over to Zea to give the Subcommittee
13 review.

14 MEMBER SONNABEND: Okay. Thank you.

15 Tetrasodium pyrophosphate, or TSPP, is
16 a processing aid that is used to make meat
17 analogs, vegetarian meat analogs. It does not
18 appear on food labels, and it does not include
19 any ancillary substances.

20 At the first meeting of posting this,
21 we requested public comment on specific uses of
22 the substance and experience with alternatives;

1 and also, whether TSPP might be primarily used to
2 restore texture after complex processing of the
3 vegetable protein.

4 The limited-scope TR we commissioned
5 was only on the question of alternatives because
6 that seemed to be the key issue, and the TR came
7 up with many, many alternatives to this use.
8 However, since the original petition had been a
9 CBI as to exactly what specific use it was used
10 for, it was very hard to know what we were
11 comparing the alternatives to.

12 We got in the first posting only one
13 comment in support, and in the second posting we
14 got one comment in support without very much of a
15 justification for it.

16 We did get a couple of critical
17 comments about why we didn't do a full TR on
18 this. And why is because pretty much from the
19 outset we thought we were going to remove it from
20 the National List. And so, there didn't seem to
21 be any point in spending a whole lot of money
22 when what we really needed was the fact that

1 there were plenty of alternatives, so we could
2 remove it from the National List.

3 So, that is what we are proposing to
4 do. And the motion is put forward to remove
5 tetrasodium pyrophosphate, CAS No. 7722-88-5, for
6 use only in meat analog products, from
7 205.605(b).

8 MEMBER CHAPMAN: Thank you.

9 And the motion was made by Zea,
10 seconded by Tracy. It passed with six in favor,
11 zero against, and two absent.

12 Any discussion on this item?

13 (No response.)

14 I would just like to state that I did
15 not find from the comments from the public that
16 there was sufficient support from the industry to
17 find it necessary.

18 Any other discussion?

19 (No response.)

20 Hearing none, I will call the
21 question.

22 CHAIR RICHARDSON: The motion has been

1 made and seconded to remove this material from
2 the National List, starting with Ashley.

3 MEMBER SWAFFAR: Yes.

4 VICE CHAIR FAVRE: Yes.

5 MEMBER CHAPMAN: Yes.

6 MEMBER BONDERA: Yes.

7 MEMBER SONNABEND: Yes.

8 MEMBER DE LIMA: Yes.

9 MEMBER WALKER: Yes.

10 MEMBER THICKE: Yes.

11 MEMBER STONE: Yes, ma'am.

12 MEMBER DANIELS: Yes.

13 MEMBER TAYLOR: Yes.

14 MEMBER MARAVELL: Yes.

15 MEMBER BECK: Yes.

16 CHAIR RICHARDSON: The Chair votes
17 yes.

18 VICE CHAIR FAVRE: The vote was 14
19 yes, zero noes, one absent. The motion passes.

20 MEMBER CHAPMAN: That concludes the
21 2017 sunset review.

22 I will now hand the chairship back to

1 the Chair.

2 CHAIR RICHARDSON: We will be
3 continuing with the Handling Subcommittee
4 tomorrow with all the 2017 materials.

5 I will recess the meeting for today
6 and see you again tomorrow morning at 8:30.

7 (Whereupon, the above-entitled matter
8 went off the record at 6:36 p.m.)
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C E R T I F I C A T E

This is to certify that the foregoing transcript


In the matter of: National Organic Standards Board
Spring 2015 Meeting

Before: USDA

Date: 04-28-2015

Place: La Jolla, California

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
true and accurate record of the proceedings.



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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2015 MEETING

+ + + + +

WEDNESDAY

APRIL 29, 2015

+ + + + +

The Board met in the Ballroom Salons
A-D, La Jolla Marriott, La Jolla, California, at
8:33 a.m., Jean Richardson, Chair, presiding.

PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary*
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
PAULA DANIELS
LISA de LIMA
NICK MARAVELL
ZEA SONNABEND
ROBERT "MAC" STONE
ASHLEY SWAFFAR
JENNIFER TAYLOR
FRANCIS THICKE
C. REUBEN WALKER

*participating via Skype

ALSO PRESENT

MICHELLE ARSENAULT, Advisory Board Specialist

LISA BRINES, List Manager, National Organic
Program

EMILY BROWN ROSEN, Technical Support

MILES MCEVOY, Designated Federal Officer,
Agricultural Marketing Service, Deputy
Administrator

JESSICA WALDEN, Materials Specialist

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1 P-R-O-C-E-E-D-I-N-G-S

2 8:33 a.m.

3 CHAIR RICHARDSON: (presiding) Thank
4 you very much.

5 Welcome to Wednesday morning, halfway
6 through.

7 What we are going to be doing today is
8 looking at starting with the 2017 sunset
9 materials for Handling.

10 Before I hand it back to the Acting
11 Chair, Tom Chapman, just a couple of words about
12 what we are doing here with this new process.

13 So, we have looked at all of these materials in
14 the Handling Subcommittee in minute detail, as
15 much as we possibly can do. We have obviously
16 received written comment and we have received
17 oral comment during this meeting.

18 So, each of the lead persons will be
19 giving a really short sort of statement of where
20 they are with that material. What we are trying
21 to create at this meeting for the record is a
22 clear from the conversation between the Board

1 members of all the committees of the entire
2 Board, a clear message, if you will, as to the
3 seriousness or not of our potential to vote to
4 remove any one of these materials. And so, that
5 way, the public record is clear as to our intent
6 at this meeting. And these materials, as you
7 know, get voted at the fall meeting.

8 Similarly, we don't do annotations at
9 sunset anymore, in large part because not
10 everybody, of the millions of people in the
11 organic community, are at this meeting and it is
12 not being video-streamed or anything. So, they
13 are not getting public notice of what we are
14 doing here.

15 And so, if we were to do an annotation
16 now, there might be a large number of
17 stakeholders that would say, "Hey, we didn't know
18 about that." So, no annotations at sunset at
19 these meetings, but the potential for making
20 changes to any one of these substances remains
21 there absolutely.

22 If, for example, someone wants to

1 shorten a withholding period -- we heard some of
2 that yesterday and we have seen it in written
3 testimony as well -- of if someone wants an
4 annotation to restrict the use of one of the
5 materials, we are working with the NOP to work
6 out the most efficient means of doing this. But,
7 as you know, it can always be done by petition or
8 it can come from the Subcommittee as a proposal
9 to make an annotation change to a material.

10 But those annotations, potential
11 annotations, those will be separately-voted
12 documents -- they are not part of sunset -- two
13 separate procedures that can go along, perhaps in
14 parallel. Perhaps if something gets done
15 quickly, we could have it on the agenda for fall.
16 But, I mean, as you know, these things often take
17 longer than we would like them to.

18 So, hopefully, each of our Board
19 members here on the different subcommittees, as
20 we go through Handling, if they would ask us
21 questions or provide us with input as lead
22 persons, so we can be sure that when we develop

1 the templates, the many templates for all of
2 these handling materials, that we have as much
3 information as we possibly can do in the
4 narrative material, written and published for
5 each of these materials.

6 Do you want to add anything more to
7 that, Miles?

8 MR. McEVOY: No.

9 CHAIR RICHARDSON: That's good.

10 Okay. So, I will turn it over now to
11 -- sorry, question, Colehour?

12 MEMBER BONDERA: Thank you, Jean.

13 I actually appreciate you reviewing
14 that process because I think, like you suggested,
15 it is, frankly, new for all of us.

16 But one of the questions that I have
17 -- and I actually probably have several, but I am
18 not waking up fast enough this morning -- one of
19 the questions that is still unclear to me at this
20 point, going through this process, is, what is
21 understood or what is sought if we are seeking, I
22 guess two components, if we are seeking a

1 Technical Review, for whatever reason, for an
2 item, it would seem to be logistically like we
3 would want that in our hands at this time, based
4 on how you just outlined what is happening.

5 From my observation, many of the
6 Technical Reviews that are requested, the
7 schedule is such that we are not going to have
8 them or they aren't yet in our hands. The other
9 part of that comment or question is it seems like
10 that directly affects the public making comments
11 and the discussion in terms of the circle of
12 input. Like you said, this is the opportunity
13 for that to be happening.

14 And so, I wonder if you could at
15 least, if you or the program could help me better
16 understand what is sought or wanted or understood
17 for that part of this process.

18 Thank you.

19 CHAIR RICHARDSON: Dr. Brines, could
20 you refresh us on the outstanding TRs that have
21 not yet been posted?

22 DR. BRINES: Sure. Thank you.

1 Yes, for purposes of the introductions
2 today, I will point out the materials for which a
3 new Technical Report was requested and its
4 availability. There are a few outstanding
5 Technical Reports pertaining to sunset 2017
6 materials which are still in development, a
7 couple of stragglers that have not been posted
8 yet. We do expect all of those reports to be
9 available soon, most likely within the next month
10 or so.

11 For purposes of the review, I would
12 just remind the Board that these are materials
13 that have a history of use in organic production
14 or handling. So, they have been reviewed based
15 on available technical information previously,
16 and that information is available to the Board,
17 and they were recommended for addition to the
18 National List at that time.

19 Thanks.

20 CHAIR RICHARDSON: Zea?

21 MEMBER SONNABEND: Well, since it
22 happened to me a couple of days ago, I think we

1 would be remiss if we didn't take this moment to
2 wish Jean a very happy birthday, since it is her
3 birthday today. I'm not a big singer, so I won't
4 subject you to that.

5 (Laughter.)

6 But I think join the Board and the
7 audience in birthday wishes.

8 (Singing happy birthday to Jean
9 Richardson.)

10 (Applause.)

11 MEMBER TAYLOR: Thank you very much.
12 I appreciate that.

13 All right, are we ready to go to Tom?
14 Thank you.

15 MEMBER CHAPMAN: Thank you, Madam
16 Chair.

17 I would just like to extend my thanks
18 to the kind words I got from fellow Board members
19 and the public for sitting in for Harold, and our
20 thoughts are still with Harold at this time and
21 his recovery.

22 Like I said at the beginning of the

1 comments, I couldn't have been this prepared if
2 it wasn't for Harold. Let's see what he has
3 prepared for day two.

4 (Laughter.)

5 Yes, I have the day two morning speech
6 right here.

7 (Laughter.)

8 Let's see if we lived up to his
9 expectations.

10 "Good morning. I would like to start
11 off this morning's session" --

12 (Laughter.)

13 "And we will pick up where we left off
14 the Handling Subcommittee presentations to the
15 entire NOSB and NOP and our organic stakeholders
16 present here today.

17 "We will begin where we left off
18 yesterday afternoon with the Subcommittee
19 presentation of 104 2017 sunset materials up for
20 review. We are on schedule, according to
21 Harold's April predictions.

22 (Laughter.)

1 "The materials have recently been
2 posted for the first of the two required public
3 comment periods. These materials will not be up
4 for a vote at this time, merely discussion and
5 information-gathering to help assist the Handling
6 Subcommittee and the entire NOSB of the official
7 sunset review process, as required.

8 We will be reading these in sections
9 as they are listed in the regulations, starting
10 with 205.605(a), non-synthetics allowed. And
11 then, we will go through and discuss them
12 individually at the top of the list.

13 With that, I would hand it over to Dr.
14 Brines for the first reading.

15 DR. BRINES: Thank you.

16 Yes, I will go ahead and read into the
17 record the listings on 205.605(a), non-synthetics
18 allowed, that are up for a sunset 2017 review.
19 Again, I will indicate for the record which of
20 these substances have new or updated technical
21 information in support of that review.

22 Okay. The first listing is acids.

1 Alginic, citric produced by microbial
2 fermentation of carbohydrate substances, and
3 lactic. And new Technical Reports were available
4 for alginic, citric, and lactic acid this round.

5 Attapulgate as a processing aid in the
6 handling of plant and animal oils; betonite;
7 calcium carbonate; calcium chloride; dairy
8 cultures, and diatomaceous earth, food-filtering
9 aid only.

10 Enzymes, must be derived from edible,
11 non-toxic plants, non-pathogenic fungi, or non-
12 pathogenic bacteria. A new limited-scope
13 Technical Report is still in development for
14 enzymes, and that should be available to the
15 public soon.

16 Flavors, non-synthetic sources only,
17 and must not be produced using synthetic solvents
18 and carrier systems or any artificial
19 preservative.

20 Kaolin; magnesium sulfate, non-
21 synthetic sources only; nitrogen, oil-free
22 grades; oxygen, oil-free grades; perlite for use

1 only as a filter aid in food processing;
2 potassium chloride; potassium iodide; sodium
3 bicarbonate; sodium carbonate; waxes, non-
4 synthetic; caranauba wax and wood rosin.

5 And three Technical Reports were
6 prepared for these materials. Caranauba wax and
7 wood resin received individual Technical Reports,
8 and there is a report for potassium iodide. It
9 is within the scope of the nutrient vitamins and
10 mineral Technical Report. That report has been
11 posted for the public, but in the meeting
12 materials it is listed as "in development"
13 because it was not available at the time those
14 materials were posted.

15 And the final listing under
16 consideration at 205.605(a) is yeast when used as
17 food or a fermentation agent in products labeled
18 as organic. Yeast must be organic if its end-use
19 is for human consumption. Non-organic yeast may
20 be used when organic yeast is not commercially
21 available. Growth on petrochemical substrate and
22 sulfite waste liquor is prohibited. For smoked

1 yeast, non-synthetic smoke flavoring. Process
2 must be documented. And a new Technical Report
3 was developed for yeast in support of the sunset
4 review.

5 Thank you.

6 MEMBER CHAPMAN: Thank you.

7 As a quick reminder, we do have 104
8 items to review this morning. So, we do need to
9 keep our comments precise and concise. If we do
10 need to somewhat limit our discussion on any
11 items, I will make a note of the Board members
12 who still had additional questions or discussions
13 and make sure you are invited to the Subcommittee
14 discussions later in the year, as we continue
15 through these items.

16 So, we will start with the first one,
17 alginic acid, and I will hand it over to Tracy to
18 give the Subcommittee review so far.

19 VICE CHAIR FAVRE: Thank you, Tom.

20 Good morning, everyone.

21 Alginic acid, it is actually derived
22 from wild-harvested seaweeds, and there is some

1 concern, with the increasing demand, about the
2 potential for overharvesting. Alginic acid is
3 actually used as a thickener and a gel
4 stabilizer.

5 Public comments. There were generally
6 no open opposition to relisting. Interestingly
7 enough -- well, never mind. Anyway, generally,
8 the public comments that we received on it were
9 generally supportive of relisting.

10 MEMBER CHAPMAN: Thank you, Tracy.

11 Any further discussion of this item at
12 this time?

13 Zea?

14 MEMBER SONNABEND: Tracy, I didn't do
15 a completely thorough search on this, but did
16 anyone turn in any indication that they were even
17 using this in organic products?

18 VICE CHAIR FAVRE: There were some
19 general references to it, but no specific
20 instances.

21 MEMBER SONNABEND: Yes. Like I just
22 looked at the QAI sheets that got handed to us,

1 and they show it as a zero. I don't recall other
2 commenters saying they actually used it.

3 VICE CHAIR FAVRE: Right.

4 MEMBER SONNABEND: But that would be
5 one thing we would seek information on for the
6 next meeting.

7 CHAIR RICHARDSON: I think that there
8 were about three different industries reported
9 using them and in support of relisting.

10 MEMBER CHAPMAN: Any other discussion
11 on this item?

12 (No response.)

13 Okay. We will move on to the next
14 item, citric acid, and I will hand it over to
15 Ashley to give the Subcommittee review.

16 MEMBER SWAFFAR: So, citric acid,
17 several uses for that, preserving flavors, color
18 enhancement, nutritional. Seemed to be
19 overwhelming support in favor of relisting. No
20 opposition. One neutral. Pretty
21 straightforward.

22 MEMBER CHAPMAN: Any further

1 discussion on citric acid?

2 (No response.)

3 Hearing none, we will move to lactic
4 acid.

5 Ashley?

6 MEMBER SWAFFAR: The same as citric
7 acid as far as the support. There was
8 overwhelming support for it. Three neutral. No
9 opposition. It is used as a preservative,
10 stabilizer, and taste and flavor enhancer. And
11 so, I think it is pretty straightforward to
12 relist that also.

13 MEMBER CHAPMAN: Any further
14 discussion?

15 (No response.)

16 Seeing none, we will move on to
17 attapulgate.

18 Jean? Or Madam Chair?

19 CHAIR RICHARDSON: Oh, you can call me
20 Jean. It's just fine.

21 So, attapulgate, such a lovely name,
22 I think, also known as Fuller's earth. It is

1 used as a filter aid, been around for an awful
2 long time. We really didn't get much comment on
3 this, and we have no one that is opposing the use
4 of it. Used as a processing aid in handling of
5 plant and as a filter.

6 CHAIR RICHARDSON: Any further
7 discussion on this item?

8 (No response.)

9 Okay. Next up is bentonite.

10 Jean?

11 CHAIR RICHARDSON: Bentonite, similar
12 to attapulgate, we didn't get a great deal of
13 comment, but we did get some indicating broad
14 support for this material. No one is opposed to
15 the use of it. It is used as a filter aid and,
16 also, in feed pellet and seed coating and in
17 vinegar filtration. It looks like it is very
18 straightforward.

19 MEMBER CHAPMAN: Any further
20 discussion?

21 (No response.)

22 Seeing none, we will move on to

1 calcium carbonate.

2 Jean?

3 CHAIR RICHARDSON: Calcium carbonate
4 is widely used as a dietary supplement and dough
5 conditioner material. No one has sent in any
6 suggestions for any opposition. It appears to be
7 widely used. There is, however, some suggestion
8 that this needs to have an updated Technical
9 Report.

10 MEMBER CHAPMAN: Any further
11 discussions?

12 (No response.)

13 Seeing none, we will move on to dairy
14 cultures, which was mine.

15 Dairy cultures are used by dairy
16 processors to make yogurt, cheese, cultured sour
17 cream, and other fermented products.

18 Public comment was supportive of this
19 listing, with six comments in favor of relisting
20 from trade association and industry, speaking to
21 its necessity.

22 And we had asked two additional

1 questions for clarification. The first,
2 examining if this separate listing was necessary
3 or if dairy cultures were fully covered under the
4 microorganisms listing. We received several
5 comments from industry asking for a continued
6 separate listing. One commenter noted that
7 microorganisms does cover dairy cultures, but due
8 to the status of the microorganisms ancillary
9 substance review test, they opposed the move at
10 this time.

11 We did receive four comments from
12 material review organization and certifiers
13 supportive of the removal of dairy cultures, as
14 they believe it is fully covered under
15 microorganisms.

16 We also asked for additional ancillary
17 substances, and some were identified by a few
18 commenters. No individual substances that were
19 published in the first listing were challenged,
20 but comments were generally received requesting
21 reviews of all ancillary substances for National
22 List.

1 We will open it up for discussion at
2 this time. Any questions on dairy cultures or
3 discussion?

4 Jean?

5 CHAIR RICHARDSON: I would sort of be
6 interested to see what other members of the NOSB
7 think about the idea of not having it listed
8 separately, but to have it grouped with other
9 microorganisms.

10 Zea, what do you think?

11 MEMBER SONNABEND: I am in favor of
12 it, because I think a streamlined National List
13 makes more sense, to combine duplicate listings.
14 Then, it gives for the future NOSB lists to
15 review next time. However, we have to make it
16 very clear to the community that removing
17 something does not mean that it can't be used
18 anymore.

19 And then, we do have to combine the
20 ancillary substance proposal into one. You know,
21 there is one reason we pulled back the
22 microorganisms. So, I do think it can be done,

1 but it will take careful communications and
2 procedure, and maybe we can have a little help
3 from the Department as we proceed with that.

4 MEMBER CHAPMAN: I share Zea's
5 comments, and I also feel like the fact that we
6 had comments from material review organizations
7 and certifiers all supportive and understanding
8 of the plan behind this, showing that it can be
9 done successfully, or hopefully it can be done
10 successfully. But there are needs for precise
11 communications to make sure it is clear that our
12 removal of dairy cultures would not be a
13 statement saying that dairy cultures can't be
14 used; rather, it is covered somewhere else on the
15 list.

16 Any further discussion or comment from
17 the program?

18 MR. McEVOY: Yes. It just seems like
19 you would have to make that very clear in the
20 proposal and the final recommendation, that it is
21 not really a recommendation for removal; it is a
22 recommendation that it is not needed because it

1 is covered somewhere else.

2 MEMBER CHAPMAN: Yes, because it is
3 covered, yes.

4 MR. McEVOY: But you can make it work,
5 I think.

6 MEMBER CHAPMAN: Yes.

7 MR. McEVOY: Yes.

8 Any further discussion on this item?

9 (No response.)

10 Seeing none, we will move on to the
11 next item, diatomaceous earth.

12 Jean?

13 CHAIR RICHARDSON: Diatomaceous earth,
14 another filter aid, and it is widely used and
15 strongly supported. Nobody is opposed to it. It
16 has been used for a long time. And, of course,
17 it is used in maple syrup filtration.

18 (Laughter.)

19 MEMBER CHAPMAN: Any other questions
20 on diatomaceous earth?

21 (No response.)

22 Okay. I believed I missed a listing,

1 calcium chloride. So, we will move back up to
2 that one. I apologize. We need some points of
3 order here.

4 Tracy?

5 VICE CHAIR FAVRE: Calcium chloride
6 -- pardon me just a moment. You caught me
7 unawares, too. This is the problem with moving
8 as fast as we are.

9 Calcium chloride, used as salt.
10 Generally supported. No obvious complaints.
11 General overall support.

12 MEMBER CHAPMAN: Any further
13 discussion on calcium chloride?

14 (No response.)

15 Seeing none, we will move on to
16 enzymes.

17 Lisa?

18 MEMBER DE LIMA: So, enzymes, used in
19 the production of bakery products, cheese and
20 dairy products, fruit juice, and other food
21 processing purposes.

22 Public comment so far has been in

1 favor of relisting with 14 in favor and one
2 commenter seeking clarification on the
3 classification and, also, asking that the review
4 of ancillary substances include all substances,
5 including those currently on the National List.

6 In the posting we had asked for
7 feedback on additional ancillary substances, and
8 we have received a few comments back.

9 MEMBER CHAPMAN: Any further
10 discussion on the enzymes?

11 Zea?

12 MEMBER SONNABEND: This is one where
13 the Technical Report is not yet posted. We
14 received it back quite late and had a few points
15 or one main point that we sent it back for
16 further analysis by the writer of the Technical
17 Report. It should be posted, though, not too
18 much longer from now.

19 It does have a more complete table
20 than this of some of the ancillary substances.
21 And so, we will be, then, working from that table
22 as we move forward, once it is posted.

1 MEMBER CHAPMAN: Colehour?

2 MEMBER BONDERA: Thank you.

3 I don't know, Lisa, if you can expand
4 on your comment, or maybe based on the TR, like
5 Zea just said, it would be addressed. But I
6 think that classification question, even with a
7 sunset, still raises a yellow flag in terms of
8 how or if we could deal with that question, if we
9 were going to. The classification question that
10 she mentioned was brought up, I thought --

11 MEMBER DE LIMA: We haven't discussed
12 it.

13 MEMBER BONDERA: Oh, okay.

14 MEMBER DE LIMA: As a Subcommittee, we
15 haven't had a meeting since we received that
16 comment.

17 MEMBER CHAPMAN: Any additional
18 discussions on enzymes?

19 (No response.)

20 Hearing none, we will move on to
21 flavors.

22 Flavors are currently on the National

1 List listed as -- this splits the page -- non-
2 synthetic sources only. Must not be produced
3 using synthetic solvents, and carrier systems or
4 any artificial preservatives.

5 We received 13 comments in support of
6 the flavor listing from industry and trade
7 associations, including many supporting an
8 addition of commercial availability annotation.

9 We received eight further comments providing
10 additional information without taking a position.
11 Comments from the industry and certifiers and
12 trade associations noted wide use of flavors by
13 hundreds of companies.

14 There was one commenter in opposition
15 from an interest group that does not support the
16 relisting of flavors, as they recreate or improve
17 flavors, in reference 205.600(b)(4), where it
18 should be noted that that section of the rule
19 applies to processing aid and adjuvants.

20 Two commenters also noted that organic
21 flavors should require the flavoring components,
22 and not just the carriers, to be organic. One

1 commenter also commented on this process and
2 noted its necessity for certain types of flavors.

3 No additional comments were received
4 about the compatibility with OFPA criteria.

5 The Subcommittee asked several
6 specific questions. The first one was about
7 supply and if warranting certain specific types
8 of flavors, subgroups was warranted. Many
9 commenters spoke against dividing flavors into
10 groups, given the complex nature of flavors and
11 formulations of various product types. Most
12 commenters responded to this and offered
13 commercial availability as a preferred option.

14 I should say I am giving you a bit
15 more comment on this than the normal sunset
16 review because we also have a petition before us
17 to add commercial availability to this current
18 listing.

19 The second question was about
20 commercial availability and if it should be
21 applied to flavors. Several comments were
22 received in support of this. And equally

1 important, no comments were received against.

2 One Board member has asked how
3 effective commercial availability will be given
4 on flavors, given the complex nature. This is an
5 issue that should be explored more under the
6 petition and before the Board.

7 The third question asked if it was
8 appropriate to retain all natural flavors on the
9 National List. Again, commenters spoke to the
10 difficulty of breaking flavors into individual
11 classes and preferred a general commercial
12 availability clause.

13 Essentiality of flavors was asked
14 about, and several companies spoke to the
15 necessity and impact flavors would have on the
16 industry. Additional comments noted that several
17 organic flavors, like compound flavors, use non-
18 organic flavors as part of their organic
19 formulation. Thus, removal of non-organic
20 flavors would reduce the availability of
21 certified organic flavors. So, some thought for
22 you guys.

1 And five, would certifiers and
2 material review organizations find a standardized
3 industry questionnaire helpful? Several
4 respondents in the MROs and certifiers felt that
5 their current tools were adequate to verify
6 compliance, but many supported the standardized
7 questionnaire as well. And there was no
8 opposition to the concept.

9 I will open it up for discussion.

10 Zea?

11 MEMBER SONNABEND: I mean, clearly,
12 this is one that we have a lot of work to do
13 between now and the next meeting because we have
14 to take a look at the petition and see if that
15 makes sense.

16 If we are going to consider the
17 petition concurrently with the sunset, we have
18 some logistical things that I'm not sure how they
19 work. But I do think we should try our best to
20 consider the petition as we go into sunset, so
21 that we can, then, go right away in with an
22 annotation, or whatever we need to do.

1 MEMBER CHAPMAN: Jean?

2 CHAIR RICHARDSON: Yes. I strongly
3 agree with that. I think that we should do two
4 things here. I think that when we generate the
5 second template for this, we should be sure that
6 we include in it all of the past history, so that
7 it is thoroughly documented. Because one of the
8 things that I found, when I started initially
9 doing this before I was happy to turn it over to
10 Tom, I found that there was a vast amount of
11 information on flavors, the documentation, TRs,
12 technical materials, and things, a lot of which
13 were not easily available to the public.

14 I want to be sure that we have
15 everything that we can do in a public place, so
16 that members of the public and future Board
17 members five years from now, when they bring this
18 up again, flavors up again, it is all in one
19 place and easy to access.

20 I certainly hope that the Handling
21 Committee can deal with both the sunset and with
22 the petition simultaneously going through the

1 Handling Committee this next semester, so that we
2 can have them both available to vote in the full.

3 MEMBER CHAPMAN: Noted.

4 Any further discussion?

5 (No response.)

6 Seeing none, we will move on to the
7 next item, kaolin. How do I say this?

8 CHAIR RICHARDSON: Kaolin.

9 MEMBER CHAPMAN: Kaolin?

10 CHAIR RICHARDSON: I say it kaolin.
11 Other people may say it differently, but kaolin.

12 It has been around for an awful long
13 time. It is used primarily as a filter aid. It
14 can also be used in personal care products.
15 There is very broad support for kaolin. There
16 has been no public comment suggesting that it
17 should be removed.

18 MEMBER CHAPMAN: Any further
19 discussion?

20 (No response.)

21 Seeing none, magnesium sulfate.

22 Jean?

1 CHAIR RICHARDSON: Magnesium sulfate,
2 non-synthetic sources only. It is used in
3 dietary supplements. And it is also essential in
4 the making of tofu, not my favorite food.

5 (Laughter.)

6 We'll live this up today here.

7 Let's see, there doesn't seem to be
8 any suggestion that it be removed, except I think
9 from one; one group suggested that it might be
10 removed. But, otherwise, there seemed to be
11 general support for it.

12 MEMBER CHAPMAN: Any further
13 discussion?

14 (No response.)

15 Seeing none, we will move on to
16 nitrogen.

17 Lisa?

18 MEMBER DE LIMA: Nitrogen was pretty
19 straightforward. There hasn't been any public
20 comment in favor -- or all the public comments
21 have been in favor of relisting. It is used in
22 the flash-freezing of food. The nitrogen

1 dissipates and doesn't remain in the food
2 product.

3 And that's it.

4 MEMBER CHAPMAN: Okay. Any further
5 discussion of nitrogen?

6 (No response.)

7 Seeing none, oxygen.

8 Lisa?

9 MEMBER DE LIMA: Oxygen is used in MAP
10 or Modified Atmosphere Packaging, and we haven't
11 received any public comment in either direction
12 so far.

13 MEMBER CHAPMAN: Any further
14 discussion of oxygen?

15 (No response.)

16 Seeing none, perlite.

17 Jean.

18 CHAIR RICHARDSON: Perlite is another
19 one of these filter aids used in food processing
20 that we have received no opposition for the use
21 of this material. There appears to be broad
22 support for it.

1 MEMBER CHAPMAN: Any further
2 discussion?

3 (No response.)

4 Seeing none, potassium chloride.

5 Tracy?

6 VICE CHAIR FAVRE: Potassium chloride
7 is quite often used as a salt substitute in foods
8 and to provide potassium as a nutrient. There
9 was no opposition to relisting.

10 MEMBER CHAPMAN: Any additional
11 discussion?

12 (No response.)

13 Seeing none, potassium iodide.

14 Tracy?

15 VICE CHAIR FAVRE: Potassium in its
16 iodide form is used as an iodine supplement
17 typically, as a food additive. Again, there was
18 no opposition to relisting.

19 MEMBER CHAPMAN: Any discussion on
20 this item?

21 (No response.)

22 Seeing none, we will move on to sodium

1 bicarbonate. This was a Harold item that I will
2 give a review on.

3 Sodium bicarbonate, otherwise known as
4 baking soda, is used as a leavening agent in
5 processing. It is used in pancakes, biscuits,
6 and muffins, and baking powder in crackers and
7 cookies, as well as in self-rising flours.

8 We received nine comments from the
9 industry and trade associations with no comments
10 opposed. No additional comments were received
11 about compatibility with OFPA criteria.

12 Any additional discussion on this
13 item?

14 (No response.)

15 Seeing none, we will move on to sodium
16 carbonate, also a Harold item.

17 Sodium carbonate is used as a
18 leavening agent in processing. It is used as an
19 anti-caking agent, as a stabilizer, and as a
20 rising agent. It is essential for the
21 characteristic color in baking German pretzels
22 and lye rolls. It gives pretzels and rolls their

1 crust without burning it. It also is used to
2 make ramen noodles.

3 There were five comments in support of
4 relisting from industry and trade associations.
5 No comments were received in opposition.
6 Commenters spoke to the necessity of the
7 substance. No additional comments were received
8 about compatibility with OFPA criteria.

9 Any additional discussion on this
10 item?

11 (No response.)

12 Seeing none, waxes, carnauba.

13 Zea?

14 MEMBER SONNABEND: Thank you.

15 Well, now we get into some of the
16 slightly messier ones.

17 At the outset, I am just going to give
18 a little Mother Hen comment, I guess. It is not
19 that often that I agree with Jay Feldman, but I
20 do agree with what he said in public comment,
21 that it is incumbent on us NOSB members,
22 especially if we are going to vote something down

1 that has been on the list or change something
2 significantly, that we give the public reasons
3 why we are doing something, both for the benefit
4 of those people who are reporting back to their
5 communities, so that the clients and users of
6 these things can know, but also to the future
7 Board who in five years, or maybe ten, is going
8 to have to go back and figure out what the hell
9 they were thinking.

10 And Carnauba wax is one of these where
11 it was really hard to trace it back. What the
12 hell was the background of this?

13 Just as an aside, I thought we didn't
14 do a good job of this yesterday when egg white
15 lysozyme got voted down without anyone on the
16 Board stating why they were voting against it.
17 You are going to have a lot of explaining to do
18 because it came out of Committee for it, and
19 people are going to be asking why. So, it is
20 done now, but now we are going to go back and
21 figure out carnauba wax.

22 This and the other waxes were

1 additionally, in the early days before the rule,
2 they were thought to be post-harvest handling
3 treatments, and so, were under the auspices of
4 the Crops Committee. The Crops Committee, as you
5 know, doesn't quite have the same procedure as
6 the Handling Committee. And so, there was one
7 TAP review done for fruit waxes, and it covered
8 all the fruit waxes and, in fact, made a little
9 bit of mention of beeswax, for instance, and
10 there is another natural wax, candelilla wax or
11 something. I don't know how you say it.

12 But, anyway, in the review in 1995 it
13 was determined that, in particular, carnauba and
14 wood rosin waxes were approved, and they didn't
15 take up the other waxes. Well, skip forward 1995
16 to 2000, when the rule was actually put out, and
17 those things that were post-harvest -- ethylene
18 was another one of them at the time -- but they
19 were moved into Handling.

20 This means that was never an analysis
21 done on carnauba or wood wax if they were
22 agricultural or not. There was never a vote made

1 on whether they were agricultural or not.

2 Well, it turns out that carnauba wax
3 is agricultural. I mean, it is really pretty
4 clear. It is derived from a palm tree. Over the
5 course of time, organic sources have arisen of
6 carnauba wax from several countries. I think we
7 identified seven of them. Or do I say in here?
8 Well, it is, yes, seven operations in Germany,
9 Brazil, and the U.S.

10 So, if we are going to do this
11 correctly, we need to, then, go back and have a
12 vote on agricultural/non-agricultural, like we do
13 for pretty much every other material on the
14 handling list.

15 So, then, if we vote it as
16 agricultural, then, really, it belongs on 606, or
17 not if there is plenty of organic carnauba wax
18 available.

19 And so, we posed the questions on how
20 much this would matter to anyone using it.
21 However, being that this is a bit obscurely tied
22 up in NOSB history, we got input back that people

1 still wanted this on the list, but we didn't get
2 a lot of input back on whether changing the
3 classification really mattered to anyone or not.

4 We did get input back that the organic
5 sources are what is primarily in use. And also,
6 it is worth adding that almost always these waxes
7 are not used purely one at a time. They are
8 combined with other waxes. Mostly, shellac and
9 carnauba are the most common combinations, but
10 wood rosin can be combined with them. And the
11 three waxes have slightly different
12 characteristics. Shellac gives more shine.
13 Carnauba gives more moisture barrier. And so,
14 that is why they combine them, to get the best
15 effect.

16 Okay. So, in analyzing the ancillary
17 substances, because these waxes usually are
18 combined, it is very hard to find out if the pure
19 wax coming has the ancillary substance in it or
20 if the ancillaries are sort of added to the
21 formulations after the waxes are combined.

22 So, we asked a question to try to

1 tease that information out of people. And we
2 didn't get back anything very conclusive.

3 And then, also, we got a lot of public
4 comment that seemed to imply that these are used
5 more widely than they actually are, I think.
6 Because, really, they are mostly used on citrus,
7 although we got comment back that they were
8 widely used on apples. But one of the last
9 things Harold and I talked about before we lost
10 him was that comment was probably not correct in
11 Washington, that a small percentage of apples
12 might have the fruit coatings on them, but, by
13 far, not the majority of them.

14 But, with citrus, where they tend to
15 be stored for a long time and you want a slow --
16 you don't want all the moisture to leave them
17 right away, that is the primary use. They are
18 sometimes used on vegetables also.

19 The early NOSB conversations often had
20 a lot to say about should they be labeled. The
21 consensus was, yes, they should be labeled, but
22 that did not really get into the annotation.

1 Also, there are complaints about whether labeling
2 is really effective because oftentimes -- this
3 was, of course, before the days of individual PLU
4 stickers for the most part. So, the label went
5 on the outside box, and when it got to the store,
6 you don't see the outside box.

7 So, most people believed these waxes
8 should stay on the list, but we need to correct
9 the way they are listed. With carnauba, we are
10 going to bring forward a motion for next time to
11 declare it agricultural. We need clarification
12 from the Department that, if we vote it
13 agricultural, if that automatically moves it to
14 606 or if we have to, then, do something
15 different to get it onto 606 instead of 605(a).
16 We didn't need that clarification right now, but,
17 you know, I have been asking Emily this already
18 for a while.

19 And then, we need to assess if there
20 is sufficient organic supply out there of the
21 organically-formulated and, also, whether the
22 organic carnauba wax is married with the non-

1 synthetic shellac. So, shellac is not produced
2 organically. We will get to that later. But
3 that brings up questions there.

4 As far as ancillary substances, the
5 input we got, we didn't get any clear suggestions
6 of ancillaries to be allowed, but we did get
7 clear suggestions that morphilene is one that we
8 may want to prohibit. And the organically-
9 approved formulations that OMRI listed I am sure
10 do not have morphilene in it, but we may consider
11 that as a prohibited ancillary substance going
12 forward.

13 So, can I just go right into wood
14 rosin?

15 MEMBER CHAPMAN: Yes.

16 MEMBER SONNABEND: Okay. Wood rosin,
17 when it was reviewed in 1995, was reviewed as
18 wood rosin. However, the spellchecker at the
19 USDA apparently didn't get it onto the list, and
20 it got onto the list as wood resin, which the TR
21 clearly points out is the precursor to wood
22 rosin. It is not the same thing. So, we are

1 proposing to make a technical correction to the
2 spelling.

3 Many of the same things I said about
4 carnauba apply to wood rosin. However, it is not
5 produced organically. It is, obviously, from
6 wood, but it is not produced organically right
7 now.

8 And it is also not in nearly as wide
9 use. We found no products out there that
10 contained it, but that doesn't mean there might
11 not be because we don't know everything. And we
12 received no input why it should not be listed
13 other than a few people who just opposed the use
14 of wax on anything, period, all waxes.

15 So, that will be handled. We don't
16 need a special rulemaking on that or a vote to
17 change the spelling. That will just be handled
18 internally.

19 Okay, I think that is all I have to
20 say for waxes.

21 MEMBER CHAPMAN: Any further
22 discussion on these items?

1 (No response.)

2 I do have one point of clarification
3 I would like to make, not about the waxes, but
4 about the statement of egg white lysozyme. I did
5 make a comment as to why I was voting in
6 opposition to it. And it was due to the fact
7 that we did not receive comments from handlers in
8 support.

9 MEMBER SONNABEND: Okay. Sorry, Tom.

10 MEMBER CHAPMAN: But, back to the
11 waxes, wood rosin and carnauba, any discussion?

12 (No response.)

13 Seeing none, we will move on to the
14 next item, yeast.

15 Zea?

16 MEMBER SONNABEND: Okay. Thank you.

17 Yeast. Yeast has been discussed a lot
18 by this Board over the years and by the public.
19 We finally changed the listing to, I think,
20 something that is working in general in the
21 organic community. As we renew it, we do need to
22 look at whether organic yeast has come to the

1 point where it is sufficient for all of the
2 different uses of yeast, of which there are many,
3 many types of uses and many, many uses for yeast.

4 We did hear testimony from people
5 that, in particular, all the different types of
6 yeast to make certain wines. And torula yeast
7 and some of other specialized applications are
8 not yet available in organic form.

9 And so, we are going to recommend
10 renewing this as it is listed. We put out a
11 short ancillary substance chart. I did not have
12 time to analyze additional ancillary substances
13 that came in. I think there were one or two.
14 So, we will complete this chart for the next
15 round, and we are going to recommend renewing the
16 listing as is.

17 MEMBER CHAPMAN: Any additional
18 questions or discussion on yeast?

19 (No response.)

20 Seeing none, that concludes our
21 205.605(a) first meeting review. And we will
22 move on to 205.605(b), synthetic substances.

1 Lisa, if you could read the
2 introduction?

3 DR. BRINES: Thank you.

4 The following substances are under
5 review for sunset 2017 under Section 205.605(b),
6 synthetics allowed:

7 Acidified sodium chlorite, a secondary
8 direct antimicrobial food treatment and indirect
9 food contact surface sanitizing, acidified with
10 citric acid only.

11 Alginates; ammonium bicarbonate for
12 use only as a leavening agent; ammonium carbonate
13 for use only as a leavening. And a new Technical
14 Report was prepared for alginates on this list.

15 Ascorbic acid; calcium citrate;
16 calcium hydroxide; calcium phosphates, monobasic,
17 dibasic, and tribasic; carbon dioxide. A new
18 Technical Report was prepared for citric acid and
19 salts which includes calcium citrate in its
20 scope.

21 Next up is chlorine materials,
22 disinfecting and sanitizing food contact

1 surfaces, except that residual chlorine levels in
2 the water shall not exceed the maximum residual
3 disinfection limit under the Safe Drinking Water
4 Act.

5 Calcium hypochlorite; chlorine
6 dioxide, and sodium hypochlorite.

7 Ethylene. A lab proposed harvest
8 ripening of tropical fruit and de-greening of
9 citrus.

10 Ferrous sulfate for iron enrichment or
11 fortification of foods when required by
12 regulation or recommended. Independent
13 organization.

14 And ferrous sulfate is covered under
15 the scope of the nutrient vitamins and minerals
16 Technical Report.

17 Glycerides, mono- and di-, for use
18 only in drum-drying of food. Glycerin produced
19 by hydrolysis of fats and oils. Hydrogen
20 peroxide. And a new Technical Report was
21 developed for glycerides, mono- and di-.

22 Magnesium carbonate, for use only in

1 agricultural products labeled "Made with organic
2 specified ingredients or food groups," prohibited
3 in agricultural products labeled "Organic".

4 Magnesium chloride derived from
5 seawater. Magnesium stearate for use only in
6 agricultural products labeled "Made with organic
7 specified ingredients or food groups," prohibited
8 in agricultural products labeled "Organic".

9 Nutrient vitamins and minerals, in
10 accordance with 21 CFR 104.20, nutritional
11 quality guidelines for foods. And again, a new
12 Technical Report was developed for nutrient
13 vitamins and minerals.

14 Ozone; phosphoric acid, cleaning of
15 food contact surfaces and equipment only.

16 Potassium acid tartrate; potassium
17 carbonate; potassium citrate; potassium phosphate
18 for use only in agricultural products labeled
19 "Made with organic specified ingredients or food
20 groups," prohibited in agricultural products
21 labeled "Organic". And again the scope of the
22 report for citric acid and salts also covered

1 potassium citrate.

2 Sodium citrate; sodium hydroxide
3 prohibited for use in lye peeling of fruits and
4 vegetables; sodium phosphates for use only in
5 dairy foods. Again, another of the citrate
6 salts, sodium citrate was covered in the scope of
7 the citric acid and salts report.

8 Sulfur dioxide for use only in wine
9 labeled "Made with organic grapes," provided that
10 total sulfite concentration does not exceed 100
11 parts per million.

12 Tocopherols derived from vegetable oil
13 when rosemary extracts are not a suitable
14 alternative. Xanthan gum. And the new Technical
15 Report was developed for tocopherols.

16 And that is the last of the 205.605(b)
17 sunset 2017 substances.

18 Thanks.

19 MEMBER CHAPMAN: Thank you, Dr.
20 Brines.

21 We will start at the top with
22 acidified sodium chlorite.

1 Ashley?

2 MEMBER SWAFFAR: So, acidified sodium
3 chlorite is a sanitizing agent and a direct
4 antimicrobial food treatment. We did ask if this
5 substance was essential for organic food
6 production, and we didn't really get any of that
7 response back. We just got some general
8 statements that it might be used by some
9 ingredient suppliers. And so, I am a little on
10 the fence about this one, and I would like for
11 the public to really comment if they are actually
12 using this substance, and what they use it for.

13 The comments were kind of a few in
14 support, one opposition, and one neutral.

15 MEMBER CHAPMAN: Any discussion of
16 this item?

17 (No response.)

18 I do believe the OTA submitted some
19 comments in support, and I would hope we could
20 review those as well at the Subcommittee level.

21 Seeing none, we will move on to the
22 next item, alginates.

1 Tracy?

2 VICE CHAIR FAVRE: Alginates, again,
3 is a derivative of wild-harvested brown seaweeds
4 used as stabilizers, thickeners, and emulsifiers.
5 We got a fair number of written comments in
6 support of the ingredient, including a statement
7 that there is no organic supply of either alginic
8 acid or alginates in the world, and that if we
9 choose to delist this material, there will be
10 significant impact in the types and quality of
11 products, organic products, on the market.

12 There was one written comment opposing
13 relisting, and that was because of concerns for
14 the accumulation of contaminants in brown
15 seaweed. Because it is used as a texturizer or
16 to enhance texture in products, that it is,
17 therefore, incompatible with organic production.

18 MEMBER CHAPMAN: Any additional
19 discussion?

20 Sorry. Jean?

21 CHAIR RICHARDSON: Tracy, did you find
22 any, look for any sort of alternates? What are

1 some other materials that are similar to
2 alginates that are used for the same type of
3 function in handling?

4 VICE CHAIR FAVRE: Well, one of the
5 key functions or one of the key features of
6 alginates is that it gels without heating. And
7 so, for those products that are sensitive to
8 that, it does serve a unique function. And we
9 did hear yesterday that xanthan gum has similar
10 properties, but I couldn't tell you whether that
11 is a direct substitute or not.

12 MEMBER CHAPMAN: Any additional
13 questions?

14 (No response.)

15 Seeing none, we will move on to
16 ammonium bicarbonate.

17 Ammonium bicarbonate -- this is a
18 Harold item -- is used as a rising agent for
19 flat-baked goods such as cookies and crackers,
20 compared to baking soda that produces more gas;
21 thus, not leaving behind a salty or soapy taste
22 in the finished product, as it completely

1 decomposes into the water and gaseous products
2 that evaporate during baking.

3 It cannot be used for moist baked
4 goods, such as normal breads and cakes. It is
5 also used in the baking process where yeast is
6 not used. It provides a characteristic texture
7 as well as functions in controlling cookie
8 spread.

9 Three comments were received in
10 support from industry and trade associations. No
11 comments were received in opposition. Comments
12 in support spoke to the item's necessity. No
13 additional comments were received about
14 compatibility with OFPA criteria.

15 Any further discussion of this item at
16 this time?

17 (No response.)

18 Seeing none, we will move on to
19 ammonium carbonate, also a Harold item.

20 These related substances are used in
21 a rising leavening agent for flat-baked goods
22 such cookies and crackers. It is often referred

1 to as baker's ammonia in cookie recipes by chefs.
2 It is also used to make bread sticks, cookies,
3 crackers, because it helps them to make them
4 lighter and more crisp. It is used in many
5 traditional Greek cooking recipes.

6 Ammonium carbonate is also used
7 because it is heat-activated, so it will not
8 start to rise until whenever the item is being
9 baked, actually goes into the oven. This helps
10 with food preparation and time requirements. It
11 completely bakes out of finished goods.

12 No comments were received on this
13 item. It was noted that this item in the past
14 has been reviewed together with ammonium
15 bicarbonate, and that may be a reasoning for the
16 lack of comments. There are no comments about
17 compatibility with OFPA criteria.

18 Any additional discussion at this
19 time?

20 (No response.)

21 I would like to say it would be in
22 industry's interest to provide public comment

1 prior to the second reading of this item to speak
2 to its necessity and continued listing, from my
3 perspective.

4 Seeing none, we will move on to
5 ascorbic acid.

6 Tracy?

7 VICE CHAIR FAVRE: Okay. Ascorbic
8 acid, quite often used as a dietary supplement,
9 flavor ingredient used in currying and pickling,
10 in flour to improve baking quality, as an
11 antioxidant in fats and oils, and a wide variety
12 of other uses in food processing.

13 The comments were significantly in
14 favor of relisting. However, there was one group
15 that did have some concerns about the fact that
16 there are other natural organic alternatives,
17 given that ascorbic acid is synthetic.

18 MEMBER CHAPMAN: Any additional
19 comments on this item? Discussion?

20 MEMBER DE LIMA: Tracy, do you know
21 specifically what the organic and natural
22 alternatives were that they were referring to?

1 VICE CHAIR FAVRE: I don't have that
2 information immediately in front of me.

3 MEMBER DE LIMA: Okay.

4 MEMBER CHAPMAN: I may be incorrect,
5 but I believe it was like acetic acid and lemon
6 juice were the organic alternatives. The natural
7 alternatives I think were the citric acid, lactic
8 acid, from my recollection.

9 Seeing no additional discussion, we
10 will move on to calcium citrate.

11 Ashley?

12 MEMBER SWAFFAR: Calcium citrate is
13 used for color, flavor enhancer, buffering agent,
14 preservative. There were several in support, one
15 neutral, no opposition. And one in support did
16 say that the removal of this product would
17 severely limit the organic products that they
18 make. So, we think it is pretty straightforward
19 to relist it because there wasn't much
20 opposition.

21 MEMBER CHAPMAN: Any additional
22 discussion?

1 (No response.)

2 Seeing none, we will move on to
3 calcium hydroxide.

4 Jean?

5 CHAIR RICHARDSON: Calcium hydroxide,
6 slaked lime, removes the tough corn cover on
7 corn, so you can make better tortillas. It is a
8 component of aluminum-free baking powder, corn
9 tortilla conditioner, sometimes used in cane
10 sugar.

11 No one opposes it, but slaked lime
12 does reduce the nutritional value of food. So,
13 it is certainly no my favorite substance, but
14 there you go. No one is opposing it and,
15 apparently, it is used widely.

16 MEMBER CHAPMAN: Any additional
17 discussion?

18 (No response.)

19 I would like to note it does have a
20 cultural use in the production of masa. And you
21 can't really make it any other way, as I
22 understand.

1 Seeing no additional discussion, we
2 will move on to the calcium phosphates,
3 monobasic, dibasic, and tribasic. This was a
4 Harold item that I will present on.

5 Calcium is derived from either mined
6 limestone or oyster shells. The phosphorous is
7 derived from mined phosphates. Calcium hydroxide
8 is neutralized with phosphoric acid.

9 Alternatives for leavening, there may
10 be some alternative available, but it is a
11 critical component of baking powder. Its uses
12 are for food processing as a leavening agent,
13 used as a critical component in baking powder,
14 aluminum-free. All three materials are used as
15 leavening agents, dough conditioners, nutrient
16 yeast food, or an expanding agent.

17 Monobasic is also a buffer or firming
18 agent sequestrant and is popular in pancake
19 mixes, usually in combination with sodium
20 bicarbonate. Used in baked goods such as cookies
21 and cakes.

22 Dibasic is used in enriched flour,

1 noodle products, and in both dry and cooked forms
2 of breakfast cereals.

3 Tribasic is an anti-caking agent and
4 buffer. It also provides a very critical
5 function as a free-flow agent in finely-powdered
6 salt.

7 Seven comments were received in
8 support from trade associations and industry.
9 Speaking to the necessity, three commenters
10 raised concerns around the use of inorganic forms
11 of phosphates and suggested elimination or
12 restricted uses. These concerns support other
13 Board members' calls for a phosphate study as a
14 handling research priority. One commenter
15 questions its necessity.

16 Any additional discussion on this
17 item?

18 (No response.)

19 Seeing none, we will move on to carbon
20 dioxide.

21 Lisa?

22 MEMBER DE LIMA: Carbon dioxide used

1 in packaging to retard spoilage, for pest control
2 of both grains and produce, in the extraction of
3 essential oils and extracts, used in the freezing
4 of foods, and in beverage carbonation.

5 So far, all the public comments, nine
6 of them have been in favor of relisting.

7 MEMBER CHAPMAN: Discussion?

8 (No response.)

9 Seeing none, we will move on to
10 chlorine materials. We will consider all three
11 chlorine materials at the same time.

12 Ashley?

13 MEMBER SWAFFAR: Chlorine materials
14 uses a disinfectant and sanitizer. There were
15 several in support from food processors,
16 handlers, manufacturers, and then, the trade
17 industry associations and certifiers, all in
18 support of it. And then, there were just about
19 as many on the neutral side.

20 And so, I would be inclined to relist
21 this because I think, based on the comments from
22 the processors and handlers, this is a critical

1 item that they use in their manufacturing
2 facilities.

3 MEMBER CHAPMAN: Any further
4 discussion?

5 (No response.)

6 I would echo Ashley's comments that,
7 from the comments I had read, it seemed extremely
8 critical to the handling community.

9 Seeing no additional discussion, we
10 will move on to ethylene.

11 Lisa?

12 MEMBER DE LIMA: Ethylene allowed for
13 post-harvest ripening of tropical fruit and de-
14 greening of citrus. We were considering editing
15 the annotation and we posted that and asked for
16 feedback. We were thinking about removing its
17 allowed use for the de-greening of citrus. We did
18 get some feedback, three organizations in favor
19 of relisting, two of which did not support the
20 annotation change.

21 So, at the Subcommittee level, when we
22 were discussing this, the reason that we put that

1 question forward is we heard reports from Florida
2 that growers were using it possibly to disguise
3 unripe fruit and sell it prematurely. But in the
4 comments that we got back from the public, they
5 stated that it was a very important material for
6 organic produce wholesalers' successful
7 importation of certified organic tropical fruit.

8 MEMBER CHAPMAN: Any additional
9 discussion on this item?

10 Zea?

11 MEMBER SONNABEND: Yes. This is one
12 that I was a bit disappointed that we didn't get
13 more public comment on, and in particular from
14 Florida where this is an issue.

15 So, I asked our representative from
16 Florida -- where are you, Marty? -- well, he is
17 here somewhere -- the first day, and what he told
18 me and what was confirmed also by his
19 organization is that in Florida right now they
20 are facing a 25-percent crop reduction for all
21 citrus throughout the State. And so, this is not
22 a time when growers can pay attention to

1 something as small in their scheme of staying
2 alive as this is.

3 However, it is generally not so much
4 used to cover unripe fruit as it is to cover the
5 fact that certain citrus, when it reaches it
6 matured stage does not color all the way. And
7 so, it is more often used on mature fruit, but
8 consumers, if given a choice between one with
9 green blotches and one that is solid orange, will
10 always pick the solid orange ones. And so, that
11 is what it is primarily used for.

12 So, I feel that it is not a time to
13 take away one of their key tools when the growers
14 are struggling to stay in business from citrus
15 greening disease.

16 MEMBER CHAPMAN: Any further
17 discussion?

18 Mac?

19 MEMBER STONE: So, again, I can ask
20 Marty later, but this blotchy green, inconsistent
21 color is different than the greening disease?

22 MEMBER SONNABEND: The greening

1 disease kills the whole citrus tree. This is
2 just a cosmetic thing. If I am not mistaken, it
3 tends to occur worst where the nighttime
4 temperatures don't get cool.

5 We have a few growers who use it in
6 Southern California, too, but in the northern
7 citrus areas. The cooler nights bring on the
8 more even color.

9 MEMBER CHAPMAN: Any further
10 discussion?

11 (No response.)

12 I personally echo Zea's comments. The
13 organic citrus industry is in a tough time right
14 now. I am not in favor of taking away more tools
15 in their toolbox.

16 Seeing no additional discussion on
17 this item, we will move on to ferrous sulfate.

18 Tracy?

19 VICE CHAIR FAVRE: Ferrous sulfate is
20 a nutrient supplement providing iron needed by
21 the body to produce blood red cells to prevent
22 iron-deficiency anemia. In some cases it is

1 mandated for enrichment in certain processed
2 foods.

3 Support, we actually didn't receive a
4 whole lot of support, but we did receive some
5 general comments in support of it. There was one
6 comment against it, basically, saying it should
7 be phased out and, alternatively, less-processed
8 food substituted for that don't require
9 fortification.

10 MEMBER CHAPMAN: Any additional
11 discussion on this item?

12 (No response.)

13 Seeing none, we will move on to
14 glycerides, mono- and di-.

15 CHAIR RICHARDSON: Mono- and di-
16 glycerides, these are annotated for use only in
17 drum-drying of food. So, they are listed for a
18 very, very limited purpose. They appear to be
19 essential in the drying of potatoes, for example.

20 We did receive comments from the
21 public. No one opposes the use of this, and it
22 appears to be essential for this very limited

1 purpose.

2 MEMBER CHAPMAN: Any additional
3 discussion?

4 Zea?

5 MEMBER SONNABEND: Well, I have a
6 question for Jean about the second question that
7 we posed about the alternatives to it. Did
8 anyone specifically comment on these
9 alternatives?

10 CHAIR RICHARDSON: Yes. And now,
11 you've got me --

12 MEMBER SONNABEND: But they did say
13 that these alternatives were not good?

14 CHAIR RICHARDSON: That is correct,
15 yes.

16 MEMBER SONNABEND: Okay. And then,
17 according to the information QAI handed out about
18 their clients, it is apparently is used for
19 personal care products, but I don't see how that
20 fits the annotation, unless it is food items used
21 in personal care products, I guess.

22 CHAIR RICHARDSON: Maybe they used

1 mashed potatoes to make your skin look nicer.

2 MEMBER SONNABEND: Okay.

3 (Laughter.)

4 MEMBER CHAPMAN: Any additional
5 discussion?

6 (No response.)

7 Your laughter lets us know you're
8 awake.

9 Moving on, the next item is glycerin.

10 Jean?

11 CHAIR RICHARDSON: I don't have that
12 one down. Did I do glycerin? I thought that was
13 Tracy. It must be Tracy.

14 VICE CHAIR FAVRE: Okay.

15 MEMBER CHAPMAN: Is it you, Tracy?

16 CHAIR RICHARDSON: Tracy is Ms.
17 Glycerin.

18 VICE CHAIR FAVRE: Yes, thanks very
19 much.

20 Glycerin, used in a wide variety of
21 applications, as carriers, as humectants, on and
22 on. We received many comments in support and

1 several comments against.

2 MEMBER CHAPMAN: I have a question for
3 the program on this item. Given that yesterday
4 we voted to delist this item, I assume the sunset
5 process moves forward if in case the program does
6 not act on our recommendation. But if it does
7 act on our recommendation, that would supersede
8 any sunset renewal? Is that a correct
9 assumption?

10 MR. McEVOY: Well, the sunset process
11 is separate from this, from the action that you
12 took yesterday. So, in terms of National List
13 recommendations that you make, we are looking at
14 doing one rulemaking each year. So, to implement
15 the recommendation on glycerin from yesterday, we
16 would do a proposed and final rule to make that
17 effective, but you still have to complete your
18 work on the sunset review of this particular
19 topic as well, which would mean that you can
20 complete review, take the action, the proposal to
21 remove glycerin from the National List. And
22 based on that recommendation, we would take

1 appropriate action to either renew glycerin or to
2 remove it from the National List.

3 MEMBER CHAPMAN: I didn't quite follow
4 all of that.

5 (Laughter.)

6 MR. McEVOY: Right. So, there are two
7 separate actions.

8 MEMBER CHAPMAN: I get that. Two
9 separate actions. I guess I just want to make or
10 I want to clarify it or make it clear to the
11 program that we have taken one action at this
12 meeting to suggest delisting of it. But we will
13 most likely take another action at the next
14 meeting about its sunset. And if that action is
15 to renew the sunset, I was interested how the
16 program would interpret a motion later that says,
17 yes, we remove the sunset, but previous we said,
18 yes, remove listing.

19 DR. BRINES: Thanks for the question.

20 Yes, the current sunset date for
21 glycerin on 205.605(b) is June of 2017. So, I
22 think the question is whether the program can

1 implement all of the changes that were proposed
2 yesterday as a substitute for the sunset review.
3 Is that your question.

4 MEMBER CHAPMAN: It is not really a
5 substitute for the sunset review. I am just
6 concerned that, if the sunset review does not
7 result in a delisting, that the intention of the
8 Board was to move it, to delist it and move it,
9 but we will have an action after we made that
10 that says, yes, it does not need to sunset. So,
11 it is somewhat contradictory.

12 Zea?

13 MEMBER SONNABEND: Isn't the more
14 appropriate question, can we allow this to go off
15 the list in 2017 with confidence that the
16 rulemaking action on what we did yesterday will
17 be completed on time? So, we don't lose the
18 substance in the meantime.

19 MEMBER CHAPMAN: That is another
20 perspective of the same problem, yes.

21 DR. BRINES: Right. So, I think part
22 of the rulemaking process is that we issue the

1 proposed rule and solicit public comment on
2 implementing the recommendation made by the
3 Board. So, part of the purpose of soliciting
4 comment is to determine that the action that was
5 recommended by the Board is appropriate for
6 implementing in the regulations. So, because of
7 that, we can't guarantee any particular outcome
8 by any particular date.

9 So, for that purpose, we would suggest
10 proceeding with the sunset review of glycerin as
11 previously planned. We will consider the
12 recommendation on glycerin that passed yesterday
13 separately.

14 Miles, you have something to add?

15 MR. McEVOY: Yes. So, by completing
16 your review of glycerin, then, it means that if
17 you complete the review and you don't recommend
18 removal under the sunset review, then it would
19 continue on the list until we completed the
20 rulemaking action on your separate motion on
21 glycerin.

22 MEMBER CHAPMAN: Thank you. That was

1 the clarification I was seeking.

2 MR. McEVOY: Okay.

3 MEMBER SONNABEND: That is asking us
4 to be completely hypocritical, if we renew it,
5 and I am not willing to do that.

6 CHAIR RICHARDSON: Yes, and certainly,
7 that is what we discussed on the Handling
8 Subcommittee, that we were in a dilemma as to how
9 we were going to deal with this, for exactly
10 these reasons. I don't know we are supposed to
11 do in the fall.

12 MEMBER CHAPMAN: So, in my opinion on
13 this item, the reason why I voted in favor of the
14 changes to glycerin via the petition was I do
15 believe it is better on 606. However, the item
16 in some form is necessary and is not fully
17 available to supply the industry in organic form.
18 So, if it is not making that transition from 605
19 to 606, then I would like to see its continued
20 listing on 605.

21 MR. McEVOY: Yes, the program's intent
22 would be to complete the rulemaking on glycerin

1 on the motion in 2016. So, the renewal of
2 glycerin would not be necessary. But, as Lisa
3 pointed out, we can't guarantee the outcome of
4 that rulemaking process.

5 So, you really need to determine two
6 separate actions. One was the motion on glycerin
7 to change the listing from yesterday. And then,
8 the sunset of this particular substance.

9 MEMBER CHAPMAN: Thank you.

10 I think we have some additional items
11 to discuss in the Subcommittee.

12 Francis?

13 MEMBER THICKE: It just seems logical
14 that, when it goes off for comment this fall, a
15 little note needs to go in there about the
16 process, and then, it would be pretty clear.

17 MEMBER CHAPMAN: Thank you.

18 Any additional comments on glycerin?

19 MEMBER BONDERA: And I apologize if I
20 am wrong in order of this. Tracy, if it wasn't
21 you who just said this, then I apologize, because
22 it has been now a few minutes.

1 But I think that I heard a comment
2 about some opposition to relisting, but I would
3 ask if you could expand on it and say why that
4 was -- what the opposition rationale was. I
5 think I got that right on this one, that I heard
6 you say that there were several people commenting
7 in opposition to relisting. And my question is,
8 what was the reasons for that opposition?

9 VICE CHAIR FAVRE: Well, there were
10 some comments about, concern about the hexane
11 extraction process or potential hexane extraction
12 process.

13 Jean, do you want to address this?

14 CHAIR RICHARDSON: Yes. I think these
15 suggestions were removal. And, of course, it
16 remains complicated because of the desire to see
17 it on 606. But like Wolf DiMatteo, for example,
18 and the Organic Trade Association were amongst
19 those that would support its removal from where
20 it is presently located. And also, I think it
21 was MOSES, MOSA, also would support its removal.
22 Oh, sorry. Yes, support the removal, right.

1 I mean, there was quite a bit of
2 comment that we got on this, but it is
3 complicated because of the 606 issue.

4 MEMBER CHAPMAN: And it was my
5 understanding of those comments that they would
6 support the removal, given the listing on 606.
7 Absent the listing on 606, I don't think we could
8 say those organizations were still in support of
9 the removal.

10 Jean?

11 CHAIR RICHARDSON: So, I think when we
12 do the template for this, I think as Colehour was
13 indicating, that we should be sure that all of
14 this sort of narrative analysis of the
15 complexities is put into the template, so that
16 the public can clearly see what we are dealing
17 with.

18 MEMBER CHAPMAN: Yes.

19 Any further discussion on glycerin?

20 (No response.)

21 Seeing none, we will move on to
22 hydrogen peroxide.

1 Ashley?

2 MEMBER SWAFFAR: Hydrogen peroxide is
3 used as a sanitizer. And we got several comments
4 on hydrogen peroxide. There were a few that were
5 neutral on it, and 11 actually wrote in in
6 support of it. One said that, if they were going
7 to lose hydrogen peroxide, it would be a
8 devastating breach in their quality system, and
9 it would critically affect the economic health of
10 their business, and it is critically essential
11 for it to be relisted. And I agree with that
12 company.

13 MEMBER CHAPMAN: Any additional
14 discussion?

15 (No response.)

16 I will say I also concur with Ashley's
17 conclusions.

18 Hearing no discussion, we will move on
19 to magnesium carbonate.

20 Jean?

21 CHAIR RICHARDSON: Yes, magnesium
22 carbonate is for use only in agricultural

1 products labeled "Made with organic specified
2 food or groups," and prohibited in agricultural
3 products labeled "Organic". I mention that
4 because of the range of uses for it, used in
5 buffering. It is a flow agent. It is a bleach
6 additive to flour and cheese, and it is a color
7 enhancer in canned green beans and peas. There
8 you go.

9 It was not clear to me from the
10 information that we got whether or not it is
11 essential. One comment from Beyond Pesticides
12 says, "Well, we could leave it." It seemed to
13 create the impression, well, since it is in the
14 made-with category, it could stay on the list.
15 There didn't seem to be a lot of excitement about
16 this material. How about that?

17 MEMBER CHAPMAN: Any further
18 discussion?

19 (No response.)

20 Jean, did you receive any specific
21 comments from industry or trade associations
22 supporting its continued listing?

1 CHAIR RICHARDSON: No, I don't see any
2 in my notes.

3 MEMBER CHAPMAN: Okay. Again, I would
4 like to note that I would support industry, if
5 they find this item necessary, to comment
6 directly or through a trade association to its
7 necessity.

8 Any other discussion?

9 (No response.)

10 Seeing none, magnesium chloride.

11 Jean?

12 CHAIR RICHARDSON: Magnesium chloride
13 derived from seawater is in 605(b). It is used
14 as a coagulant in making tofu, again, Jean's
15 favorite food.

16 And the issue here really is that it
17 may well be in the wrong category. It is
18 actually a non-synthetic if it is derived from
19 seawater, but it is in (b) rather than (a). So,
20 we would need a mechanism to reclassify it.

21 It is generally supported by industry.

22 MEMBER CHAPMAN: Any additional

1 discussion?

2 Colehour?

3 MEMBER BONDERA: I don't know, Jean,
4 if you are just making that comment for the
5 record, that there needs to some mechanism, or if
6 this is going to end up relisted as it exists, or
7 if we are going to be informed what that
8 mechanism is, so that this doesn't go through the
9 relisting process, and, then, it still isn't
10 where it should be.

11 CHAIR RICHARDSON: Maybe Dr. Brines
12 could give us some guidance.

13 DR. BRINES: Yes, I don't have an
14 exact answer to that question yet. We are aware
15 that there are probably several substances on the
16 list that may need reclassification, particularly
17 after the finalization of the classification
18 guidance.

19 This particular one, I don't think --
20 well, I understand the need to want to do that at
21 this time, now that the problem has been
22 identified, rather than postponing it to some

1 point in the future. We don't have a specific
2 mechanism for reclassifying substances as part of
3 the sunset process, but we are willing to work
4 with the Handling Committee and provide
5 additional information. I just want to think
6 through a couple of options first.

7 Thanks.

8 MEMBER CHAPMAN: Lisa?

9 MEMBER DE LIMA: Jean, did we get any
10 feedback on the question we posed about
11 considering limiting it to the production of
12 tofu?

13 CHAIR RICHARDSON: We did have
14 suggestions that we could annotate it in that
15 way, yes. I will put that in the template that I
16 send out to find out what kind of response we get
17 back from the general industry as to whether or
18 not they would be in favor of limiting it only to
19 tofu production.

20 MEMBER CHAPMAN: Any additional
21 discussion?

22 (No response.)

1 Michelle, please cancel the tofu cake
2 for Jean.

3 (Laughter.)

4 Moving on, magnesium stearate.

5 Jean?

6 CHAIR RICHARDSON: Magnesium stearate.

7 I hope there is nobody here that
8 really loves tofu or someone from industry. But
9 I do handle my biases really.

10 (Laughter.)

11 Being trained in science, I can do
12 that. I have a null hypothesis every time I look
13 at anything here. I think it is just terrific
14 stuff, and I work to support that.

15 Magnesium stearate. This is another
16 one of my not favorite materials. This is for
17 use only in agricultural products labeled made-
18 with category again, prohibited in organic
19 category.

20 WhiteWave supports the use of this
21 material. It is used as a, quote, "dietary
22 supplement".

1 Where are my other notes on this?

2 It is also used as a lubricant, a
3 binding agent in tablets, an anti-caking agent in
4 salt, and excipient in flow agent. It could be
5 an incidental additive. It allows manufacturers
6 to produce more tablets, more pills, per hour as
7 the machine can run faster. It may have some
8 negative impact on human health when ingested.

9 We didn't really get very much
10 feedback on it, and it would be great to get
11 more, especially from industry where it is being
12 used.

13 I should say, in all honesty, that
14 there were a couple of sort of major industry
15 folks that said they really needed it.

16 MEMBER CHAPMAN: Any additional
17 discussion?

18 Mac?

19 MEMBER STONE: Yes, listening to the
20 conversation -- and I appreciate all the work
21 that you all have done on these materials --
22 around this idea of necessity, and if we hear

1 from it, and, well, if three industry said, "Yes,
2 we really need it," but if only one? And are
3 they a small company? And how do we pull the rug
4 out from folks?

5 I think this Board is good at making
6 decisions on the material, and to Zea's and Jay's
7 point of explaining our vote, if you will. But I
8 want us to all think pretty hard about this
9 necessity. Just because we did or did not hear
10 -- we are counting on people to tell us, "Yes,
11 we've got to have this thing, and here's why."

12 But we know the certifiers have said
13 they reach out and they may or may not get it
14 back. Well, is that automatically an out? You
15 know, I am really wrestling with it, this
16 necessity and gauging use, because people are
17 busy.

18 So, I am just thinking outloud, I
19 guess.

20 MEMBER CHAPMAN: Zea?

21 MEMBER SONNABEND: Mac, I completely
22 agree with you, and I do think that we just don't

1 have the reach to all of the users. No matter
2 how much certifiers, OTA, and the other groups
3 try to promote the things that are on the list,
4 it is not the same as when we first created the
5 list, when there was a several-year process,
6 instead of a three-week comment period, to weigh-
7 in on each of these things. Most of them were
8 discussed more than once before they got added to
9 the list.

10 So, this one that I just don't think
11 we reach out to the supplement industry, which is
12 who mostly uses this, in the same way that we do
13 to food companies. And I would hate to close out
14 this relatively-minor, but important to them,
15 function of making capsules for supplements,
16 several of which I take every day, and I hope we
17 all do to stay healthy. But I just think it is
18 important that we recognize that.

19 MEMBER CHAPMAN: I can speak from my
20 position. It depends a bit for me based on the
21 classification of the material. In the absence
22 of any information for a non-synthetic in either

1 direction, either a request from other
2 communities for its removal or support from the
3 industry as to its necessity, then I am going to
4 rely on previously this Board's experience in
5 listing it to continue to list it. However, if
6 there is strong opposition from a section of the
7 community and no support for its continued
8 listing in any form, I have a hard time
9 justifying the continued listing of some
10 substances.

11 And when it comes to synthetics and
12 agricultural ingredients, that bias is a bit
13 stronger in the sense that, if these are
14 necessary, then there should be some comment to
15 its use by someone. In the case of this
16 substance, I noted that CCOF stated that at least
17 three of their operations, dietary supplement
18 operations, are using this substance. They
19 didn't support that they were in favor of it or
20 not, but they are speaking to its use. And that,
21 along with the previous information, for me
22 satisfies this necessity requirement. So, that

1 is not a question for mem. But, then, it is a
2 balancing again against those other criteria.

3 We just lost our microphones.

4 Hello? No, no microphone.

5 CHAIR RICHARDSON: Yes, all of our
6 microphones are off.

7 MEMBER CHAPMAN: Do you want to break
8 right now? It is a bit ahead of schedule, but we
9 are also ahead of schedule?

10 CHAIR RICHARDSON: Okay. Well, there
11 is no sound. So, I'll tell you what. Why don't
12 we take our morning break right, have a 10-minute
13 break and come back at 10:15? But that doesn't
14 mean 20.

15 (Whereupon, the foregoing matter went
16 off the record at 10:05 a.m. and went back on the
17 record at 10:29 a.m.)

18 CHAIR RICHARDSON: All right. We are
19 back on the record again.

20 And I would like to correct a
21 statement that I made, Tom, earlier. When I was
22 talking about magnesium stearate just a minute or

1 two ago, my notes are incorrect, and I
2 incorrectly wrote in my notes that WhiteWave
3 supports magnesium stearate, but when I looked
4 back through, I realized that was an error. It
5 was down for the wrong material. So, that should
6 be taken from the record. It is not a material,
7 I believe, that WhiteWave even uses. So, my
8 error.

9 MEMBER CHAPMAN: Thank you.

10 I had Zea, and then, Colehour.

11 Zea?

12 MEMBER SONNABEND: Thank you.

13 I also wanted to point out that
14 magnesium stearate was carefully considered to be
15 only in the made-with organic category. So, for
16 instance, turmeric in a capsule is something I
17 often take for inflammation because it is very
18 hard to eat enough turmeric every day to get the
19 same effect. And so, I can buy something that
20 says, "Turmeric," "Made with organic turmeric,"
21 but the capsule is able to have magnesium
22 stearate in it. I do think that is a very

1 appropriate classification for it.

2 MEMBER BONDERA: Okay. Thank you.

3 I had a question about magnesium
4 stearate. And then, I have a general comment.

5 So, I will start with the question,
6 which is -- and, Jean, if you are the lead on
7 this, it is to you -- were there or are there
8 alternatives that the industry is considering or
9 that you all have talked about?

10 CHAIR RICHARDSON: I don't have any
11 detailed information on alternatives, no. I
12 mean, it functions very well for coating pills,
13 as Zea described. So, I don't have any
14 alternatives.

15 MEMBER BONDERA: Okay. Thank you.

16 I guess, based on something that
17 entered into previous conversation in terms of
18 the industry groups commenting, generally
19 speaking -- and I think Mac was commenting about,
20 you know, we don't always get the input that is
21 out there; it is not so readily functional.

22 I do feel that it is important to

1 recognize that it has now been several years that
2 we went through that recognition process and the
3 policy development. At that point in time it was
4 committee. And then, the whole NOSB voted to
5 request of the program that there would be an
6 open docket, so that there was more opportunity
7 for public comment and input in any form, at
8 anytime.

9 I really feel like this is a good
10 example of how that could be better achieved, the
11 input, like Mac was saying, from people where it
12 is not concentrated into a three-week period and
13 it is not so limited.

14 And so, I just really want to
15 reiterate that more input would be accessible,
16 was why we went through that process of making
17 that recommendation that all NOSB members voted
18 to support. So, I really encourage the program
19 to seriously reconsider prioritizing
20 implementation of that.

21 Thank you.

22 MEMBER CHAPMAN: Thank you.

1 Any other discussion on magnesium
2 stearate?

3 Mac?

4 MEMBER STONE: I just had another sort
5 of general follow-up for the concern that we are
6 going to get good feedback. And Colehour just
7 mentioned alternatives.

8 We are going through these in
9 alphabetical order. Dr. Brines may pull her hair
10 out at this suggestion. But, in the fall if we
11 go through these in groups, like emulsifiers,
12 gels, filtering aids, kind of as a group, so that
13 we can talk about why this one is necessary at
14 high temperature or low temperatures, and those
15 types of things to help them look at each other
16 as alternatives, not alphabetical.

17 Thanks.

18 MEMBER CHAPMAN: Any other discussion?

19 (No response.)

20 Seeing none, we will move on to
21 nutrient vitamins and minerals.

22 Tracy?

1 VICE CHAIR FAVRE: Thank you, Tom.

2 Nutrients, vitamins, and minerals is
3 not without a bit of confusion and dare I say
4 even controversy. It was kind of confusing doing
5 the initial review as to what was actually all-
6 inclusive.

7 I did find back a recommendation made
8 by previous Boards that requested clarification.
9 It was done in 2012 by the Handling Subcommittee,
10 wanted a revision to the annotation to clear it
11 up, with the quote that, "We believe the
12 recommendation in 1995 expressly distinguished
13 nutrients from vitamins for the purpose of
14 including micronutrients that may be essential or
15 that have been generally accepted as promoting
16 optimal health." That annotation was not done.
17 And so, there was still some lingering confusion
18 about it.

19 There was fair amount of public
20 comment about nutrients, vitamins, and minerals.
21 I would say, generally, manufacturers and
22 producers were supportive of it, including the

1 National Organic Coalition, OTA, MOSA, and CCOF
2 were all in favor of relisting.

3 We did have some rather vocal
4 opposition to the relisting, including we heard
5 from Consumer Reports in oral comments the other
6 day. Because, generally, all of these nutrients
7 are synthetic, and folks have expressed concern
8 about having synthetic nutrients in organic food.

9 MEMBER CHAPMAN: Thank you, Tracy.

10 Any discussion on this item?

11 Yes?

12 VICE CHAIR FAVRE: I'm sorry, Zea.

13 Let me jump in real quick.

14 I neglected to say that we did receive
15 some information back in the Technical Review on
16 the ancillary substances that are typically found
17 or generally found in the makeup of these
18 nutrients. Those are listed in the template that
19 we included.

20 MEMBER CHAPMAN: Zea?

21 MEMBER SONNABEND: Okay. This is one
22 of the ones I have the hardest time with on the

1 list because it seems so non-specific and weird.

2 When it first got approved, which was
3 years ago now, it seemed more clear-cut that
4 there were certain foods and products that had
5 mandatory vitamin supplementation, vitamin D in
6 milk and those types of things.

7 We have now been told that really that
8 isn't the case anymore, that with the exception
9 of a very few things -- I think iodine in salt is
10 probably one of them and vitamin D in milk --
11 that it is now more of a self-declaration rather
12 than a government declaration that you need these
13 things.

14 And I so, I do feel that they are
15 being excessively abused as synthetic additives
16 into too many categories of food. But I just
17 don't have enough clarity on how to proceed to
18 limit this if we don't have government mandates
19 behind it. And it is not clear if there is any
20 other agency or some reputable source that we
21 can't count on for those supplementation areas
22 where it is really important to have

1 supplementation.

2 But it would be my desire to try to
3 create some sort of limitation on those, if
4 possible. But I think we need more guidance from
5 the community on it. Because I don't think just
6 saying no to all of them is the way to go.

7 With the state of the food system and
8 the agriculture reality of today, people are not
9 getting enough nutrients from what passes as food
10 to most of the population. And so, I do think it
11 is important to allow some uses, but I would like
12 to see a way through to limit them in some way.
13 If anyone has any constructive suggestions, I
14 would like to hear from them.

15 MEMBER CHAPMAN: I will go with Tracy,
16 then Nick.

17 VICE CHAIR FAVRE: We did have some
18 suggestions that we eliminated as a category and
19 that allow the individual nutrients to repetition
20 and be considered individually. That would be
21 fairly laborious, but that would be one way of
22 limiting it.

1 MEMBER CHAPMAN: Nick?

2 MEMBER MARAVELL: Yes, I just want to
3 say that I share Zea's concern, and have for
4 quite some time. It is a little bit ironic that
5 we would want to add additional nutrients to
6 organic food. You know, it is required in some
7 cases, but I think that it should be moderated.
8 I would look to industry to also help us sort of
9 figure out a way to do that, because I think it
10 sort of undermines the basic message of organic
11 food.

12 MEMBER CHAPMAN: Thank you.

13 Colehour?

14 MEMBER BONDERA: Yes. No, I actually
15 also agree with the concern. I guess from what
16 you said, Zea, because I haven't been in those
17 conversations and I don't actually know, but I
18 assume that you all are also considering the FDA
19 supplement requirements when you were mentioning
20 the possible agencies or entities that are going
21 to help advise. So, I just wonder if you can
22 default to some existing standards, as in other

1 places we have defaulted.

2 And so, I agree that it should be
3 looked at, and I just wonder if maybe it does
4 already exist.

5 MEMBER SONNABEND: Well, I can respond
6 to that, although I don't have my year exact;
7 Emily probably knows.

8 The FDA has not updated that list
9 since the seventies. And so now, they just rely
10 on a self-affirmation of like "We need this,"
11 instead of trying to make that old list current.

12 And there is -- was it an interim
13 rule, Emily? What was it called, what came out
14 already? You know, it came out, but it still
15 allowed full use of all different nutrient
16 substances.

17 MS. BROWN ROSEN: I would just like
18 direct the Committee, we did publish a proposed
19 rule in January 2012 on nutrients, vitamins, and
20 minerals that explained the correct FDA
21 references that we would have liked to use to
22 identify nutrients would fall under this. So, I

1 think the Committee might want to go back and
2 look at that.

3 Subsequently to that, we were not able
4 to complete that rulemaking, and there is an
5 interim final rule that just reverted to the
6 status quo. That is why we are still back at
7 ground zero here. But, you know, I think the
8 Committee might want to look at the original
9 proposal.

10 I just want to say FDA requirements
11 are not -- there are very few FDA requirements
12 for nutrients in foods; basically, milk and skim
13 milk and infant formula. Other things are
14 covered in FDA under standards of identity. So,
15 those are optional and to a degree that if you
16 want to make a certain type of food. So, there
17 is not a very big universe of required by FDA.

18 But I think if you go back to that
19 proposed rule, you will find a lot of information
20 about, you know, minerals and vitamins that are
21 included in the standards of identity that are in
22 common use and supported by FDA regulations.

1 MEMBER CHAPMAN: Any additional
2 discussion?

3 (No response.)

4 I have a question about the rule which
5 you were unable to do, apply, and we are back on
6 the interim final rule. Is there still action
7 being done by the program on that initial one or
8 is that now over?

9 So, you had an action that you were
10 trying to make rulemaking on, and then, you
11 reverted to an interim final rule? Is that
12 correct?

13 MR. McEVOY: Yes, the interim final
14 rule is in effect.

15 MEMBER CHAPMAN: Yes.

16 MR. McEVOY: The proposed rule is
17 still out. At a certain point, we will finalize
18 that action.

19 MEMBER CHAPMAN: Okay. Thank you.

20 MR. McEVOY: Yes. We are not
21 currently working on that at this point. We are
22 focusing on, for instance, animal welfare and

1 some other rulemaking. Origin of livestock, for
2 instance, just came out as a proposed rule.

3 But there's a couple of National List
4 items that we need to get to, sodium nitrate and
5 nutrients, vitamins, and minerals are part of
6 that package.

7 MEMBER CHAPMAN: Thank you.

8 MEMBER SONNABEND: Oh, one more
9 clarification to that is that a few years ago we
10 made recommendations on all kinds of supplemental
11 nutrients in infant formulas. Many of them were
12 rejected. However, no action has been taken on
13 those recommendations. And therefore, the infant
14 formula is still on the shelves full of these
15 synthetic things.

16 And we were told that it might be part
17 of the final rule process on the proposed rule to
18 clarify that those were not considered part of
19 the vitamin and mineral overall listings. But it
20 is stalled. And so, that means all the decisions
21 made on infant formula are also stalled along
22 with it.

1 MR. McEVOY: Yes. The current status
2 is that nutrients, vitamins, and minerals is
3 listed through that interim rule that was
4 published a couple of years. And we are not
5 currently working on that, but it is something
6 that we do need to get to, to incorporate the
7 comments on the proposed rule and the additional
8 recommendations made by the Board on this topic
9 area.

10 MEMBER CHAPMAN: Thank you.

11 Any further discussion on this item?

12 (No response.)

13 Okay. Moving on, next on the list is
14 ozone.

15 Ashley?

16 MEMBER SWAFFAR: Ozone is used as a
17 disinfectant in post-harvest treatment. We had
18 several public comments on it. One opposed the
19 listing because they thought it was a very
20 powerful oxidizer and they asked for, when we
21 reviewed this, that we should ask ourselves, is
22 this needed?

1 We did have several food processors,
2 ingredient suppliers, trade associations, and
3 wholesalers write in and say that they did use
4 this product. One said that they would like to
5 have it remain on the list, so that their
6 ingredients would still meet the requirements
7 from a food safety perspective. And so, I think
8 it is a straightforward relist on this one.

9 MEMBER CHAPMAN: Any further
10 discussion?

11 (No response.)

12 Seeing none, we will move on to
13 phosphoric acid.

14 Ashley?

15 MEMBER SWAFFAR: Phosphoric acid is
16 used as a cleaning agent in sanitization of food
17 contact surfaces. There was no opposition to
18 relisting this. We did have several food
19 processors, ingredient suppliers, and trade
20 associations, and certifiers who wrote in and
21 supported the relisting. So, I would recommend
22 that we relist this.

1 MEMBER CHAPMAN: Discussion?

2 Yes?

3 MEMBER TAYLOR: I would like to know
4 if, as you examine and count, take note of the
5 comments that you have received, if you are also
6 going to include the comments from the public
7 that we always get, and continue to get, that
8 state about no synthetics, no additives. I think
9 those are comments that we need to include in
10 your mix.

11 MEMBER CHAPMAN: Thank you for that
12 comment. I will share that view with the
13 Subcommittee as we continue these discussions.

14 Any additional discussion on these
15 items, on phosphoric acid?

16 (No response.)

17 Seeing none, next, potassium acid
18 tartrate.

19 Jean?

20 CHAIR RICHARDSON: Yes, this
21 substance, cream of tartar, is strongly supported
22 and widely used. We received no opposition to

1 its use.

2 When I was doing the research on this
3 and looking at the historical material, I did
4 note that there may be some confusion between
5 potassium tartrate made from tartaric acid and
6 potassium acid tartrate and potassium hydrogen
7 tartrate and potassium bitartrate, which is cream
8 of tartar. So, there is just a lot of odd use of
9 the term, and I would just like to be sure that
10 the NOP sort of relooks at the website. I
11 haven't checked it recently to see if some of
12 those confusions are still in place on the
13 website. So, it is sort of like just a
14 placeholder to remind us to do that.

15 Otherwise, I didn't see it as
16 something that there was any serious opposition
17 for.

18 MEMBER CHAPMAN: Discussion?

19 (No response.)

20 Seeing none, we will move on to
21 potassium carbonate.

22 Jean?

1 CHAIR RICHARDSON: Potassium
2 carbonate. This material is used in the Dutch
3 alkali process in the manufacture of cocoa and
4 chocolate. And I do eat those. Can be used in
5 soft drinks, confections, for pH control, and it
6 can also be used as part of a leavening agent.

7 We don't have a huge amount of
8 information on how it is produced. It is one of
9 those ones where I kind of wished we had a TR,
10 but, as you know, we didn't get TRs on absolutely
11 everything. Maybe the next time.

12 In some ways, it didn't necessarily
13 appear to be totally essential, but we do have
14 comments from CCOF that it is used in the wine
15 industry. It is not opposed by anyone. There
16 are no comments suggesting that we not use it.

17 MEMBER CHAPMAN: Discussion?

18 Zea?

19 MEMBER SONNABEND: This is more of a
20 general point that I had meant to bring up
21 earlier, because I don't think it was very
22 obvious to the public from some of the comments

1 we received. When we embarked on the 2017 sunset
2 reviews, we undertook to take the list for all
3 three subcommittees and rank them according to
4 the need for TRs.

5 And so, we on the Handling Committee
6 ranked high, medium, and low in terms of
7 priorities for TRs. And so did the Crops
8 Subcommittee and all of them.

9 We submitted the list to Dr. Brines,
10 and were able to receive TRs in this round only
11 on the ones that we had marked high priority,
12 because, of course, they are working under a
13 budget.

14 We have not further discussed what
15 will become of those ones that we asked for TRs
16 for medium and low priority for. Some of those
17 ones, we may want to take back right after this
18 meeting and see if we can make those go forward
19 between now and fall, especially if they are
20 limited-scope ones, to just address questions
21 that are raised here.

22 But we will be at least discussing

1 that, just so you know, and we did our best to
2 prioritize the TR requests, but not all of them
3 were adopted.

4 MEMBER CHAPMAN: Colehour?

5 MEMBER BONDERA: Yes. Actually, I
6 appreciate that comment, Zea, because I was a
7 little bit in the back of mind wondering about
8 that question.

9 However, from what you said, Jean, I
10 want to ask if in these rules, if essentiality
11 cannot be determined when we are looking at
12 something that already is listed, for whatever
13 reason and however, if currently we can't, we
14 don't have information that shows us that it is
15 an essential listing, how can we comfortably vote
16 to relist something when we don't have something
17 showing that or telling us that? For example, if
18 we didn't get a limited-scope TR and we didn't
19 get more information in this particular instance,
20 or more generally?

21 Thank you.

22 CHAIR RICHARDSON: Yes. I mean, for

1 some of these, like Zea was saying, it would be
2 nice to have a TR the next time around. I think
3 that we have enough information on this to
4 consider that it is essential, especially, as I
5 say, in the Dutch alkali process, et cetera, and
6 in the wine industry. So, it is obviously of
7 important use in sectors of the organic industry,
8 this one. Some of the others, I would have some
9 other comments on.

10 MEMBER CHAPMAN: I would also say, in
11 the absence of information to the contrary, that
12 being information from the public that
13 alternatives exist, I think we can also rely on
14 previous Boards' decisions, that they considered
15 and weighed those options at that time.

16 Any other discussion of this item?

17 (No response.)

18 Seeing none, we will move on to
19 potassium citrate.

20 CHAIR RICHARDSON: Potassium citrate
21 has a fairly-wide range of uses, nutrients, a
22 chelating agent, buffering agent, pH adjusters,

1 flavor enhancer, and flavor adjuvant. So, it is
2 widely used and has broad support.

3 Perhaps one of the most interesting
4 things right now, some of the issues that have
5 come up in this meeting relate to the use of
6 phosphates and some concerns that have been
7 raised about that, which the Handling Committee
8 will be considering over the next few months.

9 Citrates cause less environmental
10 damage than phosphates during manufacture. And
11 so, citrates and phosphates can play sort of the
12 same role in synthetic chemicals that are being
13 used in processing. So, the potassium citrate
14 seems to be widely used and not opposed.

15 MEMBER CHAPMAN: Discussion?

16 (No response.)

17 Seeing none, we will move on to
18 potassium phosphate.

19 Jean?

20 CHAIR RICHARDSON: Okay. Potassium
21 phosphate. This is for use only in agricultural
22 products labeled "Made with organic," prohibited

1 in agricultural products labeled, "Organic". It
2 is used primarily for pH control.

3 In the 1995 initial TAP, it was
4 recommended that it not be allowed; in fact, that
5 it be prohibited. But, in the end, it was
6 allowed only for made-with products. This would
7 be one where I would suggest that it would be
8 nice to be able to get a limited-scope TR.

9 It is in the phosphate group. So, it
10 will be one of the ones that I think we will be
11 looking at very closely over the next few months.

12 MEMBER CHAPMAN: Any additional
13 discussion?

14 Zea?

15 MEMBER SONNABEND: Okay. I think I
16 might as well give my discussion points about
17 phosphates now that apply to the sodium
18 phosphates as well.

19 In this one, Jean, I guess you didn't
20 mention that we received any information back
21 from our question of how this was actually used
22 and whether it was important to people.

1 But we did receive several general
2 comments about problems with the phosphates
3 overall, not singling out any particular one, but
4 just indicating as a group the more widespread
5 they get, the more people ingest them, and the
6 consequences of the long-term ingesting them over
7 people.

8 So, this is a good example of why we
9 have this two-posting period. We were unaware of
10 this concern at first, but now, going into the
11 second posting, it gives us a chance to take a
12 look at some of the literature citations that
13 were provided that we didn't have a chance to
14 look at it.

15 What we propose to do is take a look
16 at that literature, identify data gaps in that,
17 and then, focus our research priorities from the
18 Handling Committee on where more research might
19 be need to be done, in particular, as this
20 applies to organic products and the consumption
21 of that; and then, to see if there is enough
22 clear information in the literature that we

1 should put limitations on one or all of these
2 products.

3 We don't want to try to do anything
4 piecemeal, one-by-one. We need to look at the
5 whole category overall in order to do this.

6 MEMBER CHAPMAN: Thank you.

7 Any additional comments?

8 (No response.)

9 Okay. Next is sodium citrate.

10 Ashley?

11 MEMBER SWAFFAR: Sodium citrate is a
12 preservative, a flavor and color enhancer, and a
13 buffering agent.

14 The Committee did ask, we said that we
15 were considering removing this, based on the
16 availability of alternatives, including citric
17 acid and potassium citrate. We did get quite a
18 bit of written response back. That said that
19 industry needed this ingredient for an entirely
20 different purpose than citric acid and potassium
21 citrate, and they could not be substituted for
22 each other. And there was no opposition to this,

1 and only one neutral, which they questioned if
2 there were alternative available. So, I think
3 the industry responded to this.

4 MEMBER CHAPMAN: Thank you.

5 Any additional discussion?

6 (No response.)

7 Hearing none, we will move on to
8 sodium hydroxide, back to our busy bee Jean.

9 CHAIR RICHARDSON: Sodium hydroxide,
10 prohibited for use in lye peeling of fruits and
11 vegetables. It is a fairly-toxic and caustic
12 material, also known as caustic soda or lye.

13 Traditionally, it used to be made by
14 running water through wood ash.

15 It is used as a processing aid to
16 adjust pH, and in the production of pretzels and
17 cocoa it appears to have essentiality. It alters
18 proteins and starches, so that the surface of the
19 pretzel becomes smooth and brown in baking. It
20 is used in olive processing to reduce bitterness
21 in some varieties of green olives.

22 We did not receive any negative

1 statements or opposition to this material, but we
2 did receive industry support for it.

3 MEMBER CHAPMAN: Discussion?

4 (No response.)

5 Seeing none, we will move on to sodium
6 phosphate.

7 Jean?

8 CHAIR RICHARDSON: Sodium phosphate.

9 Let's see. For use only in dairy foods.

10 Let's see, what do I have? There was
11 a lack of consensus when this initially was put
12 on the list in 2001. One reviewer had suggested
13 in the past that, based on all the OFPA criteria,
14 it should be prohibited. It is used in pH
15 control in the dairy industry. Other reviewers
16 had suggested that it be listed with stringent
17 conditions on all uses of this material, which
18 would allow all FDA-permitted uses, but only on a
19 case-by-case determination, depending on need,
20 essentiality, nutritional impact, and
21 alternatives.

22 It is derived from phosphoric acid.

1 It is used, also, as a pH control, texturizer,
2 nutrient and dietary supplements, et cetera.
3 Prevents a separation of water and fat in cheese,
4 emulsifier in nonfat cheese and milk, and creates
5 organoleptic characteristics not otherwise
6 present.

7 There do appear to be a number of
8 other alternatives that could be used, such as
9 lecithin, the agars, the alginic acids already on
10 the list, and some of the gums and pectin.

11 It is used in soy processing. Let's
12 see. No, that is not a correct statement. Leave
13 that one off.

14 Okay. OTA says that in their industry
15 survey that it is used as an emulsifier in cheese
16 production. The NOC recommends that it be
17 removed.

18 MEMBER CHAPMAN: Thank you.

19 Any additional discussion?

20 (No response.)

21 Seeing none, we will move on to sulfur
22 dioxide.

1 Sulfur dioxide is used to prevent
2 spoilage and oxidation in wine. Sulfur compounds
3 have long been an integral part of traditional
4 winemaking, and some sulfur dioxide is naturally-
5 occurring in grapes. Sulfites are used to
6 prevent oxidation and help malolactic
7 fermentation.

8 In 2010, a petition was submitted to
9 remove the restrictive annotation limiting the
10 use of sulfur dioxide to wines made with organic
11 grapes, effectively expanding the use of sulfur
12 dioxide to all wines. This motion to amend this
13 annotation at the fall 2011 NOSB meeting did not
14 pass. So, at this time it is restricted to wines
15 labeled "Made with organic grapes".

16 One public comment was submitted by an
17 interest group stating, "Sulfur dioxide is a
18 synthetic preservative, but it is limited in the
19 listing to use only in wine labeled with 'Wine
20 made with organic grapes,' which does not
21 threaten the integrity of the organic label."

22 We did not receive any other comments

1 on this substance.

2 Discussion?

3 Zea?

4 MEMBER SONNABEND: Okay. I think I
5 would remiss if I just let this one go without
6 any comment. This is one of the most longest
7 historic debates among the organic community of
8 anything in the room.

9 The time that Tom simply referred to
10 in one sentence, when the petition to expand the
11 use got turned down, involved eight hours of
12 public comment in Savannah from winemakers who
13 needed it or didn't need it and wine shops who
14 sold it or didn't sell it. And some of you do
15 remember sitting through that, which was just the
16 latest of many, many past occasions where this
17 has been considered.

18 The fact that we got so little
19 comment, so few winemakers weighing-in here in
20 the home state of the best wine in the world is
21 an indication that the last action of the Board
22 probably was conclusive in terms of this is

1 appropriately-listed now. There is not a huge
2 need to reconsider its use. The system in this
3 case worked.

4 In spite of having a wine-tasting
5 event solely to sample non-sulfited wines, it
6 still passed.

7 (Laughter.)

8 And so, I just feel like we need to
9 acknowledge that this is really something that
10 has come a long way in our deliberations over the
11 years. It is good that it this at this point.

12 MEMBER CHAPMAN: Thank you, Zea.

13 Yes, Miles?

14 MR. McEVOY: Yes, just as another
15 point of information on this, we have been
16 working with the European Union. We have an
17 equivalency arrangement with the European Union,
18 and they put in organic wine standards right
19 after we signed the equivalency agreement in
20 February of 2012.

21 Their organic wine standards are
22 substantially different than ours. They do allow

1 sulfites in organic wine. They don't have a
2 made-with-organic-grape labeling category.

3 We continue to have discussions with
4 the European Union on this particular topic. It
5 is covered by the equivalency arrangement. What
6 happens with that is that European winemakers
7 that want to sell into the U.S. market have to
8 meet our labeling requirements, meaning that if
9 they want to sell wine labeled as organic, then
10 they can't use added sulfites. But if they want
11 to use the made-with-organic labeling category,
12 then they have to meet the 100 parts per million
13 requirement.

14 So, it is another indication of sort
15 of a different way that the U.S. and the
16 Europeans look at some of these material issues.
17 But I just wanted to throw that out there as
18 another point of information.

19 Thanks.

20 MEMBER CHAPMAN: Thank you.

21 Any other further discussion on this
22 item?

1 (No response.)

2 Seeing none, we will move on to
3 tocopherols.

4 Tracy?

5 VICE CHAIR FAVRE: Thank you.

6 Tocopherols, with the annotation
7 "derived from vegetable oil when rosemary
8 extracts are not a suitable alternative," mixed
9 tocopherols as used as antioxidants in food and
10 animal feeds and are manufactured in liquid and
11 powder forms, commonly extracted from distillates
12 of vegetable oils.

13 There has been a fair amount of
14 controversy about tocopherols, quite a bit of
15 feedback about it. One of the questions that we
16 did ask was, what, if any, ancillary ingredients
17 are included? The TR was not back in time for
18 the public posting, but we did subsequently get
19 it. And the TR does have a pretty detailed list
20 of ancillary substances that would be included.
21 In some cases, it is just listed as unknown, so
22 we don't know, but we do have at least the

1 beginning of a list.

2 Public comment, I would say,
3 generally, food processors and some certifiers
4 were in favor of it. There were some comments or
5 concerns raised about the potential for whether
6 or not they are still needed in synthetic form on
7 the list because there does seem to be at least
8 some early indications there might be some
9 natural tocopherols available on the market.

10 In some cases, it is required by law
11 for stabilizers such as in fish meal. You aren't
12 actually allowed to transport fish meal without
13 some sort of tocopherol as a stabilizer.

14 MEMBER CHAPMAN: Any additional
15 discussion?

16 Zea?

17 MEMBER SONNABEND: A question. Maybe
18 I wasn't paying attention at the time, but if we
19 didn't get the TR back in time, where did this
20 chart of the ancillary substances come from?

21 VICE CHAIR FAVRE: The one in the
22 proposal? I think that is the one we have now;

1 it might be -- oh, you do have it up? Okay, go
2 ahead, please.

3 DR. BRINES: Thank you.

4 Yes, the Technical Report for
5 tocopherols was posted the NOP website in late
6 February. So, it was posted in advance of the
7 meeting materials being available to the public
8 for this meeting.

9 Thanks.

10 MEMBER SONNABEND: And so, the chart
11 just was taken from that, the TR?

12 DR. BRINES: I believe so. Thanks.

13 VICE CHAIR FAVRE: Sorry about that,
14 Lisa.

15 DR. BRINES: Sure.

16 VICE CHAIR FAVRE: I had in my notes
17 that we didn't have it posted in time.

18 MEMBER CHAPMAN: Any additional
19 discussion?

20 MEMBER SONNABEND: I think this is one
21 that, clearly, between now and the next meeting,
22 we need to look at more carefully as to whether

1 we could move it to 605(a) and whether we might
2 need to send the TR back to ask that supplemental
3 question on the availability of non-synthetic
4 tocopherols.

5 MEMBER CHAPMAN: Additional
6 discussion?

7 Yes, Dr. Brines?

8 DR. BRINES: Yes, just one point of
9 clarification. Thanks, Zea, for that feedback
10 about the classification. Just one other item to
11 keep on the radar for the Board is that there is
12 a pending petition for tocopherols under review
13 by the Livestock Subcommittee specifically for
14 the use in aquaculture products. So, that
15 petition was accepted as a synthetic material
16 based on the classification of this material
17 under the handling part of the regulation. So,
18 if the classification of tocopherols were to
19 change, that may have an impact on the pending
20 petition for tocopherols for aquaculture use.

21 Thank you.

22 MEMBER CHAPMAN: Additional

1 discussion?

2 (No response.)

3 Seeing none, we will move on to
4 xanthan gum.

5 Zea?

6 MEMBER SONNABEND: Okay. Well, we
7 heard quite a bit of testimony about xanthan gum.
8 And so, everyone who was in the room should have
9 a clear idea of how it is made and used at this
10 point.

11 It is an emulsifier that enables cold
12 materials to stay in suspension, I guess similar
13 to the alginates, but with slightly different
14 uses. It is now classified on 205.605(b) because
15 at the time it was first put on the list there
16 was no even draft classification in materials.
17 And so, it was unknown whether the extraction and
18 isolation steps of it would make it be considered
19 synthetic or non-synthetic. And so, just to be
20 protective of it, protective of any eventuality
21 of classification, it was put on a list as a
22 synthetic.

1 We got quite a bit of comment that it
2 should be moved to 205.605(a) as a non-synthetic.
3 That is something I think we have to look at
4 coming up.

5 I will say that, although we didn't
6 get much testimony on this, like the phosphates,
7 there has been quite a bit of recent study and
8 publications about how all the emulsifiers, not
9 one-by-one, but when consumed in large quantities
10 in everything, because they are used in
11 everything now, lead to inflammation issues.

12 And so, it is not just carrageenan,
13 and it is not just xanthan gum, but there are
14 studies on lecithin, on guar gum, on some of the
15 very synthetic ones that aren't on our list. And
16 these studies are ongoing.

17 But it is something that we need to be
18 paying attention to, particularly the most recent
19 article I read, which was from Forbes magazine.
20 It indicated that the researcher who had studied
21 the synthetic ones was now moving into lecithin
22 to see if it has the same effect.

1 But it is one of these big, general
2 things like all the phosphates; we eat too many
3 of them. All the gums; we eat too many of them.
4 So, it is very hard for us and the NOSB to
5 grapple with how that affects any one thing or
6 another. But I am just letting everybody know
7 that this is on our radar as well.

8 So, that being said, xanthan gum is
9 used in a lot of products. We got quite a bit of
10 support from certifiers who have clients who use
11 it, from companies who use and their
12 representatives, to keep it on the list.

13 MEMBER CHAPMAN: Additional
14 discussion?

15 Jennifer?

16 MEMBER TAYLOR: I would just like to
17 again that, as we discuss the different materials
18 that we are, that we keep in mind the concerns of
19 the public in regard to synthetics and additives
20 and different other toxins in their food.

21 MEMBER CHAPMAN: Thank you.

22 Additional discussion?

1 (No response.)

2 Seeing none, that completes the
3 205.605(b) for sunset review meeting portion.

4 And we will move on to 205.606. Dr.
5 Brines will give the introduction.

6 DR. BRINES: Thank you.

7 We will proceed as before, this time
8 for all of the 205.606 materials that are under
9 consideration for sunset 2017. So, each of these
10 materials falls under the heading of non-
11 organically-produced agricultural products
12 allowed as ingredients in or on processed
13 products labeled as organic.

14 Casings from processed intestines;
15 celery powder; chia/salvia hispanica L.

16 Colors derived from agricultural
17 products must not be produced using synthetic
18 solvents in carrier systems or any artificial
19 preservative. There was an updated Technical
20 Report for colors which included all of the
21 colors on this list.

22 For purposes of reading into the

1 record, I am just going to limit myself to the
2 name of the substance and not the various CAS
3 numbers. If there is any confusion, we can
4 repeat those, if we need to. But I will go
5 through the list.

6 Beet juice extract color; black
7 current juice color; black purple carrot juice
8 color; blueberry juice color; carrot juice color;
9 cherry juice color; chokeberry aronia juice
10 color; elderberry juice color; grape juice color;
11 grape skin extract color; paprika color, dried
12 and oil-extracted; pumpkin juice color; purple
13 potato juice; red cabbage extract color; red
14 radish extract color; saffron extract color, and
15 turmeric extract color.

16 Of note for the Board, this includes
17 all of the colors under paragraph (d) with the
18 exception of beta carotene extract color.

19 On the next slide we have dill weed
20 oil; fish oil; fatty-acid, CAS No. 10417-94-4 and
21 25167-62-8, stabilized with organic ingredients
22 or only with ingredients on the National List,

1 Sections 205.605 and 205.606.

2 There was a Technical Report developed
3 for fish oil. It was posted late, after the
4 opening of the public comment period for this
5 meeting.

6 Next is fructooligosaccharides, CAS
7 No. 308066-66-2; galangal, frozen, and gelatin,
8 CAS No. 9000-70-8.

9 And an updated, limited-scope
10 Technical Report was prepared for
11 fructooligosaccharides.

12 Next we have gums, water-extracted
13 only. Arabic; guar; locust bean, and carob bean;
14 inulin-oligofructose enriched, CAS No. 9005-80-5;
15 kelp, for use only as a thickener and dietary
16 supplement.

17 And an updated, limited-scope
18 Technical Report was prepared for the inulin
19 listing.

20 Next we have konjac flour, CAS No.
21 37220-17-0; lecithin, deoiled; lemongrass,
22 frozen; orange pulp, dried, and orange shellac,

1 unbleached, CAS NO. 9000-59-3.

2 And a new Technical Report was
3 developed for orange shellac, unbleached.

4 Next is pectin, non-amidated forms
5 only; peppers, chipotle, chili, and seaweed,
6 Pacific kombu.

7 A limited-scope Technical Report was
8 prepared for pectin and just recently posted for
9 the public earlier this week.

10 Next is starches. Cornstarch, native;
11 sweet potato starch for bean thread production
12 only; Turkish bay leaves; Wakame seaweed, Undaria
13 pinnatifida, and whey protein concentrate.

14 An updated Technical Report is
15 recently developed for whey protein concentrate.
16 That report was recently provided for the
17 Handling Subcommittee and is still under review.

18 Thank you.

19 MEMBER CHAPMAN: Thank you, Dr.
20 Brines.

21 We will start back at the top of the
22 list with casings.

1 Jean?

2 CHAIR RICHARDSON: Yes, casings. So,
3 maybe I will just say a couple of things about
4 the 606s, as I understand them, so to be sure
5 that I am reviewing them properly.

6 It is not always clear to me that
7 these were looked at by applying the OFPA
8 criteria, but only looking to see if they were
9 available organically or not. So, when I looked
10 at the 606 materials, I tried, also, to consider
11 whether or not they would meet the OFPA criteria
12 in addition to just are they available
13 organically.

14 So, on casings, let's see my notes
15 here. The petition was pretty detailed. It came
16 in in 2006. So, it is relatively-recent. It
17 included a lot of information in it.

18 And the general comments, you know,
19 just the general things about casings is that
20 they are intestines from certified, you know,
21 from beef, lamb, pork. But the thing is that
22 they do not appear to be available anywhere in

1 either the United States or in Europe from
2 organic animals; only from non-organic animals.

3 In 2007, the NOSB found that no
4 processor with equipment or technology to
5 process/slaughter byproducts into casings from
6 processed intestines that has organic
7 certification, or they are not making them or
8 they are unwilling to just use their equipment
9 for batches as small in size that will be
10 necessary to fill the current organic
11 requirements. And that is back in 2007.

12 In some ways, the same situation may
13 be the case, but we didn't really get a lot of
14 information in from the industry that is using
15 the casings to really perhaps tell us the whole
16 story. But, certainly, I was unable to find, and
17 the input that we got from industry indicates
18 that no one else seems to be able to find, any of
19 the slaughters yet separating out their organic
20 from their conventional animals to make organic
21 sausage casings.

22 So, the casings for these intestines

1 are called natural casings as opposed to those
2 that might be made from synthetic cellulose or
3 collagen. And certainly, organic producers
4 prefer to use the natural casings in my
5 experience and observation in going around doing
6 inspections of slaughterhouses.

7 Obviously, it would be not necessarily
8 a delightful task to begin separating out organic
9 and conventional intestines in our
10 slaughterhouses around the country. But I think
11 that part of what I will be putting in the
12 template will be suggestions that there is a
13 market demand for sausages as part of the growing
14 organic market for processed meats, and at least
15 the suggestion that we try to really encourage
16 that in the United States.

17 Because when you look at the other
18 OFPA criteria, obviously, it is a little bit
19 difficult to feel comfortable that presently all
20 the natural cases are coming from conventionally-
21 raised or non-organic livestock.

22 The actual making of the casings is

1 pretty straightforward, very old-fashioned,
2 traditional. There's no chemicals. They are
3 washed with water, and then, they are salted with
4 sodium chloride, just straight salt and water and
5 cleaned. So, it is a relatively-simple process
6 to make these.

7 Back in 2007, there were no public
8 comments that specifically opposed the listing of
9 casings from processed intestines on 606, and we
10 didn't receive any that I recall -- I was just
11 looking for my additional notes, but I don't
12 believe we received anything that would be
13 opposed to the listing. Our challenge is, I
14 think, to rethink through the application of the
15 OFPA criteria as we look at these 606 materials.

16 MEMBER CHAPMAN: Discussion?

17 (No response.)

18 Seeing none, we will move on to celery
19 powder.

20 The Subcommittee posed several
21 questions about the availability of celery powder
22 in the marketplace. Four public comments were

1 received speaking to the use or necessity of
2 celery powder from industry and trade
3 associations. One commenter raised the critical
4 necessity of celery powder, high in nitrate, for
5 its technical use in meat products and stated
6 that there are no alternatives available, and
7 that trials with organic products have not been
8 successful.

9 Commenters noted its use in uncured
10 meat products like sausage, bacon and ham, as
11 well as one commenter noted its use on top of a
12 pizza.

13 There were three comments from
14 interest groups questioning why this material
15 could not be supplied organic, and many comments
16 were received from the public that were opposed
17 to any items on 606.

18 Any further discussion of this item?

19 MEMBER SONNABEND: Okay. This is one
20 of the ones that I am having the hardest time
21 with deciding, you know, trying to figure out.
22 Coming from the state that probably grows most of

1 the nation's supply of organic celery, it just
2 seems really hard to believe that some celery
3 couldn't be produced that meets the
4 specifications for the nitrate content that is
5 needed in the meat preservation situation.

6 And in the inconsistency of approving
7 a conventional product just because it has high
8 nitrates is something that is very troubling for
9 me to grasp. So, I have not decided how I am
10 going to vote yet, but I am hoping that I am
11 going to find some direction around the corner,
12 where it has been waiting to meet me all this
13 time, between now and fall.

14 MEMBER CHAPMAN: Francis? Then, Jean.

15 MEMBER THICKE: Yes, just a follow-up
16 on what Zea commented. It seems like we are
17 using celery to deliver nitrate to meat. If they
18 want to put nitrate on meat, they can, but they
19 shouldn't call it organic maybe.

20 MEMBER MARAVELL: Yes, I am just going
21 to echo Francis' comment and also suggest to Zea
22 that an organic farmer probably wouldn't want to

1 put that amount of nitrogen on celery, for a
2 whole variety of reasons. So, that may be part
3 of the problem. I don't know.

4 MEMBER SONNABEND: Just to respond to
5 that briefly, Nick, we do have some soils that
6 are quite high in residual nitrogen that it could
7 be grown on perhaps. So, it wouldn't necessarily
8 be a heavy application. It might be taking it up
9 from a previous crop or like that. It might
10 work, I am just saying.

11 MEMBER CHAPMAN: Any additional
12 discussion on this item?

13 (No response.)

14 Seeing none, we will move on to chia.

15 Again, the Subcommittee posed several
16 questions about its availability and some data as
17 to its own search in finding of available organic
18 chia seeds.

19 Several comments were received in
20 support of diva seng chia seed, speaking to its
21 wide commercial availability from a cross-section
22 of the organic community.

1 We received no specific comments in
2 support of relisting chia seed as not organic. I
3 think this is a strong candidate for delisting.

4 I open it for discussion.

5 Jean?

6 CHAIR RICHARDSON: I certainly have
7 found in my inspections that in the last few
8 years organic chia has become very readily
9 available, and it is obviously a booming market
10 in the products that are derived from that. So,
11 yes, I would agree with you that it is a strong
12 candidate for delisting.

13 MEMBER CHAPMAN: Any further
14 discussion?

15 (No response.)

16 Okay. Next on the list is colors. I
17 will hand that over to Jean.

18 CHAIR RICHARDSON: So, colors. I
19 cannot find my notes on my computer at the
20 moment, but let's see if I can just do it from my
21 recollections here.

22 We have a new Technical Report on

1 colors covering all of them. It came in February
2 of this year, as I recall. Yes.

3 When we sent out the initial first
4 template of this sunset process, we asked for a
5 number of questions, primarily, of course,
6 availability in terms of organic. Has it
7 increased since they were put on the list? And
8 we asked by individual colors, not just colors as
9 a whole group, but for each of the individual
10 colors, whether sufficient organic to warrant the
11 removal of some or all of them from the National
12 List, and we asked if colors were essential. We
13 did get response back that, yes, they are
14 essential to have. And I do not recall the
15 answer to ancillary substances question. Perhaps
16 Zea recalls that. Sorry, I don't have those
17 notes in front of me.

18 But what was obvious from both the TR
19 and also from the feedback from public comment is
20 that it appears that all of the colors, derived
21 as they are from agricultural products, should
22 now be available organically. The exception

1 might be the color from red cabbage. But,
2 otherwise, all of the other colors, it seems to
3 be a reasonable general agreement that these
4 could, in fact, be removed from the list, since
5 they are available organically.

6 MEMBER CHAPMAN: Further discussion on
7 this item?

8 Zea?

9 MEMBER SONNABEND: Yes. I'm not quite
10 as convinced as Jean that we heard solid input
11 that all of them were available organically. I
12 mean, certainly, looking through this list, many
13 of them, but particularly the ones that aren't
14 necessarily produced in the United States, like
15 saffron or turmeric. I'm not sure. You know, I
16 don't feel like I have arrived at that conclusion
17 and would need to look into it more between now
18 and the next meeting.

19 So, I hope that anyone who has
20 information -- you know, I sat through the
21 meeting, as did a few of us, where these things
22 were added onto the National List. If you

1 thought this was tedious so far, that for me was
2 like one of the most tedious experiences ever
3 because person after person just got up and said,
4 "I need this color. I need this thing in 606,"
5 and no TRs. And we were all very frustrated that
6 they were relying on very little information to
7 decide these were not available organically.

8 And then, I also saw people in the
9 audience who I knew grew carrots, potatoes, some
10 of these things, going, why couldn't they grow it
11 for you?

12 So, I feel fairly confident for the
13 common, you know, carrots, beets, potatoes. I
14 don't feel so comfortable with the saffron. I
15 don't know what the status is of organic saffron,
16 et cetera.

17 MEMBER CHAPMAN: Jean?

18 CHAIR RICHARDSON: Yes. Again, I
19 apologize for not having my more detailed notes
20 here. I have tried to look at each of them
21 separately, and I will look at it in more detail
22 as I prepare the overall templates for each of

1 these over the next few weeks.

2 One thing that I would, then, still
3 have the challenge with, if I was to be
4 supporting their retention on the list, would be
5 the application of the OFPA criteria because I
6 would, then, be -- we know that the colors are
7 really important. And if, then, we try to say,
8 you know, is the manner in which they are
9 produced, does it meet those criteria for each of
10 them, you would then have this tension between
11 yes and no.

12 MEMBER CHAPMAN: Additional
13 discussion?

14 (No response.)

15 To Jean's earlier question about
16 ancillary substances, from my notes, I have
17 preservatives, pH-controlled citric acid; as a
18 standardizing agent, invert sugar; as a carrier
19 of maltodextrin and sunflower oil. Those were
20 the ones that I noted.

21 I would also call upon certifiers who
22 have certified organic colors, such as QAI, or

1 have clients using organic colors, to their
2 ability, let us know which ones are commercially
3 available as organic or being used as currently
4 as organic.

5 For example, we received a listing
6 from QAI that listed 73 clients using organic-
7 only colors. It would be helpful to me to know
8 which ones are currently available in the
9 marketplace as organic.

10 And I would also like to point out
11 that we have had a successful history of removing
12 some colors from this list via the petition
13 process, once suppliers have come forward to
14 state that the organic color was available.
15 There might be multiple I know off the top of my
16 head. Used to be on this list.

17 Any additional questions or discussion
18 on this item?

19 (No response.)

20 Seeing none, we will move on to dill
21 weed oil.

22 Again, the Subcommittee posed several

1 questions to the community about the availability
2 and necessity of dill weed oil. In our own
3 searching, we found suppliers of dill, dill weed
4 oil as well.

5 No comments were received in support
6 of continued listing of dill weed oil. I will
7 state it would be in the industry's interest to
8 provide public comment during the second reading
9 to speak to the necessity, if this ingredient is,
10 indeed, needed in a non-organic form.

11 I should note that there were several
12 comments from the public, again, opposed to the
13 listing of 606 materials, and several interest
14 groups pointed out the availability of dill
15 ingredients as organic.

16 Any additional discussion on this
17 item?

18 (No response.)

19 Oh, I should say this is a strong
20 candidate for delisting.

21 Seeing none, we will move to fish oil.

22 Jean?

1 CHAIR RICHARDSON: Obviously, there
2 are no organic fish. So, that is not really a
3 choice for the industry to use organic fish.

4 The annotation is that they have to be
5 stabilized with organic ingredients or only with
6 ingredients on the National List. It is 205.605
7 or 606.

8 Fish oil does appear to be an
9 essential ingredient in a number of products. We
10 did pose questions for the public to give us
11 feedback on the geographic areas from which the
12 fish are harvested, as well as
13 conservation/environmental issues surrounding the
14 harvest of wild fish. And we did get some very
15 good response back on that.

16 We did not get as much detail as I
17 would have liked to have seen on the
18 manufacturing of purification process. And we
19 really didn't get responses, in my opinion, to
20 answer Question No. 4, which is on the standards
21 for fish oil purity with limits for contaminants
22 such as dioxins and PCBs and the assessment of

1 the purity of it. I would have liked to have
2 seen more of that.

3 There is some ability to use flax or
4 chia compared with the omega-3 in fish and the
5 algal oils. That is done, that is a possibility
6 in some of the kinds of products in which the
7 fish oil is used. But, by and large, fish oil
8 does appear to be an important ingredient for
9 many people in the industry out there.

10 I should say, obviously, the opposing
11 comments, of course, include the expected and
12 very appropriate concerns over environmental
13 conservation and, also, for potential for
14 contaminants in the fish oil.

15 MEMBER CHAPMAN: Zea?

16 MEMBER SONNABEND: Thank you.

17 As I recall, the most detailed answers
18 we got to these specific questions were from
19 Organic Valley, and they did address a question
20 with some particular rating system that their
21 fish oil went through. And I can't remember the
22 details here. But there are companies that do

1 certify standards of contamination for fish oil.

2 And so, to me, this is one we have to
3 do a lot more research on because it might be a
4 prime candidate for an annotation to focus on
5 some of these issues we raised in the questions,
6 like a certain standard of purity and areas where
7 the fishery is unpolluted and managed properly.

8 But, yet, we don't want to limit it so
9 much that you could only get the fish oil from
10 Peru, and it rules out the fish oil from Norway.
11 It is very complicated. However, I know that it
12 is studied a great deal in the supplement
13 industry because it is very controversial there.

14 And so, I think we may have to renew
15 the listing as is while we work on a more
16 comprehensive annotation for it after the sunset,
17 because I do think it needs one. I think there
18 is enough interest on it that we don't want to
19 remove it from 606. I think we want to try to
20 annotate it in a way so that it is the best-
21 possible fish oil.

22 MEMBER CHAPMAN: Jean?

1 CHAIR RICHARDSON: Yes, I agree with
2 your analysis entire, Zea. I think it would be
3 really good to put as much as we can into the
4 second template, so that the range of what we
5 feel we know well and those areas where we feel
6 uncertain are clearly spelled out, so we can get
7 some further detail. And we do have, of course,
8 the Technical Report that we can use with its
9 attached scientific references as well.

10 MEMBER CHAPMAN: Colehour?

11 MEMBER BONDERA: That was my question,
12 to verify you do have a Technical Report in hand,
13 or it is like it says in here, in development?

14 CHAIR RICHARDSON: We have it, yes.

15 MEMBER BONDERA: Thank you.

16 MEMBER CHAPMAN: Any additional
17 discussion?

18 (No response.)

19 Seeing none, we will move on to
20 fructooligosaccharides, herein referred to as
21 FOS.

22 Two commenter spoke for the necessity

1 of FOS. One commenter spoke to its use. One
2 comment from an interest group was received
3 against the listing of FOS, questioning its
4 necessity and the availability of alternatives.
5 And they drew a line between the necessity and
6 the useful.

7 No comments were received related to
8 the availability of organic versions. Many
9 comments from the public were received opposed to
10 any items on 606.

11 Any further discussion of this item?
12 Zea?

13 MEMBER SONNABEND: I believe we also
14 received some comments that this was
15 misclassified on 606 and really was too highly
16 processed to be considered an agricultural item.
17 I think that is something we have to look at
18 going forward also.

19 MEMBER CHAPMAN: Thank you. I will
20 make note of that.

21 Any additional questions?

22 (No response.)

1 Seeing none, we will move on to
2 galangal, frozen.

3 No comments were received in support
4 of galangal, frozen. It would be in the
5 industry's interest to provide public comment
6 during the second reading to speak to the
7 necessity, if this item is needed.

8 Many comments from the public were
9 received generally opposed to items on 606

10 I believe this is a strong candidate
11 for delisting.

12 Any further comments on galangal?

13 Zea?

14 MEMBER SONNABEND: If we don't delist
15 it, I am really having a hard time understanding
16 why only it is on there as frozen. I mean, why
17 can't you have it fresh? That just seems like an
18 inconsistent listing on the National List --

19 MEMBER CHAPMAN: Yes.

20 MEMBER SONNABEND: -- and we should
21 look at it.

22 MEMBER CHAPMAN: I mean, galangal, it

1 is an ingredient similar to ginger, and I think
2 it was widely available in a dried form, based on
3 its production areas, but not as widely available
4 in the fresh/frozen form in this geographical
5 area.

6 Any further questions or discussion?

7 (No response.)

8 Seeing none, gelatin.

9 Zea?

10 MEMBER SONNABEND: Okay. I hadn't put
11 that it was mine on the chart, but I do know that
12 it is mine.

13 Let's see. Gelatin, as you know, is
14 derived from animal hoofs and also from fish.
15 Fish gelatin is widely used as a filtration agent
16 for things like iced teas in bottles, which at
17 the time that I first learned that at an NOSB
18 meeting and was a vegetarian, I went, oh, my God,
19 the vegetarians are going to freak out if they
20 know this, because it is not on the label.

21 We didn't receive significant new
22 information of problems with gelatin beyond the

1 problems inherent in conventional livestock
2 raised, being used for any type of products that
3 might go into organic food. However, we received
4 no comments about the fish gelatin, which really
5 is at least as much of the use as the other types
6 of gelatin in anything.

7 But the certifiers, they gave us
8 information that it is an important input in
9 clients' products. Certifiers also do not
10 distinguish between fish gelatin and cow-derived
11 gelatin.

12 And I believe that they said that some
13 organic gelatin is starting to be available. I
14 might be wrong about this because that was just
15 what was turned in at the meeting here. Yes,
16 organic gelatin is being used in some products,
17 including cooked chicken products, ready-to-eat
18 meals, granola bars.

19 So, we have to evaluate this
20 information about the availability of organic
21 gelatin, obviously, from cows, since there are no
22 organic fish, and whether we need to maybe just

1 change it to just fish gelatin still on the list,
2 and not cow gelatin. I don't know.

3 MEMBER CHAPMAN: Thank you.

4 Any further discussion on this item?

5 MEMBER BONDERA: Yes.

6 MEMBER CHAPMAN: Colehour?

7 MEMBER BONDERA: For the sake of
8 clarification, Zea -- and I'm not necessarily
9 accurate on this, but just so I can wrap my brain
10 around it -- isn't there organic fish imported
11 from, didn't Miles mention organic fish being
12 imported from the European Union or something
13 like that with trade agreements?

14 So, when you say there is no organic
15 fish, isn't that actually not accurate? I'm not
16 saying necessarily that the gelatin, there is
17 going to be enough and it could be derived. But,
18 on that comment, I just wanted you to further
19 address.

20 Thank you.

21 MEMBER SONNABEND: Maybe I misspoke.

22 I just mean there is no organic fish gelatin.

1 There may be fish; I think it is salmon.

2 MR. McEVOY: Yes, just to clarify, we
3 don't have organic aquaculture standards in the
4 U.S., but there is some organic seafood that is
5 sold in the U.S. that comes from EU, Ecuador, and
6 Canada, primarily salmon and some shrimp, not a
7 real large market, but we are estimating
8 somewhere between \$7 and \$10 million in sales.

9 But the equivalency agreements that we
10 have do not include aquaculture. So, there is no
11 aquaculture as part of any of our equivalency
12 arrangements.

13 MEMBER CHAPMAN: Jean?

14 CHAIR RICHARDSON: Yes. I am not
15 really clear why you would want to have from fish
16 as opposed to animal hooves, because I am sort of
17 protective of fish out there; whereas, there's
18 plenty of animal hooves.

19 MEMBER SONNABEND: Actually, the
20 initial petition and the 2002 TAP review were
21 done on fish gelatin. Yes, fish gelatin is what
22 was petitioned and, as far as I can tell, what

1 was discussed. So, why it just came out gelatin
2 instead of just fish gelatin, I could not really
3 find back in the historic record.

4 But the cow gelatin does not work to
5 filter the little green tea in bottles and other
6 tea. It is definitely fish gelatin they have to
7 use. And that was covered in the meeting, public
8 testimony, and I think in the TAP review,
9 although it has been a while since I read it.

10 MEMBER CHAPMAN: Do you know if the
11 CAS number listed is specific for fish gelatin?

12 MEMBER SONNABEND: No, I do not.
13 Maybe Emily knows that.

14 MS. BROWN ROSEN: The 2002 TAP review
15 did cover bovine, porcine, and fish gelatin. I
16 think you're right, that petition was originally
17 fish, but, then, the contractor was asked to
18 expand the review because there was interest in
19 making it more comprehensive.

20 MEMBER SONNABEND: And so, is the CAS
21 number just for one or other of those or does it
22 cover all gelatin?

1 MS. BROWN ROSEN: I don't know. I
2 will have to look into that.

3 MEMBER CHAPMAN: Thank you.

4 You don't have to do that right now.
5 You can just get that information to the
6 Subcommittee at a later point.

7 Any further discussion on this item?

8 (No response.)

9 Hearing none, we will move on to gums.
10 Zea?

11 MEMBER SONNABEND: Okay. All right.
12 One listing covering four products, which seemed
13 like a good idea at the time, but becomes awkward
14 when you are trying to assess commercial
15 availability of organic forms.

16 And, in actuality, what we heard
17 comment on is that, although there are four names
18 listed here, really locust bean and carob bean
19 gum are the same. Although I occasionally now
20 see carob gum listed on products, but, mostly,
21 the conventional name has become locust bean gum.

22 So, these were on 606 because of the

1 unavailability of organic forms of gums. They
2 are widely used, too much in my opinion, since
3 I'm allergic to all of them except gum arabic.

4 There are organic forms now of guar
5 bean and locust bean gums, but we don't know if
6 there is enough organic farms to remove them from
7 the list. And then, of course, it will be very
8 awkward to just remove those two and, then, keep
9 gum arabic on the list, which very clearly is not
10 available in organic form and is used in certain
11 specific applications.

12 And then, one commenter pointed out
13 some problems with, I believe it was heavy metal
14 contamination of guar gum. And so, we have to
15 probably look into that and see if that is a
16 factor that we need to consider.

17 In general, we didn't hear a lot of
18 clamor to remove these from the list, but we need
19 to do a better assessment on organic availability
20 of some of the forms of these gums.

21 MEMBER CHAPMAN: Thank you.

22 Any further discussion?

1 Jean?

2 MEMBER TAYLOR: So, can I interpret
3 that that you may, when you do your workup for
4 the next version of this, the second template,
5 that you are going to be suggesting perhaps
6 removal of one or more of these with any
7 seriousness?

8 MEMBER SONNABEND: I mean, isn't that
9 an annotation change? And then, isn't that a
10 problem? You know, I'm a little stymied on how
11 to achieve that.

12 CHAIR RICHARDSON: Well, that is why
13 I am asking the question. Yes.

14 MEMBER CHAPMAN: Can the program
15 comment if we have the ability to sunset one or
16 more of these gums without sunsetting all of
17 them?

18 DR. BRINES: Yes, I think if the
19 intent of the recommendation is clear, we would
20 be able to move forward on that. The listing, as
21 it is, is sort of treated as four individual
22 substances listing rather than annotation that is

1 restrictive other than the water-extracted form.
2 So, I think if the recommendation is clear, if
3 there is a recommendation to remove one or more
4 of these gums, that we would be able to move
5 forward on that recommendation.

6 MEMBER CHAPMAN: Anything else?

7 (No response.)

8 Hearing none, we will move on to
9 inulin-oligofructose enriched.

10 One comment was received from the
11 industry in support of the inulin. However, they
12 did not speak to the unavailability of organic,
13 just the necessity of inulin.

14 One comment was received from an
15 industry certifier that noted clients had begun
16 switching to organic.

17 One comment from an interest group was
18 received questioning the necessity of inulin and
19 the availability of alternatives. And they
20 questioned the line between necessity and
21 usefulness.

22 No comments were received related to

1 the availability of organic versions other than
2 the comment from the certifier.

3 No comments were received on the
4 specific questions posed by the Subcommittee, and
5 there were several comments from the public
6 opposed to 606 listings in general.

7 I believe the comment raised by Zea
8 also applied to this substance, that there was a
9 commenter questioning the agricultural status of
10 this product.

11 Any further discussion?

12 Jean?

13 CHAIR RICHARDSON: For clarification,
14 Tom. So, are you thinking that this may be a
15 candidate to remove?

16 MEMBER CHAPMAN: I would say it is a
17 candidate for removal, yes.

18 CHAIR RICHARDSON: Any further
19 discussion?

20 (No response.)

21 Seeing none, we will move on to kelp.

22 Zea?

1 MEMBER SONNABEND: Okay. Kelp, as you
2 know, is from seaweed. It was put on the list in
3 the early days for use only as a thickener and a
4 dietary supplement.

5 In trying to look back at old notes,
6 it was very unclear how that annotation got on
7 there because they didn't really ever discuss
8 what the problem would be with overuse of kelp,
9 which you would probably avoid overusing because
10 it has such a strong flavor in products. But,
11 anyway, that is what we are on.

12 And then, subsequently, the Board
13 added certain types of seaweed as a separate
14 category. So, I would really like us to explore
15 having them all on one listing to clean up the
16 list in the future. But, you know, like I said
17 yesterday, you pick your battles, and cleaning up
18 the seaweed listing isn't exactly the highest
19 priority of things we should do in the world.

20 So, kelp is clearly not available
21 organically, and it clearly is agriculture; it is
22 grown or wild-crafted to supply kelp in organic

1 foods.

2 We did ask people of the effect of
3 removing the annotation. I didn't quantify the
4 responses back, but the few that we did get back,
5 mostly from certifiers, thought that it was a
6 good idea to remove this annotation because it
7 would not be abused for using it as a flavoring
8 agent, which would be the main other use for it.

9 So, there you have it really, the
10 summary. There wasn't a strong opposition to
11 removing kelp since everyone knows it is not
12 available organically.

13 MEMBER CHAPMAN: Jean?

14 CHAIR RICHARDSON: So, when we are
15 using this general term, not the Latin name, so
16 kelp, does it mostly apply to the laminaria
17 group?

18 MEMBER SONNABEND: There are many
19 species of kelp, and the fact that it isn't
20 quantified at all in the very preliminary TAP, I
21 mean it gives examples of several of the species
22 in there, but there is no restriction on which

1 species.

2 CHAIR RICHARDSON: So, as a follow-up,
3 I do know that kelp in the general laminaria
4 group can be actually readily easily grown, and
5 it grows quite quickly. I certainly have seen it
6 growing to supply local markets up in Maine, for
7 example.

8 And the reason I raise it is, you
9 know, obviously, we don't have any organic
10 aquaculture standards here. It would seem to me
11 that this would be one of the kinds of things
12 that it would be very useful to be able to have
13 as an organically-certified aquaculture product,
14 because I don't know how much kelp is used or,
15 again, thinking of the application of the OFPA
16 criteria to fish, to kelp, and all that good
17 stuff as well.

18 The ability to have it organic would
19 be helpful in thereby reducing the likelihood of
20 wiping out kelp beds, which is certainly common
21 in many parts of the world, sold in large
22 quantities, large blocks of coastline. So, I

1 think that anything that we can do to sort of
2 bulk-up the information that we send out in this
3 template to get further more complex information,
4 if you will, on the species that are used under
5 this general title of kelp and the amounts, the
6 volumes that get used, because I think that that
7 will be helpful when, assuming at some point we
8 get an aquaculture standard and we start really
9 looking at the aquaculture plant and animal needs
10 that we have our petitions in for right now.

11 MEMBER CHAPMAN: Dr. Brines?

12 DR. BRINES: Thank you.

13 Just a point of clarification. In
14 March 2013, the National Organic Program did
15 publish guidance about the use of kelp in organic
16 livestock feed. As part of that guidance, we did
17 clarify that kelp may be certified as organic as
18 a wild crop and must be certified organic if used
19 as an ingredient in livestock feed. So, separate
20 from the aquaculture rulemaking, kelp is eligible
21 to be certified as organic.

22 And Emily is reminding me that it is

1 also an example in the wild crop guidance as
2 well. Thank you.

3 MEMBER SONNABEND: And there is some
4 organic kelp available from Iceland, but I just
5 don't know enough about the forms and everything.
6 You know, it was probably on our list as one of
7 the lower priorities for a TR. You know, it
8 didn't make the cut, and it might be something
9 that we would want to try and assess some of the
10 points Jean brings up between now and fall.

11 MEMBER CHAPMAN: Nick?

12 MEMBER MARAVELL: Yes, thank you,
13 Lisa, for pointing that out. I was going to
14 bring that up.

15 But, also, Jean, I may be a little
16 confused here, but will the aquaculture standards
17 affect vegetative growth or are they only going
18 to apply to -- I'm not sure how USDA defines
19 fish. But my understanding is -- and maybe,
20 Miles, you could elucidate. Right now, we can
21 certify for livestock purposes. Is there any
22 problem moving forward with organic kelp for

1 other purposes? Miles, maybe you can answer
2 that.

3 MR. McEVOY: Yes, we have guidance or
4 a policy memo on the certification of aquatic
5 plants that is in the Program Handbook. So, that
6 is the information that specifies that aquatic
7 plants can be certified under the current
8 regulations.

9 The proposed rule that we are working
10 on on aquaculture does not include aquatic
11 plants. It is only for aquatic animals. So,
12 yes.

13 MEMBER CHAPMAN: Further questions,
14 discussion?

15 (No response.)

16 Seeing none, we will move on to Konjac
17 flour.

18 Zea?

19 MEMBER SONNABEND: Konjac flour is
20 derived from a starchy plant that grows in the
21 tropics. I forget which country. But it is used
22 as a thickening agent and a supplement in foods.

1 We asked the question if organically-
2 grown Konjac flour was available. We did not get
3 any response to that. We did get the response
4 that it is still needed.

5 And I also asked for unique situation
6 in which Konjac flour is a better choice than
7 potato starch, and I actually got no response to
8 that, either. But, from personal research into
9 this, I have discovered that it is very highly
10 touted now as something that helps stabilize
11 blood sugar spikes, unlike the other starches,
12 because it is a non-starchy starch. I don't know
13 how to explain it as well as some of what I have
14 been reading. I will try, by the time we do the
15 summary, to explain it properly.

16 But it is used in a number of
17 supplements and like shake mixes and stuff for
18 blood sugar stabilization and weight-loss
19 products.

20 MEMBER CHAPMAN: Any further
21 discussion?

22 Jean?

1 CHAIR RICHARDSON: This is actually a
2 general comment, just for all of us NOSB members.
3 I know Tracy and I have talked about it on one of
4 our Subcommittee calls.

5 It is that, when we do these second-
6 round templates, let's be sure to write in
7 exactly what the material is used for, just so we
8 can really understand the context within which we
9 are making our decisions. You know, as we read
10 through all these materials, it is in one place
11 and the public knows, too.

12 MEMBER SONNABEND: Well, it is kind of
13 funny because, when we had our discussions about
14 this, we had notes on every one. So, we brought
15 that up in the calls. But, then, in this
16 stripped-down process of only the references,
17 that didn't get in there and it probably should
18 be.

19 MEMBER CHAPMAN: Additional
20 discussion?

21 (No response.)

22 Seeing none, I will move on to

1 lecithin deoiled.

2 Zea?

3 MEMBER SONNABEND: Thank you.

4 Okay. Not quite as long history as
5 sulfites in wine, but if we ever had the time to
6 do a chart of how many words were spoken at NOSB
7 meetings on a certain subject, this would be in
8 the top 10, I think. Yeast would be up there, as
9 well as sulfites.

10 Okay. The Board has known from the
11 beginning that lecithin is an important component
12 in food processing. It is an emulsifier. It
13 helps things stay in suspension. It helps things
14 create the desired texture when you eat them.
15 And it helps in a lot of different functions.

16 It is derived, as we know, primarily
17 from soybeans, but in the concern over people
18 with soy allergies or anti-soy dietary
19 preferences, like Madam Chair, at least for tofu,
20 there are some alternative forms, including
21 sunflower lecithin and we heard yesterday or the
22 day before canola and one other type of lecithin

1 that is sometimes available.

2 The Board, in 2009, considered the
3 petition to remove lecithin from the listing that
4 it had had for all forms of lecithin, which was
5 then called bleached and unbleached, to make it
6 subject to commercial availability on 205.606,
7 because organic lecithin of the -- I don't even
8 know what you call it when it is not deoiled.
9 Dry?

10 MEMBER CHAPMAN: Fluid.

11 MEMBER SONNABEND: Fluid. Thank you.

12 The fluid was available in sufficient
13 organic supply from several different
14 manufacturers. And so, it was not needed in that
15 category anymore. But this deoiled lecithin,
16 which is, therefore, dry, was still needed in
17 certain very specific applications.

18 Since we have been here, we have heard
19 a bit of testimony on either side of the coin on
20 this. People saying that there was no
21 organically-produced lecithin. When asked, the
22 gentleman said two facilities were producing it,

1 but we don't know if that is represented by one
2 company or by multiple companies. We didn't
3 further ask him where those companies might be
4 and how stable their production was in the long-
5 term.

6 Because sometimes these companies --
7 and this is the case with sunflower lecithin from
8 what I have been led to understand -- it is that
9 sunflower lecithin became available, but, then,
10 the company went bankrupt. And so, then, it
11 wasn't available anymore organically, but now
12 there is some conventional. It is a volatile
13 business venture, apparently.

14 So, I was definitely on the fence
15 about this coming into this meeting, about
16 whether this was still really needed or not.
17 But, as a person who is allergic to lecithin from
18 soy, as I am allergic to all soy products, and
19 hearing from the testifiers on both sides that
20 sunflower lecithin is only available in deoiled,
21 not in fluid form, and is not available
22 organically, has convinced me that we need to

1 keep deoiled lecithin on the list, so that the
2 people who need alternatives to soy products are
3 able to have lecithin in them.

4 MEMBER CHAPMAN: Thank you.

5 Any further discussion on this item?

6 Francis?

7 MEMBER THICKE: If we were to
8 determine that there was adequate soybean
9 deoiled, could that be put in there, that forms
10 other than soybean oil, deoiled lecithin?

11 MEMBER SONNABEND: Yes, I am pretty
12 sure that is an annotation change. We still
13 haven't successfully accomplished an annotation
14 change in sunset. And so, we would need to
15 petition for an annotation change, but we could
16 certainly try that.

17 MEMBER CHAPMAN: I have two questions,
18 Zea, for you.

19 First, do you know from the historical
20 review if the presence, the availability of a
21 non-allergen form of fluid lecithin was
22 considered when that removal was made?

1 And secondly, how do you distinguish
2 this argument in favor of having an item that
3 doesn't have allergenic properties where that
4 argument was not prevailing for the whole algal
5 flour?

6 MEMBER SONNABEND: Well, we are
7 talking a different product. This is more akin
8 to fish gelatin versus porcine or cow gelatin.
9 You know, we could limit it to just fish gelatin.
10 We could limit it to just cow gelatin because of
11 commercial availability.

12 This isn't for a person with a dietary
13 preference to be able to avoid or not avoid a
14 certain product. These are two different
15 products.

16 And the other question about history,
17 when this petition was considered in 2009, he was
18 specifically asked about the other forms of
19 gelatin -- gelatin? -- lecithin, and he said --
20 this is Lynn Clarkson -- he said that they have
21 the ability to produce sunflower lecithin but
22 nobody was asking for it.

1 So, that has since changed with the
2 new labeling. I mean, you didn't have to use to
3 label where lecithin came from. So, once it
4 started -- and this is fairly recent that they
5 have had to label that it was soy lecithin --
6 once it started being soy lecithin, then the
7 clamor came up for alternatives. And that has
8 happened since 2009.

9 MEMBER CHAPMAN: Thank you.

10 Any further discussion?

11 (No response.)

12 Seeing none, we will move on to
13 lemongrass, frozen.

14 Comments were received from industry,
15 trade association, interest groups, and the
16 public in favor of delisting. No comments were
17 received in support of continued listing. This
18 item is a strong candidate for delisting.

19 Any additional questions?

20 (No response.)

21 Seeing -- I'm sorry.

22 CHAIR RICHARDSON: I should at least

1 tell you I agree with you.

2 MEMBER CHAPMAN: Okay. Thank you,
3 Jean.

4 Next up is orange pulp, dried.

5 I have really short notes on this one.

6 No comments were received supporting
7 continued listing. Several comments from the
8 public and interest groups were opposing items on
9 606.

10 I would suggest to the industry, if
11 this is a necessary item in their formulations,
12 that they submit comments prior to the second
13 reading. I believe this is a strong candidate
14 for delisting.

15 Any discussion?

16 Colehour?

17 MEMBER BONDERA: Sorry. I just did a
18 double-take when you said it is a strong
19 candidate for delisting. Aren't we right now
20 having -- isn't part of this meeting about sunset
21 items which essentially is delisting? Aren't
22 these all candidates for sunseting, every single

1 one of them? I'm sorry, maybe I misunderstood or
2 didn't --

3 MEMBER CHAPMAN: Yes. And so, I have
4 been --

5 MEMBER BONDERA: Words were going
6 around in my brain when you said that.

7 MEMBER CHAPMAN: I'm sorry, I have
8 been using that terminology for most of my items.
9 I'm trying to convey to the public items that I
10 think that I will be less likely to support
11 unless I receive additional information for not
12 sunseting, if that makes sense.

13 Maybe Zea can make my words make more
14 sense.

15 (Laughter.)

16 MEMBER SONNABEND: No. I think the
17 way you said it is much clearer to me. Because
18 if you said about it, "This is a candidate for
19 sunseting," that means anything is going to be a
20 sunset determination. But, if our intention is
21 to possibly remove it and let it sunset off,
22 having a clear way to express that succinctly is

1 what Tom was referring to in his comments.

2 And I agree with his assessment, but
3 I just think saying we might allow this to sunset
4 off is just a little bit more wordy than
5 delisting.

6 MEMBER CHAPMAN: Any additional
7 discussion on this item?

8 (No response.)

9 Seeing none, we will move on to orange
10 shellac.

11 Zea?

12 MEMBER SONNABEND: Thank you.

13 I'm just going to back up here for a
14 second and let everyone know that I received some
15 clarification from QAI on the mono- and di-
16 glycerides. It is not used in personal care
17 products. That was just a mistake in the way
18 they filtered their list. And so, it is clearly
19 only used in potatoes.

20 Okay. Orange shellac is another one
21 of the waxes or coatings. And we don't just say
22 fruit coatings, although it is tempting, because

1 they are fruit and vegetable coatings.

2 Orange shellac is one of the more
3 interesting things on our list in that it is
4 derived from the secretions of the lac beetle,
5 which is an insect which grows in the tropics and
6 is grown specifically for its very sticky resin
7 which enables coating of things and, also,
8 confers a certain shine to them.

9 This is quite different from the
10 shellac you might use to finish your deck or a
11 table, which has lots and lots of chemical
12 additives. Because some people sort of freak out
13 with the idea of shellac on their fruit, not to
14 mention that it is an insect secretion, which we
15 don't go around telling everyone.

16 However, it was looked at extensively.
17 It is very clearly a non-synthetic material. And
18 theoretically, you could grow organic shellac
19 beetles, but I don't know that anyone has really
20 attempted this. So, there is a nice enterprise
21 for someone in the future perhaps. Yes, I think
22 beetles would be livestock.

1 Anyway, usually, it is used in
2 combination with the other fruit coatings, as I
3 mentioned, carnauba and wood rosin. And so, one
4 of the topics that we want to consider are the
5 ancillary substances. We gave a short list of
6 ones that were in the TR. We did receive
7 information back with concern for morphilene in
8 it. And so, we are going to take a look at that.

9 And we didn't receive much other
10 specific information on ancillaries, but we did
11 receive a continued support for keeping this on
12 the list.

13 MEMBER CHAPMAN: Any further
14 discussion?

15 Colehour?

16 MEMBER BONDERA: I apologize, I have
17 to admit that I just can't even wrap my brain
18 around where or when something that I, as a
19 consumer, am considering or looking at or buying
20 uses orange shellac or how I would even know
21 that.

22 MEMBER SONNABEND: Well, it is

1 supposed to be labeled. As I mentioned for the
2 other waxes, it is supposed to be labeled,
3 although it doesn't say that in the organic
4 regulations directly, but that was the intention.
5 That is something we are going to have to ask the
6 Department and maybe propose a more definite
7 annotation. Because now that things can be
8 individually stickered, there is much more
9 ability to label. But, whether we can do that as
10 an annotation change or just as a separate policy
11 is something that I think we need to clarify
12 between now and fall.

13 MEMBER CHAPMAN: Any additional
14 comments or discussion?

15 (No response.)

16 Seeing none, we will move on to
17 pectin.

18 Jean? No, Zea. Whoops.

19 MEMBER SONNABEND: I get all the fun
20 ones. All right.

21 Well, I lost my place here for a
22 second. 606. Okay.

1 Pectin, as you well know, is
2 originally derived from certain fruits. Apples,
3 citrus, and quince are the main sources of it.
4 And it is used as a jelling agent to make jams
5 and things like that.

6 A very long historic use. I mean, it
7 used to be used by just boiling down apple or
8 quince into a jelly-like consistency and then
9 adding it to whatever else you wanted to gel.
10 But, commercially now, it is made with -- what
11 was approved for the National List was only what
12 was made with non-synthetic steps. Because some
13 of the pectins, the high-methoxy, go through
14 synthetic steps in the making them. And while
15 those were on the National -- both forms were
16 initially on the National List, but the synthetic
17 form was removed after it was determined that
18 there was non-synthetic agricultural pectin in
19 sufficient quantity.

20 To me, this is a really good example
21 of something to keep on the National List because
22 one of the key reasons people use this is it

1 enables you to use less added sugar in jams. And
2 particularly, some of these pectins in
3 conjunction -- the low-sugar pectins are used in
4 conjunction with calcium. I think it is calcium
5 carbonate, but calcium something, and it is a
6 two-step process.

7 If you have ever made jam at home and
8 you shake up the calcium part, you do the pectin,
9 you mix them together. Then you don't need to
10 add so much sugar.

11 I think when we consider the other
12 criteria on the list such as human health
13 effects, no one would debate the fact that too
14 much sugar is one of the most negative effects on
15 people's health, whether it is organic sugar or
16 not. And so, anything that enables us to use
17 less sugar is really worthwhile keeping on the
18 list.

19 We did not hear any opposition other
20 than the people who want everything off of 606.
21 We did ask about ancillary substances, and we did
22 receive a few, which I have not tabulated yet.

1 But most of them are carrying agents for the
2 pectin, various sugars and sugar derivatives that
3 are used in just small amounts to give
4 consistency to the pectin as we use it.

5 MEMBER CHAPMAN: Any further
6 discussion?

7 Colehour?

8 MEMBER BONDERA: Yes, I think this is
9 an interesting topic. At a personal level, I use
10 pectin to make jam. I have for many years now
11 wondered why the supplier of the product that I
12 use -- and I have actually spoken with them --
13 doesn't do it organically because all it is is
14 grapefruit rinds. That is all it is. It is the
15 pith of the grapefruit. It is the primary
16 ingredient. And the answer was, "I can't get the
17 supply of organic grapefruits."

18 But my point is, when it is listed
19 here where it is not necessary, it is sort of a
20 circle. And so, I just wanted to raise that
21 reality because that is the reality. It is not
22 as if there aren't enough organic grapefruits.

1 And so, I think I see it as a little bit of a
2 Catch-22 in terms of what the demand is and what
3 the supply could be if it were driven to need to
4 go down that path, from my experience or
5 perspective.

6 I still procure my pectin and it is
7 not organic, but I wish that it were.

8 MEMBER SONNABEND: Yes, I just feel
9 like I have to respond to the one sentence in
10 there where you said, "It's not as if there
11 aren't enough organic grapefruits." Well, with a
12 25-percent reduction in the Florida citrus crop,
13 I don't think that is an assumption that you can
14 actually make, without us looking into it
15 further.

16 As a personal disclaimer, I sell
17 quince at the farmers' market. While most people
18 go, "What's that?", the people who know buy bags
19 of it to take home to use to make their own
20 jelly. So, why couldn't you extract it from our
21 organic quince? But I don't have the volumes for
22 sale that you would need to make a commercial

1 product out of it, and I am just not sure the
2 grapefruit is there available to make a
3 commercial product out of it.

4 MEMBER CHAPMAN: Additional
5 discussion?

6 (No response.)

7 Seeing none, we will move on to the
8 next item, peppers, chipotle, chili.

9 Comments were received from the Trade
10 Association, interest groups, and the public in
11 favor of delisting. No comments were received in
12 support of continuing listing. I believe this is
13 a strong candidate for delisting.

14 Any additional discussion on this
15 item?

16 (No response.)

17 Seeing none, we will move on to
18 seaweed, Pacific kombu.

19 Zea?

20 MEMBER SONNABEND: Okay. Well, we
21 talked about this a little. It seems like maybe
22 it could be covered in an overall listing for the

1 different seaweed types. And there are all the
2 factors that we discussed previously about could
3 it be produced or wild-crafted from organic
4 forms.

5 But we didn't hear any real clamor to
6 take it off the list. We heard just from some
7 groups, from some individual users, that it is
8 still used in organic products.

9 MEMBER CHAPMAN: Jean?

10 CHAIR RICHARDSON: So, can you
11 clarify? I can't remember the responses. Is
12 anybody using it that we know of, Kombu?

13 MEMBER SONNABEND: I don't think we
14 heard specifically that they were.

15 CHAIR RICHARDSON: Right, right.

16 MEMBER SONNABEND: But we didn't --
17 you know, like OTA identified certain ones to
18 take off, and that wasn't one, and QAI didn't
19 have it on their list. And so, I think we need
20 to do more marketplace research on this
21 potentially.

22 CHAIR RICHARDSON: Yes. And again,

1 for me, obviously, seaweed -- I will say the same
2 things on wakame -- the more we can know about
3 how it is harvested, how it is prepared, who is
4 using it, how important it is, once again, in
5 terms of just thinking of protection of plant
6 life in the oceans. And can it be grown as a
7 form in -- could it be grown agriculturally, so
8 to speak?

9 MEMBER SONNABEND: Well, and I didn't
10 even really get into it because I don't want to,
11 but the fact that I was a big user of seaweed,
12 and now I am even very reluctant to buy it
13 anymore because of Fukushima contamination of the
14 Pacific. And how do we look at the whole rest of
15 it without like looking at that also?

16 MEMBER CHAPMAN: Any additional
17 discussion?

18 (No response.)

19 Seeing none, we will move on to
20 starches, cornstarch and sweet potato.

21 Zea?

22 MEMBER SONNABEND: Another one.

1 All right. Starches, of course, have
2 a wide variety of use. Sweet potato starch is,
3 however, severely restricted for bean thread
4 production only.

5 We really got no comments on the sweet
6 potato starch other than it was on most
7 certifiers' lists. No, we didn't hear from a
8 specific bean thread producer or the certifier
9 who certified them, but we also did not hear a
10 big clamor to specifically take off this. We got
11 very little comment either way.

12 For cornstarch, we heard from several
13 certifiers who say that cornstarch is still
14 widely used. Organic cornstarch is available.
15 It wasn't clear necessarily if organic cornstarch
16 was acceptable for all of the different potential
17 uses for this.

18 We did get one letter from an
19 ingredient supply company who provides cornstarch
20 who said there were specific types of corn, high
21 amylase corn and one other kind, that were used
22 to produce starch for certain uses that were not

1 replaced by organic forms of cornstarch.

2 And so, it is sort of a mixed bag
3 about we need to still assess whether there is
4 enough cornstarch or whether there are very
5 specific uses that it doesn't work.

6 So, we hope the groups who outreach to
7 handlers will try to nail this down a little bit
8 more and try to get specific information on
9 situations where organic cornstarch doesn't work.

10 MEMBER CHAPMAN: Any discussion on
11 this item?

12 CHAIR RICHARDSON: I have a question.

13 MEMBER CHAPMAN: Jean?

14 CHAIR RICHARDSON: What is a bean
15 thread?

16 MEMBER CHAPMAN: I could be mistaken,
17 but I have purchased bean thread noodles before.

18 And since I am already speaking, I do
19 want to draw the attention to the OTA comment
20 speaking to the lack of organic molding starch
21 for an operation who claims it is a critical
22 processing aid for their facility.

1 MEMBER SONNABEND: What's molding
2 starch?

3 MEMBER CHAPMAN: It is used in making
4 Gummy Bears and such. They mold it out of
5 starch, drop the liquid in there. As it molds
6 the starch falls apart.

7 MEMBER SONNABEND: Absolutely
8 essential.

9 (Laughter.)

10 MEMBER CHAPMAN: Who doesn't want
11 organic Gummy Bears? Who has the Gummy Bears?
12 Don't give them to Zea.

13 Any further discussion on the
14 starches?

15 (No response.)

16 Hearing none, we will move on to
17 Turkish bay leaves, just the Turkish varietal.

18 Sorry, I can see, as the day went on,
19 my notes did not improve.

20 The same comment was received from
21 industry and the trade association. Speaking to
22 the need of Turkish bay leaves, they stated, "We

1 have one source of organic Turkish bay leaves
2 that match our requirements and have been able to
3 use them, based on availability in two SKUs of an
4 organic product. We are concerned, however,
5 about the consistency of supply and request that
6 this item remain on the National List through one
7 more sunset process to allow us to secure
8 consistent supplies."

9 There were comments received from
10 interest groups and the general public opposed to
11 the continued listing of agricultural
12 ingredients.

13 I would pose the question to the
14 commenter, and I will probably try to reach out
15 to them directly, specifically, what an
16 additional seven years will do to increase this
17 supply that has not occurred in the last nine.

18 Any further discussion on this item?

19 (No response.)

20 Seeing none, we will move on to wakame
21 seaweed.

22 Zea?

1 MEMBER SONNABEND: All right. The
2 same issues which we have pretty much covered in
3 the other two listings that involve sea plants.

4 This one at least lists the botanical
5 name, which the other two don't. And so, we know
6 what species we are dealing with.

7 We will study it in the same way that
8 we study the rest of the seaweed items. We did
9 not receive specific information on this in terms
10 of its use or its need or a great deal of comment
11 against it, other than those who would like
12 everything removed from 606.

13 MEMBER CHAPMAN: Jean?

14 CHAIR RICHARDSON: Again, just to be
15 sure we get on the record here that this is -- it
16 is nice to see the Latin name for it. It is in
17 the larger laminaria group. And wakame is grown
18 in Japanese and Korean water and, also, off the
19 coast of France. But it also very widely
20 harvested throughout the shorelines of New
21 Zealand, sold off, and badly being used in terms
22 of destruction of the ocean habitat.

1 So, I would just raise concerns that,
2 if we don't apply all the OFPA criteria carefully
3 when we look at these, and we just think of
4 organic availability, I think we have to do
5 everything we can to encourage the aquaculture
6 production of these laminaria groups, so that we
7 can have an organic source that we know will meet
8 the high standards necessary for production,
9 instead of being part of fairly-serious problems
10 of laminaria bed destruction, especially in the
11 Southern Hemisphere. It is horrendous.

12 MEMBER CHAPMAN: Any additional
13 discussion?

14 (No response.)

15 Seeing none, we will move on to whey
16 protein concentrate.

17 Whey protein concentrate is on the
18 National List as a non-organically-produced
19 agricultural product. It is allow as ingredients
20 in processed products labeled as organic. Whey
21 protein concentrate is used in dairy products,
22 protein bars, and infant formulas. Whey protein

1 concentrate is used a source of protein, as a fat
2 replace, and as a texturalizer.

3 A Technical Review was requested but
4 not available for publication prior to the
5 Subcommittee's review or this NOSB meeting.

6 Comments have been received from the
7 industry and trade associations on both sides
8 speaking to availability and unavailability.

9 Additional detailed information from
10 the industry is needed to support the commercial
11 unavailability of whey protein concentrates or
12 forms of whey protein concentrates.

13 There were comments received from
14 interest groups and the public generally opposed
15 to items on 606.

16 Any further discussion?

17 Zea?

18 MEMBER SONNABEND: This one for me is
19 a clear candidate for removing from the list,
20 allowing to sunset. Even the petitioner of it
21 indicated that they haven't had to use non-
22 organic whey since 2009.

1 Just a trip to the health food store
2 or a trip to Google with whey protein concentrate
3 will indicate many possible sources of whey
4 protein concentrate in organic form, and we did
5 not get specific-enough information back about
6 why the non-organic forms were the only ones that
7 worked for any particular application that
8 satisfied me, anyway. So, I'm going to be
9 inclined to not for this to continue.

10 MEMBER CHAPMAN: Thank you, Zea.

11 Any additional discussion on this
12 item?

13 CHAIR RICHARDSON: I would agree.

14 MEMBER CHAPMAN: Jean?

15 CHAIR RICHARDSON: I agree entirely
16 with what Zea just said.

17 MEMBER CHAPMAN: Anything else?

18 (No response.)

19 Okay. Seeing that we have concluded
20 the first discussion of the 2017 sunset materials
21 -- (applause) -- I would like to thank the
22 Subcommittee members for their time and review of

1 the public comments and the review.

2 I would like to thank the organic
3 community for their comments and attention to
4 these items, and the rest of the Board for their
5 thoughtful discussion and time as well.

6 I hand the meeting back over to Madam
7 Chair.

8 CHAIR RICHARDSON: Thank you very
9 much, Tom. Excellent job. Almost right on time,
10 I mean with five or six minutes, but we will
11 blame that on the guy over there that turned off
12 the microphones. So, that is easy to do.

13 (Laughter.)

14 Obviously, as you can see, we go
15 through this stuff in minute detail, but we are
16 not necessarily perfect. Well, Tom might be, but
17 the rest of us aren't. And so, you can see how
18 we have to struggle to get the right amount of
19 detail and information available to us to make
20 decisions on these for the fall.

21 So, you can continue to send us
22 information that will help with these decisions.

1 It would be most appreciated, obviously, as we
2 begin to develop these templates over the next
3 few months.

4 So, we will reconvene here at, let's
5 see, let's say 1:50. Would that be okay, Zea,
6 instead of 1:45? 1:50? Yes, okay. So, a 75-
7 minute lunch break.

8 See you later.

9 (Whereupon, the foregoing matter went
10 off the record for lunch at 12:37 p.m. and went
11 back on the record at 1:49 p.m.)
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1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2 2:00 p.m.

3 CHAIR RICHARDSON: Very well, this
4 afternoon we will start the Crops Subcommittee
5 with Zea Sonnabend as the Chairperson. And I
6 will turn it over to Zea at this time.

7 MEMBER SONNABEND: Can you make one
8 announcement while I wake my computer up or
9 something?

10 CHAIR RICHARDSON: Okay. I will make
11 some announcements in preparation, and I will be
12 saying some of these things again on Friday, but
13 all of you may not -- not Friday -- Thursday,
14 when you still, hopefully, will all be around.

15 We are think of ways to make the fall
16 meeting not just more fun, although this is
17 pretty good fun, but also to be more efficient of
18 our time. And we are thinking of ways in which
19 we might try to lengthen the time for public
20 input, written information, public comments. So,
21 that might help to reduce the amount of
22 verbal/oral comment because your written comments

1 actually are so much more important to us because
2 we have time to digest them, rather than sort of
3 handling them all at the last minute, so to
4 speak.

5 So, many of you have mentioned you
6 would like to have 45 days. I don't know whether
7 we can to do that, but we are going to try to
8 strategize how we can be more efficient in
9 receiving information, but extending and widening
10 and opening up the times that public can provide
11 comment. So, stay tuned on that.

12 And I will also be saying a bunch of
13 things about the Vermont meeting probably
14 tomorrow.

15 Are you ready to get started now?
16 Okay, but we should really get on to our crops.

17 MEMBER SONNABEND: Thank you, Madam
18 Chair.

19 Welcome to the Crops Subcommittee
20 portion of our agenda.

21 The first item that we will be talking
22 about is a proposal based on a petition for

1 exhaust gas. So, I will turn it over to Francis.

2 MEMBER THICKE: Thank you, Zea.

3 Exhaust gas from internal combustion
4 engines has been petitioned for use for control
5 of burrowing rodents under 205.601.

6 DR. BRINES: I'm sorry, Francis.

7 MEMBER THICKE: Oh, Lisa, yes.

8 MEMBER SONNABEND: Lisa has to go
9 first.

10 DR. BRINES: I was waving my arms.

11 (Laughter.)

12 MEMBER THICKE: You do it.

13 DR. BRINES: I'll be brief.

14 Thank you.

15 The petition for exhaust gas was
16 submitted on April 19th, 2012, and there was a
17 subsequent revision on February 22nd, 2013. The
18 petition was submitted by H&M Gopher Control and
19 requests the addition of exhaust gas to Section
20 205.601 of the National List for underground
21 rodent control.

22 In support of its review, the Crops

1 Subcommittee had requested the development of a
2 third-party Technical Evaluation Report, which
3 was completed in 2014. Both the report, the
4 original petition, and the subsequent agenda for
5 posted for the public in advance of the opening
6 of the announcement for this meeting.

7 Thank you.

8 MEMBER THICKE: Thank you, Lisa.

9 DR. BRINES: Uh-hum.

10 MEMBER THICKE: So, as Lisa mentioned,
11 this was petitioned by a copy that makes the
12 machine that compresses exhaust gas and injects
13 it into burrows.

14 Exhaust gas contains a lot of
15 compounds, including carbon monoxide, which, of
16 course, diminishes the oxygen-carrying capacity
17 of red blood cells, and also carbon dioxide,
18 which displaces oxygen in burrows and can lead to
19 asphyxiation as well.

20 The Crops Subcommittee did not support
21 this petition because of concerns about potential
22 impacts on non-target species, especially

1 threatened and endangered species, as well as
2 potential effects on the soil microorganisms.

3 The technical review for the material
4 indicated that there is an absence of information
5 on the effects of exhaust gas on the soil/food
6 web.

7 There were about seven public comments
8 on the petition. All were opposed to putting
9 this on the National List.

10 In previous actions related, in April
11 of 2011, the NOSB, on a sunset review of sulfur
12 dioxide, also known as sulfur bombs, for use as a
13 rodenticide, the NOSB failed to relist it by a
14 vote of nine to zero. So, that was taken off the
15 National List at that time.

16 And then, in December of 2011, a
17 petition to add propane gas to the National List
18 as a rodenticide was denied by the NOSB by a vote
19 of zero to 14.

20 So, the Crops Subcommittee moved to
21 classify exhaust gas as synthetic by a vote of
22 five yes, zero no, two abstained, and in the

1 listing motion, voted to -- let's see. To put it
2 on the National List, the vote was zero yes and
3 five no, and two absent.

4 Anybody else have any comments about
5 it?

6 CHAIR RICHARDSON: Francis, did anyone
7 write in to say that they thought it was a great
8 idea?

9 MEMBER THICKE: I didn't see anywhere,
10 unless I missed a comment, I did not see anybody
11 in support of it.

12 MEMBER SONNABEND: I have a comment?
13 Am I supposed to call on people or Francis?

14 MEMBER THICKE: Yes, you are, Zea.

15 MEMBER SONNABEND: Oh, sorry.

16 (Laughter.)

17 One of the concerns the Subcommittee
18 has, and one reason this took quite a long time
19 from the petition coming until getting it onto
20 the agenda, is that exhaust gas is not just
21 carbon monoxide, but all the other things that go
22 into gasoline or diesel fuel that come out in the

1 exhaust. We felt that we had to do an evaluation
2 of those things as well.

3 I have seen an ad since then that
4 said, "100-percent pure carbon monoxide," and it
5 showed a picture of a guy killing rodents with
6 it. Maybe it is going to come back to us as 100-
7 percent pure.

8 But I still share the same concern
9 that, while I don't have any concerns about using
10 tractors or other equipment on farms, but the
11 other components that are injected with the gas
12 into the holes still makes me very uncomfortable,
13 which is why I am not for it.

14 MEMBER THICKE: And, Zea, on that
15 point, the petition was initially for carbon
16 monoxide. And then, when we pointed out that
17 there were other gases there, they brought the
18 petition back as exhaust gas.

19 MEMBER SONNABEND: Any more
20 discussion?

21 (No response.)

22 Are we ready to proceed with a vote?

1 Mac?

2 MEMBER STONE: Just a comment before.

3 It does work really well to thaw a livestock
4 water tank, but I don't know if I need to let my
5 certifier know that or not.

6 MEMBER SONNABEND: And that's it?
7 Okay.

8 Who calls the vote? Jean?

9 CHAIR RICHARDSON: So, there are
10 motions on the floor. Both come as seconded
11 motions from the Subcommittee.

12 The first motion on which we will vote
13 is the classification motion. That motion is to
14 move to classify exhaust gas as synthetic.

15 The voting starts with Ashley, I
16 think.

17 MEMBER SWAFFAR: Yes.

18 VICE CHAIR FAVRE: Yes.

19 MEMBER CHAPMAN: Yes.

20 MEMBER BONDERA: Yes.

21 MEMBER SONNABEND: Yes.

22 MEMBER DE LIMA: Yes.

1 MEMBER WALKER: Yes.

2 MEMBER THICKE: Yes.

3 MEMBER STONE: Yes, ma'am.

4 MEMBER DANIELS: I know now to wait to
5 hear the "ma'am" before I vote.

6 (Laughter.)

7 Yes.

8 MEMBER TAYLOR: Yes.

9 MEMBER MARAVELL: Yes.

10 MEMBER BECK: Yes.

11 CHAIR RICHARDSON: The Chair votes
12 yes.

13 VICE CHAIR FAVRE: The vote is 14 yes,
14 zero no, one absent. The motion passes.

15 CHAIR RICHARDSON: Thank you.

16 The second motion coming from the
17 Subcommittee as a seconded motion is a move to
18 list exhaust gas at 205.601, synthetic substances
19 allowed for use in organic crop production.

20 Does everybody understand the motion?

21 The voting will start with Tracy.

22 VICE CHAIR FAVRE: No.

1 MEMBER CHAPMAN: No.

2 MEMBER BONDERA: No.

3 MEMBER SONNABEND: No.

4 MEMBER DE LIMA: No.

5 MEMBER WALKER: No.

6 MEMBER THICKE: No.

7 MEMBER STONE: No, ma'am.

8 MEMBER DANIELS: No.

9 MEMBER TAYLOR: No.

10 MEMBER MARAVELL: No.

11 MEMBER BECK: No.

12 MEMBER SWAFFAR: No.

13 CHAIR RICHARDSON: The Chair votes no.

14 VICE CHAIR FAVRE: The vote is zero

15 yes, 14 no, one absent. The motion fails.

16 MEMBER SONNABEND: Okay. Thank you.

17 The next item is a proposal that was

18 withdrawn on allyl isothiocyanate, henceforth

19 known AITC.

20 We are going to just read a little

21 statement about the Committee's work on this,

22 but, then, not vote.

1 AITC has been petitioned to add to the
2 National List as a biofumigant. Its source is
3 mustard oil. It is a synthetic form of isolated
4 and distilled mustard oil.

5 We did have a TR commissioned on this
6 to see why a synthetic form might have unique
7 properties over the non-synthetic just growing of
8 mustard and all. We could not determine from
9 that TR that it did have unique properties, and
10 therefore, had decided to rejection the petition.

11 I do understand from the petitioners
12 that they withdrew the proposal because they
13 realized they had not presented it right. In
14 fact, it might be a registered fungicide, and so,
15 really should be considered in a different
16 context for the National List. So, I do think we
17 will be seeing this proposal come back to us in
18 the future, or the same product but a different
19 use pattern and all that.

20 So, for now, we are accepting that the
21 petition has been withdrawn.

22 CHAIR RICHARDSON: Could I ask a

1 question as to whether or not you had reached any
2 conclusions on it?

3 MEMBER SONNABEND: The Committee had
4 decided to reject the proposal and not list this
5 in the manner that it was presented before it was
6 withdrawn.

7 MEMBER SONNABEND: The next item is
8 calcium sulfate. Calcium sulfate was petitioned
9 for use --

10 DR. BRINES: Zea?

11 MEMBER SONNABEND: Yes?

12 DR. BRINES: I'm sorry.

13 MEMBER SONNABEND: Sorry, Lisa.

14 DR. BRINES: We will figure it out by
15 the last one.

16 All right. The petition for calcium
17 sulfate was received on June 2nd, 2014, and was
18 submitted by the American Coal Ash Association.

19 In support of its review, no new
20 Technical Report was developed. However, there
21 is a previous Technical Advisory Panel Report for
22 2001 that was prepared for the listing of calcium

1 sulfate for processing use.

2 And that's all I have for this one.

3 Thank you.

4 MEMBER SONNABEND: Good. Thank you,
5 Lisa.

6 The Crops Subcommittee looked at this
7 petition and realized that many similar things to
8 this had been reviewed before, and all of them
9 had been turned down. So, we decided not to
10 request a TR because the petitions and/or the
11 previous work that the Board did in looking at
12 similar things was enough to make us make a
13 decision.

14 This calcium sulfate is produced from
15 a process known as flue -- say this five times --
16 flue gas desulfurization, or FGD, process, which
17 is the most common process used to control sulfur
18 dioxide emissions in coal-fired power plants.

19 So, the petition raised two key
20 points. First of all, that FGD gypsum is a
21 byproduct of energy production and, as a
22 byproduct, it is not all able to be able to be

1 used, and so, gets diverted into landfills.

2 Second of all, the accessibility of
3 mine gypsum varies a great deal from state to
4 state, primarily because of the cost and
5 convenience of transporting mine gypsum is
6 directly proportionally to how far away the mine
7 is, and most of the mines are in the Western
8 States; whereas, most of the smokestacks are in
9 the Eastern States. So, it would be much better
10 for East Coast farmers if they could have a
11 source of gypsum that was closer to home.

12 There is no doubt in any of our minds
13 that gypsum or calcium sulfate is not a
14 beneficial addition to soils, and we have some
15 sympathy with the fact that East Coasters have to
16 bring it from further. However, this is not
17 enough reason for us to decide to allow a
18 synthetic onto the National List for something
19 that there are perfectly good non-synthetic
20 substitutes for.

21 And so, the Subcommittee has decided
22 to classify calcium sulfate produced by flue gas

1 desulfurization as synthetic and not to add it to
2 the National List.

3 Discussion?

4 Francis?

5 MEMBER THICKE: I would point out that
6 I did a lot of research on this in graduate
7 school, on flue gas desulfurization sludge,
8 scrubber sludge, as we called it. It is quite
9 variable. It depends upon the coal source, and
10 it can have heavy metals in it. And it can even
11 have pyrototoxic materials like boron that can
12 cause plant problems. So, I don't think it is
13 the same as gypsum.

14 MEMBER SONNABEND: Anyone else?

15 (No response.)

16 Okay, a vote.

17 CHAIR RICHARDSON: The question is
18 being called.

19 There will be two motions on this.
20 Both of these motions come as seconded motions
21 from the Subcommittee.

22 The first motion is the classification

1 motion to classify calcium sulfate produced by
2 FDG process as petitioned as synthetic.

3 Starting with Tom.

4 MEMBER CHAPMAN: Yes.

5 MEMBER BONDERA: Yes.

6 MEMBER SONNABEND: Yes.

7 MEMBER DE LIMA: Yes.

8 MEMBER WALKER: Yes.

9 MEMBER THICKE: Yes.

10 MEMBER STONE: Yes, ma'am.

11 MEMBER DANIELS: Yes.

12 MEMBER TAYLOR: Yes.

13 MEMBER MARAVELL: Yes.

14 MEMBER BECK: Yes.

15 MEMBER SWAFFAR: Yes.

16 VICE CHAIR FAVRE: Yes.

17 CHAIR RICHARDSON: The Chair votes
18 yes.

19 VICE CHAIR FAVRE: The vote is 14 yes,
20 zero one, one absent. The motion passes.

21 CHAIR RICHARDSON: The second motion
22 is the listing motion. The motion is to add

1 calcium sulfate produced by -- this one says
2 "SDG"; I think it is supposed to be "FGD" process
3 as petitioned to 205.601.

4 Does everyone understand the motion to
5 add?

6 The voting starts with Colehour.

7 MEMBER BONDERA: No.

8 MEMBER SONNABEND: No.

9 MEMBER DE LIMA: No.

10 MEMBER WALKER: No.

11 MEMBER THICKE: No.

12 MEMBER STONE: No, ma'am.

13 MEMBER DANIELS: No.

14 MEMBER TAYLOR: No.

15 MEMBER MARAVELL: No.

16 MEMBER BECK: No.

17 MEMBER SWAFFAR: No.

18 VICE CHAIR FAVRE: No.

19 MEMBER CHAPMAN: No.

20 CHAIR RICHARDSON: The Chair votes no.

21 VICE CHAIR FAVRE: The vote is zero

22 yes, 14 no, one absent. The motion fails.

1 MEMBER SONNABEND: Thank you.

2 The next item is a proposal for

3 3-decen-2-one.

4 Lisa?

5 DR. BRINES: Thank you.

6 The petition for 3-decen-2-one was

7 submitted on August 13th, 2014, by Amvac Chemical

8 Corporation. The petition requests the inclusion

9 of this material to Section 205.601 of the

10 National List as a sprout inhibitor.

11 No Technical Evaluation Report was

12 requested or developed in support of this

13 petition.

14 Thank you.

15 MEMBER SONNABEND: Okay. Carmela?

16 MEMBER BECK: So, the Crops

17 Subcommittee reviewed the petition for

18 3-decen-2-one this past semester for addition to

19 Section 205.601 for use as a plant growth

20 regulator. More specifically, the substance is

21 intended for use on potatoes as a sprout

22 inhibitor.

1 As mentioned, the primary argument for
2 listing the material is that it extends the
3 potato shelf life, which is particularly
4 advantageous for export markets.

5 The Subcommittee noted that clove oil
6 is an alternative to the synthetic material.
7 Additionally, as indicated in the TR -- excuse me
8 -- additionally, as noted in the public comment,
9 a focus on proper harvest, handling, and cold
10 storage to maintain the optimal temperature,
11 humidity, and ventilation techniques can be
12 utilized to help delay the dormancy break.

13 The Crops Subcommittee decided that
14 the material fails both the essentiality,
15 compatibility, and consistency criteria because
16 of the availability of non-synthetic
17 alternatives. For these reasons, we have
18 determined that the material should not be listed
19 for use in organic production.

20 There were two commenters in favor of
21 the listing and seven opposed.

22 That concludes.

1 MEMBER SONNABEND: Discussion?

2 Jean?

3 CHAIR RICHARDSON: Carmela, or anyone
4 else on the Crops Committee, what was sort of the
5 scope of -- I mean, obviously, we heard comments
6 on this during public comment at this meeting.
7 But could you help me understand sort of the
8 scope of the objections to use of it in terms of
9 either its chemistry or its manufacturing or
10 environmental impacts, for example?

11 MEMBER BECK: I believe that the
12 primary reason for not considering the material
13 is because there is an alternative that functions
14 and that there was not a need to add an
15 additional synthetic to the list.

16 MEMBER SONNABEND: Although it is a
17 short sentence in our background material, I
18 think the fact that there are also cultural
19 practices and ways of handling potatoes to
20 minimize the likely of sprouting, and also that
21 it is a varietal -- you know, some varieties seem
22 to have sprouting tendencies more than others --

1 that led us to think that this may not be
2 necessary.

3 And I tried to reinforce that somewhat
4 when I asked Jim Gerritsen to explain how he was
5 able to produce potatoes without it. And he
6 indicated that proper attention to the right
7 harvest dates, getting them into cold storage
8 immediately, and techniques like that help avoid
9 him having to use that.

10 Any other discussion?

11 (No response.)

12 Okay, I think we could vote.

13 CHAIR RICHARDSON: Okay. This, again,
14 has two motions. The first motion is the
15 classification motion. Both motions come as
16 seconded from the Subcommittee.

17 The first motion, the classification
18 motion is a move to classify 3-decen-2-one as
19 petitioned as synthetic.

20 Starting with Zea.

21 MEMBER SONNABEND: Yes.

22 MEMBER DE LIMA: Yes.

1 MEMBER WALKER: Yes.

2 MEMBER THICKE: Yes.

3 MEMBER STONE: Yes, ma'am.

4 MEMBER DANIELS: Yes.

5 MEMBER TAYLOR: Yes.

6 MEMBER MARAVELL: Yes.

7 MEMBER BECK: Yes.

8 MEMBER SWAFFAR: Yes.

9 VICE CHAIR FAVRE: Yes.

10 MEMBER CHAPMAN: Yes.

11 MEMBER BONDERA: Yes.

12 CHAIR RICHARDSON: The Chair votes
13 yes.

14 VICE CHAIR FAVRE: The vote is 14 yes,
15 zero no, one absent. The motion passes.

16 CHAIR RICHARDSON: The second is the
17 listing motion. Move to list 3-decen-2-one on
18 Section 205.601 of the National List.

19 The voting will start with Lisa.

20 MEMBER DE LIMA: No.

21 MEMBER WALKER: No.

22 MEMBER THICKE: No.

1 MEMBER STONE: No, ma'am.

2 VICE CHAIR FAVRE: No.

3 MEMBER TAYLOR: No.

4 MEMBER MARAVELL: No.

5 MEMBER BECK: No.

6 MEMBER SWAFFAR: No.

7 VICE CHAIR FAVRE: No.

8 MEMBER CHAPMAN: No.

9 MEMBER BONDERA: No.

10 MEMBER SONNABEND: No.

11 CHAIR RICHARDSON: The Chair votes no.

12 VICE CHAIR FAVRE: The vote is zero

13 yes, 14 no, one absent. The motion fails.

14 MEMBER SONNABEND: Thank you.

15 Next up is a report, and the report is

16 on the Contamination Issues in Farm Inputs.

17 Colehour will be presenting this

18 report on behalf of the Subcommittee.

19 MEMBER BONDERA: Thank you very much.

20 So, it is all up, and I am going to

21 try to just go through this presentation. And

22 then, what I am hoping is that, especially the

1 members who aren't on the Crops Committee can add
2 any comments or input that we can be taking back.

3 This is presented as a report,
4 although at one point in time or somewhere occurs
5 the phrase "Discussion Document," but there is
6 definitely input that we have received.

7 Protecting against contamination in
8 farm inputs is the goal. We, the NOSB, decided
9 to pursue this. It has been several years ago.
10 And so, we are trying to move it along. It is a
11 pretty complicated subject. So, we will see.

12 The background: the regulations at
13 205.203 require organic producers to add organic
14 materials while avoiding contamination with
15 substances prohibited in organic production.
16 Soil fertility and crop nutrient management
17 practice standard.

18 I'm not going to read through all of
19 it. Hopefully, you all will keep up. Stop me if
20 you want me to go slower or have questions.

21 It continues, with animal and plant
22 materials, it includes raw animal manure.

1 Sorry. I have to find this in the
2 right place.

3 Raw animal manure -- excuse me --
4 composted plant and animal manure, and
5 uncomposted plant materials. So, those are what
6 are included there.

7 The Subcommittee focuses on the
8 feedstocks and pathways. That is where it has
9 been going.

10 What contaminants might be present
11 here -- these are the questions at hand -- which
12 would survive currently-prescribed requirements
13 for composting?

14 If there are remaining contaminants
15 known to persist through the composting process
16 at any level, is there a way to restrict the
17 source?

18 If there are remaining contaminants,
19 do they exceed unavoidable residual contamination
20 levels from a historical, but not current use of
21 a toxic material?

22 And then, finally, are there

1 treatments that could be applied to the compost
2 that can eliminate those contaminants?

3 I'm sorry.

4 In the report which summarizes the
5 plan there are 10 points, 10 columns in a
6 spreadsheet that we created. I am just going to
7 read through them, but that is where we are
8 starting. So, the 10 items are:

9 Off-farm input.

10 No. 2 is source.

11 Three is components of interest.

12 Likely or possible contaminants.

13 Ability to persist through the
14 composting process.

15 Avoidance methods.

16 Environmental fate of inputs when
17 applied to soil.

18 No. 8 is loading rates.

19 Efficacy of remediation.

20 And testing methods.

21 So, as was stated -- and we did get
22 some feedback, and this is what we asked for,

1 some assistance in identifying feedstocks,
2 pathways, and determining how to separate them
3 into categorized groups.

4 Which contaminants are associated with
5 which feedstocks, pathways?

6 Additional contamination removal
7 methods; for example, bacterial cultures that
8 might be added to compost; fungi that might be
9 used for micro-remediation.

10 And then, low-cost test methods, like
11 bioassays with clear definitions as another
12 example.

13 So, that is where we sort of started
14 out, a summary of the document that was put
15 forth.

16 I will try to some degree summarize
17 the comments that came in because I think that we
18 can recognize the importance of what has come in
19 so far. Like I started out by saying, we are not
20 making a recommendation; we are seeking a means
21 to get to a goal.

22 Comments calling for a ban on the use

1 of manure from conventional factory farms was
2 quite significant numerically. Realistically,
3 even if you only counted the petition as a single
4 entity, that was 23,681 signatures on a petition,
5 but there were 109 separate individual comments
6 and an organizational comment regarding this
7 subject. So, this was a topic that a lot of
8 people thought merited attention.

9 Comments calling for other avoidance
10 measures: testing, affidavits, labeling,
11 allowance as an unavoidable residual,
12 environmental contamination, no methane digester
13 sources. They came from organization and
14 individuals.

15 And then, comments asking that
16 conventional manures not be banned did come from
17 three individuals as well.

18 Hold on. My screen doesn't want to
19 work with me. So, one second. Here it goes
20 back.

21 Okay. So, we have some comments from
22 both Cornucopia and QAI suggesting testing,

1 protocols for avoiding physical contamination.
2 Address pesticide contamination as it arises.
3 Persistent chemicals need to be banned from
4 production. Farmers not being held responsible
5 for contamination, and even compensation from the
6 manufacturer of the herbicides until they are
7 banned was included.

8 Other comments that came: support for
9 research into contaminated farm inputs.
10 Examination of sources and means of controlling
11 cadmium in soils.

12 I think a little bit of what the best
13 step is, and what we really were thinking, is how
14 to move this forward. And Beyond Pesticides is
15 talking about one feedstock and following it
16 through to making some recommendations.

17 I do think on this subject area I
18 actually agree, and you heard me comment about it
19 before. But, specifically, on this topic, I
20 think that an open docket to receive public
21 comment on an ongoing basis, this is the kind of
22 example of something we are trying to do where it

1 would be very hard without it, frankly, going
2 outside of the normal means.

3 And a contaminated input plan, also
4 supported by Consumer Reports.

5 So, that is really all -- I'm sorry,
6 I clicked when I didn't need to click -- but that
7 is really my summary of what we put forth. Like
8 I said at the beginning, I at least would very
9 much value and appreciate non-Committee members
10 adding their reflections, thoughts, or comments.

11 And that is what I wanted to present.
12 Thank you.

13 MEMBER SONNABEND: Colehour, I am
14 going to call on myself first.

15 I didn't hear you mention OMRI's
16 comment, who gave a very specific comment about
17 conducting a TR about this, which I think should
18 at least be acknowledged as one approach to
19 dealing with it.

20 MEMBER BONDERA: No, thank you very
21 much, and that is actually one of the things I
22 meant to do, and I failed. So, thank you in

1 general.

2 But, specifically, I think OMRI also
3 pointed out that this is -- I am not going to
4 quote it at all -- but this is maybe too much or
5 a lot to try to be taking on. This is quite a
6 significant endeavor. I think that it is also a
7 valid point.

8 Thank you.

9 And I would appreciate other Committee
10 members chiming-in with things that I have failed
11 to include because I have an entire two pages of
12 additional things here that I wanted to do, but I
13 wanted to be brief.

14 Thank you.

15 MEMBER SONNABEND: Okay. Any
16 discussion from the Board?

17 Mac?

18 MEMBER STONE: I appreciate the work
19 the Committee is doing on this because farmers
20 could get tripped up pretty quickly, and this
21 could bring some attention to that.

22 I will say that most OSPs and all

1 certifiers and inspectors, frankly, are very
2 aware of this out of protection for their
3 clients, if you will. If you are bringing in
4 off-farm inputs, that usually triggers another
5 set of questions and discussion between the
6 certifier and/or the inspector to sort of look of
7 these things. And if it is manure from a lagoon,
8 if they are using fly controls and different
9 types of things.

10 The community, the farmers are very
11 aware of it. The certifiers are very aware of
12 it. The inspectors are very aware. But I think
13 bringing it to this attention in this stage helps
14 that conversation.

15 MEMBER SONNABEND: Anyone else?

16 Thank you.

17 Paula?

18 MEMBER DANIELS: Thank you.

19 I just wanted to comment on the open
20 docket question, which I think is an interesting
21 one. There is certainly value in getting public
22 comment between now and September. And I was

1 thinking that as we were listening to the sunset
2 reviews on handling as well, that there is a long
3 gap between now and then, and we have expressed
4 our views on the sunset materials and we will for
5 the other subcommittees as well, and on this one.

6 But how do we get public input in the
7 interim? And I keep leaning over to Emily and
8 asking her procedural questions, and I really
9 appreciate she helping walk me through aspects of
10 the regulations and answering my procedural
11 questions.

12 The concern I have about an open
13 docket is I am just not sure how that would be
14 managed, but I am wondering if we could search
15 for another way to open and close a comment
16 period kind of in the middle, in between
17 somewhere. I am going to arbitrarily say July,
18 that we have a month or something where we invite
19 on various issues.

20 MEMBER SONNABEND: Okay. We have been
21 pestering Miles about this for probably three
22 years now.

1 (Laughter.)

2 MEMBER DANIELS: So, I will add my
3 voice to that.

4 MEMBER SONNABEND: Yes.

5 MEMBER DANIELS: Sorry, Miles, but I
6 am piling on.

7 MEMBER SONNABEND: And I don't want to
8 speak for him, but he has often said anyone can
9 send an email into the Department, and they will
10 see if they can forward it on to us if it is
11 related to our work or at least incorporate it
12 into something or another.

13 MEMBER DANIELS: You know, the only
14 reason I would --

15 MEMBER SONNABEND: But the obstacle,
16 he has explained before, actually, the obstacles.
17 Maybe he wants to go through it all again. But,
18 like any government process that has not been
19 ever done before, it is especially complicated.

20 MR. McEVOY: Yes, it is something that
21 we would like to do, and there are some other
22 federal agencies that have types of open dockets.

1 We haven't been able to figure out how to do
2 within AMS, within Agricultural Marketing
3 Service. It is something that we intend to do at
4 a certain point.

5 And Zea is exactly correct, that
6 anybody can send in comments at anytime and we
7 will try to get them to the appropriate
8 subcommittee.

9 The problem with that is that, when
10 you send in comments to us and we get it to the
11 subcommittee, it is not available to the public
12 in general. And so, the way that we do that is
13 through regulations.gov when we have the open
14 docket, so that everybody can see everybody
15 else's comments, and it is all transparent.

16 So, that is the downside of people
17 sending in comments in an interim period just,
18 for instance, to -- you know, they could sent
19 them to Michelle or they could send them to
20 nopguidance@ams.usda.gov. There are various
21 ways to get information into the program, and
22 then, having us get it to the Board.

1 But we don't have a mechanism for an
2 open docket at this point. It is something that
3 we would like to establish, but we haven't
4 figured out how to actually do it through AMS.

5 MEMBER DANIELS: Is there a way to
6 declare a period, a comment period? I am going
7 to, again, just sort of arbitrarily pick July 1,
8 not because that should be the date, but let me
9 just say hypothetically you announce that on July
10 1 we are going to open comments on everything
11 that was reviewed for sunset, including this
12 document and other discussion documents, and
13 comments will close July 30. And then, you have
14 them -- I'm just picking that as an arbitrary.

15 Can that sort of thing be managed?

16 MR. McEVOY: Well, there's lots of
17 things that can or could be done. So, the
18 mechanism for doing that is we could do a Federal
19 Register Notice and open up regulations.gov in
20 some way or fashion. I don't know the details of
21 that, but we could possibly look into that. But
22 that means that we will be spending a lot of time

1 trying to figure out how to do that rather than
2 what our strategic priorities are to get animal
3 welfare, for one of many other projects, out of
4 the Department this summer.

5 MEMBER DANIELS: Well, maybe there is
6 another way we can kind of informally, you know,
7 informally, but transparently gather comments. I
8 will just keep thinking about it, and maybe we
9 can talk about it again.

10 MEMBER SONNABEND: Okay. Any further
11 discussion on Colehour's report?

12 (No response.)

13 Okay. I think we are ready to move
14 on.

15 So, next on the agenda is Sunset 2016.
16 We will give it to Lisa to introduce the
17 materials.

18 DR. BRINES: Thank you.

19 The first item up for sunset under
20 Section 205.601 of the National List is ferric
21 phosphate. This substance is currently listed
22 under paragraph (h) as slug or snail bait, ferric

1 phosphate, CAS No. 10045-86-0.

2 No new Technical Report was developed
3 for this substance, but there are previous
4 Technical Reports available, including a
5 Supplemental Report that was completed in 2012.

6 Thank you.

7 MEMBER SONNABEND: Okay. The first
8 one is ferric phosphate, and Carmela will take us
9 through that.

10 MEMBER BECK: Okay. There has been
11 overwhelming compelling public comment in support
12 of the relisting of ferric phosphate. At the
13 fall 2014 meeting, there were an estimated seven
14 substantive comments in favor of relisting and
15 two substantive comments opposed to the
16 relisting.

17 In 2015, support has come from farmers
18 through the OTA, representing 633 acres and
19 certifying surveys distributed to certified
20 organic operations.

21 The WSDA indicated that 19 percent of
22 their organic vegetable growers listed ferric

1 phosphate in their 2014 Organic System Plan as an
2 option for use as an input material when
3 preventative management practices have not been
4 sufficient to control pests. This number was
5 based upon a search of brand-name ferric
6 phosphate products within 166 vegetable producer
7 Organic System Plans.

8 OMRI indicated that they have 16
9 registered products with ferric phosphate as the
10 active ingredient.

11 Public comment keywords in support of
12 relisting include the following:

13 Delisting would be detrimental.

14 The material is a highly-effective
15 pest management material.

16 This is a necessary material for slug
17 control, considering it is the only national-
18 listed material approved for the use.

19 Almost all respondents rated ferric
20 phosphate as critically essential to their
21 operation.

22 There are no alternative products for

1 slug and snail control for commercial-scale
2 production.

3 And we need to have the option to have
4 this production tool in our toolkits.

5 There were some concerns expressed
6 regarding the use of the inert ingredient EDTA.
7 However, the inert in the formulated ferric
8 phosphate are allowed under Section
9 205.601(m)(1).

10 The Subcommittee reiterates to the
11 Board that the material under review for sunset
12 2015 is solely the active ingredient ferric
13 phosphate.

14 As stated in our proposal, the NOSB,
15 NOP, EPA Inerts Working Group will continue to
16 work diligently to address the EPA List 4 inert
17 ingredients over the coming months.

18 As referenced during an earlier
19 presentation, the IWG will be evaluating the
20 possibility for collaboration with EPA's Safer
21 Choice Program.

22 It is the intention of the

1 Subcommittee to relist ferric phosphate because:

2 One, it is necessary to the production
3 of the agricultural product because of the
4 unavailability of wholly-natural substitute
5 products.

6 Two, it is not harmful to human health
7 or the environment.

8 And three, it is consistent with
9 organic farming and handling.

10 At the Subcommittee level, there was
11 a motion to remove ferric phosphate from
12 201.601(h). The motion was made by myself,
13 Carmela Beck, and seconded by Colehour Bondera.
14 Two were in favor of delisting; three were in
15 favor of relisting.

16 And that concludes my presentation.

17 MEMBER SONNABEND: Jean?

18 CHAIR RICHARDSON: I would be
19 interested in hearing from the Subcommittee what
20 kind of science they found that supported the
21 lack of risk to earthworms, other soil organisms,
22 et cetera.

1 MEMBER SONNABEND: Carmela, do you
2 want to address that or do you want me to?

3 MEMBER BECK: No, I would like you to.

4 MEMBER SONNABEND: Okay. As far as I
5 can tell -- and we have looked into this quite a
6 bit -- all of the evidence about earthworms is
7 based on one study by someone named Edwards.

8 We did ask the TR contractor who was
9 -- I forget the name of the branch of the USDA,
10 but did the TR on that particular thing -- to
11 verify for us whether they thought that study was
12 biased or not, because there were accusations at
13 the time we took up the petition to remove it
14 about the study being accurate or biased.

15 They came back to us and they said
16 they found the study to be unbiased, but it is on
17 unreplicated -- you know, it hasn't been
18 replicated in other types of soils and
19 conditions. So, clearly, this is an area for
20 future research because we were reluctant to base
21 any conclusion based on just one study.

22 MEMBER SONNABEND: Clarification,

1 Francis?

2 MEMBER THICKE: Were there any other
3 studies that had the opposite results that showed
4 no effect? Or were there no other studies?

5 MEMBER SONNABEND: No, it hasn't been
6 studied.

7 MEMBER THICKE: Just one study?

8 MEMBER SONNABEND: Yes.

9 MEMBER THICKE: Okay.

10 MEMBER SONNABEND: And that one study,
11 we didn't have it for a long time. All we had
12 was references to it in CBI. So, it took a long
13 time to even get it disclosed to us.

14 MEMBER THICKE: A related question.
15 Carmela, you said that OMRI said there are 43, I
16 think, listed forms of ferric phosphate. Did I
17 get that right? Do you know, are they all with
18 EDTA? I presume they might be, but does anybody
19 know?

20 MEMBER SONNABEND: Well, I don't know
21 about the 43, and I don't know for sure about all
22 with EDTA, because EDTA is one of those things

1 that could be listed on a label, but it is also
2 approved as a List 4 inert. And so, it might
3 just say ferric phosphate plus List 4 inerts.
4 And then, you don't know that it is EDTA, and you
5 can't find out.

6 MEMBER BECK: I have 17. I counted 17
7 on the list that they provided, yes.

8 MEMBER SONNABEND: Calvin?

9 MEMBER WALKER: What year was that
10 particular study done or published?

11 MEMBER SONNABEND: Carmela, do you
12 have that in your checklist or your files?

13 MEMBER BECK: It will take me a minute
14 to find it, yes. I can't get it right now.

15 (Pause.)

16 MEMBER SONNABEND: I think we have to
17 go back to the checklist from a couple of years
18 to find that, but --

19 Any other questions in the meantime,
20 comments?

21 Francis?

22 MEMBER THICKE: Well, I am still

1 conflicted about this whole EDTA thing and what
2 is the long-term solution. Suppose this does
3 pass this time. Maybe, Zea, can you help us to
4 understand what will happen in the future?

5 MEMBER SONNABEND: Yes, and this is
6 the reason that it passed last time. EDTA, as a
7 List 4 inert, is in our list of inerts to be
8 reviewed for compatibility with organic
9 principles. It is one, if we move forward with
10 the Design for Environment, or whatever it is
11 called now, I am sure it is in one of the
12 groupings that they will be considering.

13 In addition, we haven't worked through
14 the whole procedure yet, but we floated project
15 to do a TR on one particular targeted class of
16 inerts, the NPEs, for this meeting. And we do
17 have the opportunity to request future TRS on
18 certain specific classes of inerts.

19 This is one of two other particular
20 ones of very high interest to growers that were
21 proposed to do next, but we haven't actually
22 talked about whether we are going to do it next.

1 So, they will be reviewed in the
2 inerts review process, which we felt, the
3 majority of the Committee felt is the most
4 appropriate way for them to be reviewed, rather
5 than to prohibit an active ingredient just
6 because it has an inert in it.

7 Jean?

8 CHAIR RICHARDSON: I'm so torn on this
9 material. It's widely used, at least in the
10 Northeast, and my own VOF organic farm -- oh, she
11 is gone; that's good. Nicole is not here, I
12 hope.

13 (Laughter.)

14 I mean, it is used in Vermont and in
15 the area that I am commonly working in. The
16 challenge for me is the earthworm issue because,
17 to me, earthworms are a critical characteristic
18 of an organic farm. I mean, you can tell the
19 quality of the soil, how well it is working and
20 functioning going around looking to see how many
21 worm casts there are, trying to understand
22 earthworms, how many earthworms there are per

1 square foot, or whatever criteria you might use.

2 So, it would seem to me that there's
3 obviously some management, cultural practices
4 being an alternative control mechanism for slugs.
5 And I know some years they are absolutely awful.
6 You know, I have a garden, too.

7 But I am just really concerned that,
8 if you use it prophylactically, so to speak, and
9 you send out, put out Sluggo all over the place
10 because you know it is going to work and you are
11 busy on everything else, have you really attended
12 to the range of quite complex cultural practices
13 to reduce the incidence of slugs, even in high-
14 slug years?

15 So, I certainly would like to see, if
16 I am going to vote for this, I would like to see
17 that the Crops Committee considers making this
18 one of their -- now we are getting too many
19 research priorities for you, but protecting
20 earthworms seems to me like a really high-
21 priority thing. Any kind of research that we
22 should encourage the people to do in universities

1 I think on this would be really, really
2 beneficial to us.

3 MEMBER SONNABEND: Okay. Well, I
4 agree with that. And I think it is, then, a two-
5 pronged approach, which is call for more research
6 on earthworms or on EDTA and earthworms, which
7 may or may not make it to the top. As you say,
8 we have many competing ones. But, also, we could
9 commission the specific review of EDTA and there
10 is a related compound, EDDS, that we could
11 potentially have done before the full program
12 with DfE comes into existence. So, that is
13 something we will take back to the Crops
14 Committee and discuss further after this.

15 Colehour?

16 MEMBER BONDERA: Thank you.

17 I guess I actually appreciated
18 Carmela's pretty thorough review of this topic,
19 but I just want to make it clear, which it
20 probably is, but just to reiterate the fact that,
21 although EDTA is considered an inert ingredient,
22 that ferric phosphate alone is not effective. By

1 itself, it is not; it doesn't happen.

2 So, it is in combination with EDTA
3 where we have the risks that we are talking
4 about, which are earthworms and, like it says
5 here, other soil organisms. And it uses the
6 highly-toxic materials in manufacture. It is not
7 compatible with organic agriculture, as it states
8 in this document.

9 So, I just want to make sure it is
10 clear that we can't say we are not considering or
11 factoring in the EDTA reality when we have to
12 when we look at the whole formulation of the fact
13 that ferric phosphate is not being used by
14 itself.

15 MEMBER SONNABEND: Okay. I guess I
16 don't have to raise my hand if I am calling on
17 people.

18 (Laughter.)

19 But I will just remind you about the
20 testimony that we did hear a couple of years ago
21 in which the scientists from the company said
22 that they were studying other chelation agents,

1 and that there was effectiveness. You know, it
2 wasn't that it wasn't effective just by itself,
3 but there was the possibility that other
4 chelation agents could be used with it, but none
5 of those products containing those others are on
6 the market right now.

7 And so, it is not just a it won't work
8 with EDTA; it might work with some other
9 chelation agent. And taking it off the list, you
10 will never find out. So, taking this off the
11 list because of something else just does not make
12 any sense to me.

13 Paula?

14 MEMBER DANIELS: I just want to say,
15 just echo what Jean said. I have been torn about
16 this.

17 But what I am seeing as something
18 valuable to recognize is the process of
19 separating, as you just described, the
20 consideration of the active ingredient and the
21 consideration of the inert. Since we are in the
22 process of setting, hopefully, setting up a

1 process to work with the EPA on review of inerts,
2 I think that is the place to do that. So, I am
3 going to agree with that process.

4 MEMBER SONNABEND: Anyone else?

5 MEMBER DANIELS: I mean, it bears
6 repeating that, obviously, there is a concern
7 about impact to earthworms. So, I am equally and
8 as urgently concerned.

9 MEMBER SONNABEND: Calvin?

10 MEMBER WALKER: The bottom line is
11 that ferric phosphate alone does not impact
12 earthworms? That is what I'm hearing? Okay.
13 And the year?

14 MEMBER SONNABEND: No studies have
15 been completed that show that. You can't say it
16 doesn't if it hasn't been studied. But there are
17 no studies that show that.

18 Carmela, are you looking up the year?

19 MEMBER BECK: Yes. My files are
20 frozen. I am trying to get it up. Sorry.

21 MEMBER SONNABEND: Okay. Anything
22 else?

1 Colehour?

2 MEMBER BONDERA: Yes, I mean, ferric
3 phosphate alone doesn't kill the slugs, which is
4 what this is used for. So, the earthworms is a
5 secondary impact; the EDTA, that is the issue the
6 full formation is having on the earthworms. But
7 the point is, it is not acting alone to achieve
8 its goal, which is as a slug bait. So, just to
9 make sure that the earthworm impact is the
10 secondary offshoot of what is happening.

11 MEMBER SONNABEND: Okay. Do you feel
12 like you can't vote until she finds the paper?
13 Okay. Because I could look for it, but I can't
14 run this section of the meeting and also look for
15 it at the same time.

16 Mac?

17 MEMBER STONE: I was going to just
18 suggest that the growers, because of their
19 concern for earthworms, they are doing all the
20 cultural practices. This is probably a last
21 resort for them, and use it very judiciously,
22 only in a wet pattern. It is probably not

1 something they keep on the shelf for every year.
2 And certifiers are also sort of verifying that,
3 yes.

4 MEMBER SONNABEND: Okay, I think we
5 are ready to vote. At such time as Carmela comes
6 up with the paper, we can figure that out.

7 Carmela, I think it was in one of the
8 public comments this time where they specifically
9 addressed that paper.

10 (Someone says "2007".)

11 MEMBER SONNABEND: Thank you. 2007.

12 MS. BROWN ROSEN: It is 2009. It is
13 in as a reference in the TR.

14 MEMBER SONNABEND: Well, somewhere
15 around there.

16 Okay, so I am hearing the discussion
17 wind down. So, perhaps we could call for the
18 vote.

19 CHAIR RICHARDSON: The question has
20 been called. Are you ready to vote?

21 There is one motion on this material.
22 This is a sunset motion. So, if you say yes on

1 this motion, your vote would be to remove. If
2 you say no on this motion, it will keep it on the
3 list.

4 The motion is to remove ferric
5 phosphate from 205.601.

6 And the voting starts with Calvin.

7 MEMBER WALKER: No.

8 MEMBER THICKE: No.

9 MEMBER STONE: No, ma'am.

10 MEMBER DANIELS: No.

11 MEMBER TAYLOR: Yes.

12 MEMBER MARAVELL: Yes.

13 MEMBER BECK: No.

14 MEMBER SWAFFAR: No.

15 VICE CHAIR FAVRE: No.

16 MEMBER CHAPMAN: No.

17 MEMBER BONDERA: Yes.

18 MEMBER SONNABEND: No.

19 MEMBER DE LIMA: No.

20 CHAIR RICHARDSON: The Chair votes no.

21 VICE CHAIR FAVRE: The vote is three
22 yes, 11 no, one absent. The motion fails.

1 MEMBER SONNABEND: Thank you.

2 Now we will proceed to hydrogen

3 chloride.

4 Lisa?

5 DR. BRINES: Thank you.

6 Hydrogen chloride is currently

7 included on the National List at Section

8 205.601(n). The current listing reads as

9 follows: "Seed preparations, hydrogen chloride,

10 CAS No. 7647-01-0, for delinting cottonseed for

11 planting".

12 In support of its review the Crops

13 Subcommittee requested a limited-scope Technical

14 Report that was completed in 2014.

15 Thank you.

16 MEMBER SONNABEND: Sorry. Francis

17 will lead us through one.

18 MEMBER THICKE: Thank you.

19 Hydrogen chloride, otherwise known as

20 hydrochloric acid, is used for delinting

21 cottonseed for planting. Cotton ginning removes

22 the long fibers of the cottonseeds from the

1 cottonseeds, and delinting is required to remove
2 the short fibers, so the seeds can flow through
3 the planter.

4 Acid delinting is the primary method
5 of delinting in the United States and, currently,
6 the only commercially-available option for U.S.
7 cotton growers who are mostly in west Texas.
8 Without allowance for acid delinting, organic
9 cotton growers say they will not be able to
10 source seed for planting and they will be forced
11 out of organic cotton production.

12 The good news is that the USDA ARS is
13 developing a mechanical delinting system. They
14 have a benchtop model, and now they are starting
15 to build a prototype mechanical delinter. We
16 hope that is going to progress quickly.

17 In the first round of comments, there
18 were five comments, all in favor of relisting
19 hydrogen chloride for delinting cotton. In the
20 second round of comments, there were eight
21 comments, with the consensus being that hydrogen
22 chloride needs to remain on the list for now.

1 There were concerns raised about the
2 corrosive nature of hydrogen chloride and the
3 potential health and the environmental effects of
4 manufacturing and using hydrogen chloride, and
5 that hydrogen chloride is not compatible with the
6 principles of organic and sustainable
7 agriculture.

8 However, the mono-HGLU is very small.
9 But people felt, the comments indicated that they
10 thought that there is such a great need because
11 we could lose the organic cotton industry
12 otherwise.

13 So, in the Crops Subcommittee we voted
14 to keep it on the list, zero to five, five to
15 keep it on the list and zero to delist it.

16 MEMBER SONNABEND: Thank you.

17 Discussion?

18 (No response.)

19 I'll bring up something. We didn't
20 really mention this in our review, but I want us
21 to not lose sight of the fact that most organic
22 cotton in the world is not produced in the U.S.,

1 and any restriction we made in this regard would
2 affect growers outside of the U.S. There are
3 very few sources of cotton delinting, even
4 worldwide. And so, that is a big factor for some
5 of these overseas cotton producers also.

6 MEMBER THICKE: Another positive thing
7 is that mechanical delinting is being pushed by
8 the need by organic farmers. And if it is
9 successful as they expect, this may go to all the
10 cotton producers. And so, it may eliminate a lot
11 of HDL in the conventional cotton market as well.

12 MEMBER SONNABEND: Lisa?

13 MEMBER DE LIMA: From my perspective
14 in the retailer seat, it is definitely an
15 industry or it is a portion of our business that
16 is very small that we are trying to grow. And we
17 are trying to educate consumers on and get more
18 people using and buying organic cotton.

19 So, as much as I don't like the
20 material that is used for delinting, I do feel
21 like it is necessary at this time.

22 MEMBER SONNABEND: Anyone?

1 (No response.)

2 Okay.

3 CHAIR RICHARDSON: The question is
4 being called. The item we will be voting on is a
5 motion to remove hydrogen chloride from
6 205.601(n).

7 And if you vote no, that will keep the
8 material on the list. If you vote yes, it would
9 be to remove.

10 And the voting starts with Francis.

11 MEMBER THICKE: No.

12 MEMBER STONE: No, ma'am.

13 MEMBER DANIELS: No.

14 MEMBER TAYLOR: Yes.

15 MEMBER MARAVELL: No.

16 MEMBER BECK: No.

17 MEMBER SWAFFAR: No.

18 VICE CHAIR FAVRE: No.

19 MEMBER CHAPMAN: No.

20 MEMBER BONDERA: No.

21 MEMBER SONNABEND: No.

22 MEMBER DE LIMA: No.

1 MEMBER WALKER: No.

2 CHAIR RICHARDSON: I'm falling asleep;
3 never mind anyone else.

4 (Laughter.)

5 The Chair votes no.

6 VICE CHAIR FAVRE: The count is zero
7 yes -- oh, I'm sorry -- one yes, 13 no, one
8 absent. The motion fails.

9 MEMBER SONNABEND: Thank you.

10 Now, before we proceed on to our 2017
11 crops sunsets, I just want to mention that I was
12 distracted earlier because I was receiving a text
13 from Harold Austin, who at least is functional
14 enough to inquire how the meeting was going.

15 (Laughter.)

16 So, he is awake, and I don't think he
17 is going to be back to work too soon. But good
18 news that everything went well so far with him.

19 CHAIR RICHARDSON: Okay.

20 (Applause.)

21 MEMBER SONNABEND: Now we will proceed
22 to the crops sunset 2017 materials. We are going

1 to take these by section of the National List.

2 And so, Lisa will start with the
3 summaries.

4 DR. BRINES: Thank you, Zea.

5 I was going to pause after paragraph
6 (a) for discussion. If you would like me to go
7 further, I can certainly do that. All right?

8 MEMBER SONNABEND: I think that is
9 fine.

10 DR. BRINES: Yes. All right, I'll let
11 Michelle find it and proceed.

12 So, for the Crops Subcommittee, crops
13 materials were under Section 205.601 of the
14 National List, synthetic substances allowed for
15 use in organic crop production. The following
16 materials are listed under paragraph (a) as:
17 algicide; disinfectants and sanitizer, including
18 irrigation system cleaning systems.

19 Under paragraph (a)(1), alcohols,
20 ethanol and isopropanol. Both ethanol and
21 isopropanol had updated Technical Reports for the
22 sunset 2017 review.

1 (2) Chlorine materials for pre-harvest
2 use. Residual chlorine levels in the water in
3 direct crop contact or as water from cleaning
4 irrigation systems applied to soil must not
5 exceed the maximum residual disinfectant limit
6 under the Safe Drinking Water Act, except that
7 chlorine products may be used in edible sprout
8 production, according to EPA label directions.

9 Calcium; hypochloride; chlorine
10 dioxide, and sodium hypochlorite.

11 MEMBER SONNABEND: Okay. I don't have
12 it divided into paragraphs. So, if you could
13 just say when it is at the end?

14 DR. BRINES: I will.

15 MEMBER SONNABEND: So, "The end."

16 DR. BRINES: Next up is hydrogen
17 peroxide and soap.

18 Next slide, Michelle. Thank you.

19 MEMBER SONNABEND: Oh, okay.

20 DR. BRINES: Hydrogen chloride and
21 soap-based algicide/demossers. Hydrogen chloride
22 did get an updated Technical Report this round,

1 as did soap-based algicide/demosers. The one
2 for soaps was posted on March 10th.

3 And that is the end of paragraph (a).

4 Thanks.

5 MEMBER SONNABEND: Okay. Thank you.

6 So, back to the top then, the first,
7 alcohols, would be Francis.

8 MEMBER THICKE: Two alcohols, ethanol
9 or ethyl alcohol and isopropanol. Ethanol,
10 currently, it is used as an algicide and
11 disinfectant and sanitizer, including irrigation
12 system cleaning.

13 And isopropanol is quite similar. It
14 is a disinfectant and sanitizer, including
15 irrigation cleaning systems.

16 Back to the comments, the comments
17 that came, there were very few comments that came
18 in on these materials. Basically, it sounds like
19 they are used fairly widely. Some commenters
20 suggested that there should be some effort to
21 look for environmentally-friendly kinds of
22 disinfectants. Of course, chlorine is not that.

1 Any questions?

2 MEMBER SONNABEND: Anything on
3 alcohol?

4 (No response.)

5 All right. The next one, then, was
6 chlorine.

7 And I haven't located my tracking
8 sheet to find out whose that was. So, if you
9 could just --

10 MEMBER THICKE: I think that is me,
11 too.

12 MEMBER SONNABEND: Okay.

13 MEMBER THICKE: So, there are three
14 chlorine materials, calcium hypochlorite,
15 chlorine dioxide, and sodium hypochlorite. They
16 are general disinfectants used for a lot of
17 different uses, not only in crop production, but
18 in livestock and in handling.

19 The comments were that a lot of people
20 use them. There are about five comments. Again,
21 they are used for a lot of things, and people --
22 I didn't see -- well, there were some concerns

1 about chlorine. People are always concerned
2 about chlorine, the effects on the environment,
3 and so on, and producing it, manufacturing it.
4 But I didn't see anybody who really indicated we
5 had an alternative, that chlorine should come off
6 because it wasn't needed.

7 MEMBER SONNABEND: Is that it on
8 chlorine?

9 MEMBER THICKE: That is it, I guess.

10 MEMBER SONNABEND: That's what you
11 have? Okay.

12 Any discussion on chlorine?

13 Jean?

14 CHAIR RICHARDSON: So, under the
15 alternatives, you have listed there peracetic
16 acid, for instance, or ozone. There is,
17 obviously, a lot of concern for excessive or
18 overuse of chlorine in the environment or any
19 other aspect.

20 Did you look at the range of
21 alternatives? Is there any sort of reality
22 facing any of those three?

1 MEMBER THICKE: Alternatives mentioned
2 were things like essential oils. And these are
3 used in pruning, and so on, too. Those would be
4 alternatives, peracetic acid. But is peracetic
5 in the crops?

6 CHAIR RICHARDSON: Yes.

7 MEMBER THICKE: It is? Okay. So,
8 those would be alternatives.

9 But, for irrigation cleaning, I don't
10 know about that. Do you have any comments on
11 that, Zea?

12 MEMBER SONNABEND: Well, citric acid
13 is one that can be used in irrigation cleaning.

14 MEMBER THICKE: Is it successfully
15 used? Is it being successfully used?

16 MEMBER SONNABEND: Well, I don't know
17 if it is comparable to chlorine. I actually
18 don't know of chlorine being used in dripline
19 cleaning. Usually, people use citric acid.

20 But chlorine has just so many other
21 uses in washing apple bins, washing all the
22 harvesting equipment, and stuff like there. And

1 there is the intervening step is necessary.

2 So, I don't know that every possible
3 use of chlorine has a sufficient substitute.

4 CHAIR RICHARDSON: A follow-up. So,
5 are these chlorine materials also used because
6 they might be required under various state laws
7 for cleaning the apples or the lines, or
8 whatever?

9 MEMBER THICKE: I know in dairy they
10 are required, but --

11 CHAIR RICHARDSON: Yes, I know dairy.

12 MEMBER THICKE: -- I don't know that
13 chlorine is required in crop production. I know
14 that, the answer to that.

15 MEMBER SONNABEND: It is certainly
16 required by organic standards to clean something
17 after it has been used for a conventional
18 product.

19 With the case of the apple bins, which
20 is what I know best as an apple grower, when we
21 have our own bins and we only use them for
22 organic, I mean, we still clean them once a year.

1 But, if we are ever to get bins from someplace
2 else, like some buyers provide bins, then we have
3 to make sure that they are cleaned out, and
4 chlorine is the accepted protocol.

5 CHAIR RICHARDSON: Well, a follow-up.
6 It is just my experience that the use of
7 peracetic acid has become a lot more common in
8 handling, in the processing facilities that I'm
9 going to, as a replacement for the use or perhaps
10 overuse of chlorine, where it can be appropriate.

11 So, I was just wondering if this is
12 something that you looked at, because it appears
13 to be a viable tool.

14 MEMBER THICKE: I know just on the
15 side, in dairy, I tried peracetic acid, and you
16 have to be very, very careful. Any residual that
17 you haven't gotten off can cause an off-flavor in
18 the milk.

19 But I don't know how that pertains to
20 this.

21 MEMBER SONNABEND: I also heard
22 anecdotal input since I been here that the

1 smallest amount of peracetic acid you can buy
2 costs \$100, where a bottle of bleach at the store
3 costs \$1.99. While cost isn't supposed to be a
4 choice, but to have spend, you know, to get many
5 times more gallons of something than you actually
6 need is definitely a factor for small growers, in
7 particular.

8 MEMBER THICKE: But I will look more
9 into that, Jean, for the next comment round.

10 MEMBER SONNABEND: Okay. Any further
11 discussion on this?

12 (No response.)

13 Next we have hydrogen peroxide which
14 is mine. No? Do we? Am I in the right place?
15 Yes. Okay.

16 Hydrogen peroxide actually is also a
17 cleaning agent as well as being a -- it is on a
18 list twice -- algicide disinfectant and
19 sanitizer, including irrigation system cleaner.
20 So, there you would have an alternative to
21 chlorine right there. And then, it is on the
22 list again, I believe, for disease control.

1 It is a relatively-benign material as
2 long as the applicator is using it carefully, and
3 it is very effective. It definitely breaks down
4 without the same concerns for chlorine. It
5 breaks down thoroughly.

6 And we received a number of comments
7 from growers who do depend on this for both of
8 the uses, and we didn't find substantial comments
9 against it other than from some people who are
10 opposed to most things on the list.

11 I should also mention, I would be
12 remiss if I didn't mention for Harold that it is
13 one of the alternative fire blight control
14 materials, one of the very, very few we have left
15 now that the antibiotics are gone.

16 Discussion?

17 (No response.)

18 Okay. The next on is soap-based
19 algicides, which is Francis.

20 MEMBER THICKE: There weren't very
21 many comments on that, either.

22 Somehow I seem to have lost my

1 cheatsheet on this. Did they get stripped out of
2 our little reports here? Oh, no wonder.

3 Okay. Okay. Well, the comments,
4 there were three yes and two comments that said
5 that it shouldn't be allowed for application to
6 water systems.

7 And I'm sorry that I can't find my
8 files here, either, the materials that I had
9 thought were attached to this.

10 (Pause.)

11 Well, basically, it is soap being used
12 for an algicide and demossing.

13 I guess I am not doing too well here
14 today. But I had that all prepared.

15 MEMBER SONNABEND: Do you want me to
16 help? Because I remember some of the public
17 comment that we heard.

18 MEMBER THICKE: Well, yes, the public
19 comments were not very -- go ahead if you have
20 something.

21 MEMBER SONNABEND: Well, actually, we
22 didn't hear so many comments directly to this and

1 certainly not as algicide, which I have not ever
2 really heard of anyone using in water. But that
3 doesn't mean it isn't.

4 But we definitely heard from some
5 people in both written comment and verbally here
6 that other products were available that were
7 based on essential oils, vinegar, and the
8 gentleman who spoke about the SUPPRESS product,
9 which is a fatty-acid material, that serve the
10 same function as soaps without being considered
11 to be true synthetics.

12 But we also heard from a number of
13 people who felt that this was still an important
14 tool for them to use as it is appropriately
15 annotated around farm buildings and in areas for
16 non-crop use.

17 Did you hear further public comment
18 than that?

19 MEMBER THICKE: No.

20 MEMBER SONNABEND: Okay. Does anyone
21 want to discuss the use of this?

22 (No response.)

1 Okay. Are we ready to move on,
2 Francis, do you think?

3 MEMBER THICKE: The next one is
4 ammonia soaps, right? Is that correct?

5 MEMBER SONNABEND: Is that in (a) or
6 (b)?

7 Lisa, did you cover that or do we need
8 to go back to you now? No? So, we have to go to
9 Lisa for the next set.

10 DR. BRINES: Thank you.

11 The next set of materials follow under
12 Section 205.601(b) as herbicides, weed barriers,
13 as applicable. And I will also cover paragraph
14 (c) as well.

15 One, herbicides, soap-based for use in
16 farm maintenance, roadways, ditches, rights-of-
17 ways, building perimeters, and ornamental crops.

18 Mulches, newspaper or other recycled
19 paper without glossy or colored inks. Plastic
20 mulch and covers, petroleum-based, other than
21 polyvinyl chloride, PVC.

22 A new Technical Report was also

1 developed for soap-based herbicides and that
2 report was posted for the public on March 10th.

3 The next slide, under paragraph (c),
4 as compost, feedstocks, newspapers, or other
5 recycled paper without glossy or colored inks.

6 And that is the end of paragraph (c).

7 Thanks.

8 MEMBER SONNABEND: Okay. We
9 essentially covered both soap-based algicides and
10 soap-based herbicides at the same time.

11 So, the next thing -- I'm jumping
12 around here -- the next one, then, I believe is
13 newspaper, which would be Colehour.

14 MEMBER BONDERA: Okay. Thank you.

15 The way that these were presented and
16 the way that I have prepared it, the two are
17 together, the 205.601(b) and 205.601(c).

18 Let's see. Sorry.

19 Yes, I think newspapers and other
20 recycled papers like we put forth, and like what
21 was just referred to, are providing organic mulch
22 materials when natural mulches aren't available.

1 But there have been a lot of changes in
2 newspapers since the original listing back --
3 well, I'm not going to get it right. I was going
4 to say 1995, but I'm not sure exactly, but, you
5 know, way back when.

6 So, more investigation into newspaper
7 production really to determine if the annotation
8 language is currently appropriate in terms of the
9 fact that some of the colored inks now may not be
10 more harmful than carbon black, which was where
11 it was at at that time. So, that kind of
12 verification procedure would really help us
13 update.

14 In terms of relisting, we did not have
15 any opposing commentaries on that process. And
16 colored inks, you know, a more in-depth
17 understanding and review of the ink issue I think
18 is the primary comment, except for like CCOF
19 says. You know, drought means that people are
20 looking for more mulches, and newspaper can serve
21 as an important mulch.

22 So, I think the hypothesis is that

1 demand may be going up, although I can't make any
2 commentary or knowledge based on the fact that in
3 the last whatever number of years it has been
4 with changes in communication, we are seeing a
5 lot less newspapers than we did even 10 years
6 ago. So, who knows on that topic in terms of
7 availability?

8 But, yes, I don't know if anybody else
9 has anything to add on newspapers, but that is
10 what I wanted to say.

11 MEMBER SONNABEND: Okay. I will add
12 just one very minute detail. But, along with the
13 changes with ink, I have seen information that
14 the glossy paper has changed significantly.
15 Until now, the gloss on the recycled is often
16 clay-based gloss. And so, it may be appropriate
17 for recycling and it may be appropriate for
18 mulch.

19 So, if we ever do get around to doing
20 a TR, it needs to cover the inks and the paper
21 technologies that have advanced to the point
22 where we might not need this annotation.

1 Any further discussion on newspapers
2 and recycled paper?

3 (No response.)

4 Okay. Next is plastic mulch.

5 MEMBER BONDERA: Okay. So, yes, again
6 -- sorry -- the plastic mulch topic, you know, it
7 has been around for a while as well. The product
8 is allowed to be put on as long as it is removed
9 from the field at the end of the growing or
10 harvest season.

11 And there has been plenty of criticism
12 about that need to remove it, where the result is
13 that plastic wastes are going to landfills. I
14 think we went through this discussion and this
15 process with the whole biodegradable bioplastic
16 mulch, which was approved. It is a separate
17 topic, but it was directly related in some ways
18 because I remember parts of our conversation in
19 that process where, well, maybe we don't need to
20 renew the plastic mulch again when it comes up
21 for sunset. Whereas, now with the difficulties
22 that have been faced, that is probably not where

1 we can anticipate it going in the short-term.

2 I think that we really didn't have
3 commentary in opposition to relisting of plastic
4 mulch covers, but I think that we do need to
5 anticipate that, what I already mentioned, the
6 reconsideration on a future agenda.

7 And I think that the one comment that
8 I did write down that makes some sense to me is
9 figuring out if it is possible to limit the use
10 of plastic mulches where organic mulches or cover
11 crops can't perform the necessary function. I
12 think that that is up to the certifier,
13 obviously, and the farmer in terms of what
14 choice. But I think that adding some kind of
15 limitation as some resonance, although without
16 the opportunity to annotate, I don't think it is
17 a viable option. But I put that out there.

18 And again, if people had other
19 additional thoughts or comments or reflections,
20 please add them.

21 MEMBER SONNABEND: Discussion about
22 plastic mulch?

1 (No response.)

2 Okay. Next, Lisa will take us to the
3 next section.

4 DR. BRINES: And this section will
5 cover the materials under paragraphs (d) through
6 (g).

7 The first is animal repellants, soaps,
8 ammonium, for use as a large animal repellent
9 only. No contact with soil or edible portion of
10 crop.

11 Under paragraph (e), insecticides,
12 including acaricides or mite control, ammonium
13 carbonate for use as bait in insect traps only.
14 No direct contact with crop or soil.

15 Boric acid; structural pest control.
16 No direct contact with organic food or crops.

17 Elemental sulfur and lime sulfur,
18 including calcium polysulfide.

19 And a new Technical Report for lime
20 sulfur was completed in 2014.

21 Continuing under paragraph (e), oils,
22 horticultural, narrow-range oils as dormant,

1 suffocating, and summer oils.

2 Soaps, insecticidal; sticky traps;
3 barriers, and sucrose octanoate esters, CAS Nos.
4 42922-74-7, 58064-47-4, in accordance with
5 approved labeling.

6 Under paragraph (f), as insect
7 management, pheromones.

8 And finally, under paragraph (g), as
9 rodenticides, vitamin D3.

10 Thank you.

11 MEMBER SONNABEND: Okay. The first
12 one under this category is ammonium soaps. And
13 so, that is Francis.

14 MEMBER THICKE: Okay. Ammonium soaps
15 are for animal repellants for large animal only
16 and no contact with the soil or edible portions
17 of the crops.

18 And there was only one comment. It
19 said it was a very effective animal repellant.
20 So, there were no comments against.

21 MEMBER SONNABEND: Discussion?

22 Jean?

1 CHAIR RICHARDSON: So, what large
2 animals does it repel and how does it work?

3 MEMBER THICKE: Well, deer, I guess.

4 CHAIR RICHARDSON: Does anybody know?

5 MEMBER SONNABEND: Yes, deer.

6 CHAIR RICHARDSON: Deer?

7 MEMBER SONNABEND: Primarily, although
8 the box has pictures of like rabbits. It has
9 pictures of other stuff on it, but I don't know
10 how effective it is.

11 CHAIR RICHARDSON: Well, then, how do
12 you prevent -- how does it not get in contact
13 soil?

14 MEMBER SONNABEND: It is hung up on
15 like the edges of fence rows in little bags. It
16 is contained within a --

17 CHAIR RICHARDSON: So, it doesn't drop
18 out of the bags onto the ground? Okay. I'm not
19 familiar with it.

20 MEMBER SONNABEND: Anyone else on
21 ammonium soap?

22 (No response.)

1 Okay. The next one is lime sulfur,
2 and that was Harold's. I'm going to be taking
3 Harold's on his behalf.

4 He left written summaries. Yay,
5 Harold.

6 (Laughter.)

7 Lime sulfur is on the list in Section
8 (e) and Section (I) as an insecticide and plant
9 disease control, respectively. We did commission
10 a TR because the very skimpy information left
11 from the old TR --

12 CHAIR RICHARDSON: Sorry to interrupt.

13 MEMBER SONNABEND: Yes?

14 CHAIR RICHARDSON: What about ammonium
15 carbonate and boric acid?

16 MEMBER SONNABEND: Oh, my chart haws
17 ammonium carbonate. Where did boric acid go?
18 Mine has boric acid a few below it, but I'm
19 following my chart and not the list.

20 Oops, sorry. Okay, we will go back.
21 How did this get out of order, Michelle? Just
22 that is the way things happen, I guess.

1 Ammonium carbonate.

2 MEMBER BONDERA: Okay. This one I
3 think will be simple and fast. Like was said, an
4 insecticide, and honestly and realistically, we
5 had extraordinarily little -- well, let me back
6 up a little bit.

7 It is like what Francis said, if you
8 read the whole thing, and like the annotation
9 reads, "No direct contact with crop or soil" is
10 how it ends. I think that that is an important
11 component because it is serving as an
12 insecticide, but it is an isolated product. So,
13 it is not having any other contacts.

14 We really didn't get -- I'm not going
15 to say no comments, but we got extraordinarily
16 minimal comment. And I think that there was no
17 contest to the renewed listing as it stands.

18 MEMBER SONNABEND: Okay. I can point
19 out the reason that -- and this came up at our
20 last sunset review for 2015 items -- the reason
21 we got no comment or little on this one and the
22 ammonium soaps is people don't know that is the

1 name of what they are using.

2 In the case of the deer repellant,
3 they just buy it by the brand-name. And in the
4 case of this, it is fly bait sold in traps, sold
5 with the traps. So, people know they are using
6 the fly bait and rely on it, but they don't know
7 the name of it as ammonium carbonate.

8 Any discussion?

9 Yes, Jean?

10 CHAIR RICHARDSON: So, when we did
11 this in Handling, we were trying to give some
12 indication as to how likely we were going along
13 that you might be removing them or anything like
14 that. I mean, does ammonium carbonate work? Is
15 there a need for it?

16 I know you have just said that we
17 don't advertise it as fly bait, but do we just
18 keep things on if we don't know anything about
19 them?

20 MEMBER SONNABEND: If we were to
21 publicize this properly, that we were going to
22 take away the bait that is in most fly traps, I

1 think we would get thousands and millions of
2 comments because anyone with a livestock
3 operation nearby has problems with flies.

4 This is the stuff that it smells like
5 rotten meat. It smells totally horrible, and it
6 is put in a little dish under the -- I mean,
7 there are different delivery mechanisms right
8 now, but it doesn't come into contact with the
9 food or anything nearby. It is just used to
10 attract the flies into the trap. And I really
11 just see no reason to take that off.

12 And, yes, I know it is very obscure to
13 the public when it is just a big list with it
14 sounds like a lot of names of chemicals. Even if
15 it says "Used as bait in traps," unless you have
16 been out in the field and you know what these fly
17 traps look like, you might not associate it with
18 that.

19 Okay. Seeing no more discussion, we
20 will move to boric acid, and that belongs to
21 Colehour.

22 MEMBER BONDERA: I don't know. A lot

1 in a row, but that is fine. Thank you.

2 Okay. So, boric acid, similar again
3 to where we were, an insecticide which is used
4 for structural pest control. No direct contact
5 with organic food or crops.

6 In terms of where we went with it, I
7 think we did -- I mean, I will read it in moment,
8 our background comment -- but we did also put out
9 a question, if their situations were boric acid
10 is the only or safest means of controlling the
11 pest. Boric acid, which comes from mineral
12 borax, is considered the least-toxic pesticide
13 because it is non-volatile. When it is placed in
14 a bait or gel formulations, there is no direct
15 exposure. But the dust from structural pest
16 control exposure can occur, which is hazardous
17 for exposed populations.

18 It is a reproductive toxicant. It is
19 suspected as an endocrine disrupter. It is toxic
20 to plants and animals if misused. And boric
21 mining does cause environmental damage.

22 Based on the life cycle analysis, and

1 if it is used in a manner that causes exposure,
2 it raises challenging issues on the health and
3 environmental mining impacts. There are
4 alternative materials and practices that might be
5 less harmful. I think that like diatomaceous
6 earth, boiling water, management like sanitation
7 exclusions, sticky barriers, sticky traps, even
8 removal of host plants for aphids.

9 But, like also was pointed out, it
10 kills insects where other options won't work.
11 So, really, there wasn't any -- what can I say?
12 -- opposition or, yes, the relisting wasn't
13 contested strongly, but that call for looking at
14 other options and alternatives was brought up.
15 So, I think that that is worth noting.

16 I think our discussion, you know, to
17 try to address Jean's point or question, I don't
18 remember us coming to any conclusion within the
19 Subcommittee in terms of where we thought that
20 things were going in terms of how we all felt
21 about it. But the discussion seemed to have at
22 least hypothesized that it would get relisted

1 unless we could get some feedback that would tell
2 us otherwise. But, like I said, if people can
3 come up with alternatives, that is the better
4 choice.

5 So, that is all I have to say.

6 MEMBER SONNABEND: Discussion on boric
7 acid?

8 Okay, Jean?

9 CHAIR RICHARDSON: I think maybe we
10 should take a 10-minute, a 15-minute break at
11 this point.

12 MEMBER SONNABEND: Right now, after
13 boric acid?

14 CHAIR RICHARDSON: Do you feel like
15 this is a good time to do it?

16 MEMBER SONNABEND: Okay. Sure.
17 Anytime is as good as any other time.

18 CHAIR RICHARDSON: Yes. We are about
19 right on track where we should be. So, if you
20 could be back here by just after quarter to, then
21 we should be able to finish easily on time, the
22 intention being to recess at 5:30. Yes, recess

1 at 5:30.

2 (Whereupon, the foregoing matter went
3 off the record at 3:35 p.m. and went back on the
4 record at 3:53 p.m.)

5 CHAIR RICHARDSON: So, do you want to
6 move on to the next material, as Vice Chair?

7 MEMBER THICKE: Yes. Which one did we
8 just finish up on?

9 CHAIR RICHARDSON: We just finished
10 boric acid.

11 MEMBER THICKE: Okay. So, our next
12 material is elemental sulfur. I think that was
13 Harold, which is Zea right now. And so, is lime
14 sulfur, and so is oils, horticultural.

15 I can go down to soaps, insecticidal,
16 which is me.

17 So, the insecticidal soaps, which is
18 used for soft-bodied insects, the comments, there
19 were about five comments, and they were all
20 positive: things like little to no risk or
21 hazard to the user or non-target organisms;
22 environmental-friendly, biodegradable. Potential

1 toxicity is minimal. It is not persistent. And
2 compatible with organic. So, it seemed like the
3 comments were pretty positive.

4 Any comments? Anybody else have any
5 discussion?

6 (No response.)

7 This is not a controversial issue.
8 So, we will go on to the next one.

9 Go ahead.

10 MEMBER DANIELS: It's okay.

11 MEMBER THICKE: Oh, Paula.

12 MEMBER DANIELS: Well, the only thing
13 I was going to say is misunderstand again, but
14 maybe I was -- we did this in Committee. I
15 thought it was my assignment.

16 The only thing I am going to add to
17 that, I am not doing anything other than to add
18 what I saw that you might not have put there, you
19 are right; there was an overwhelming amount of
20 support for this. What I saw was 12 in support,
21 not that I am characterizing or confusing
22 quantity with quality necessarily. But there was

1 an overwhelming amount of support, including from
2 the Organic Producer Wholesalers Coalition, the
3 Cornucopia Institute, the Northwest Horticultural
4 Council, OTA, CCOF.

5 There was one opposition though, and
6 that was what made me think I should at least
7 mention that. That was from Beyond Pesticides
8 that raised the question of the potential to kill
9 predatory arthropods in insecticidal soaps. So,
10 just to add to the public comment.

11 MEMBER THICKE: Thank you.

12 MEMBER DANIELS: Since I read it.

13 MEMBER THICKE: Since I have your
14 attention, Paula, are you doing sucrose
15 octanoates esters also?

16 MEMBER DANIELS: I am.

17 MEMBER THICKE: Okay, good.

18 MEMBER DANIELS: Yes.

19 MEMBER THICKE: That is what I want to
20 know. Thank you.

21 VICE CHAIR FAVRE: Uh-hum.

22 MEMBER THICKE: Back to you, Zea.

1 MEMBER SONNABEND: Did we just do soap
2 while I was out of the room, insecticidal soap?

3 MEMBER THICKE: Not insecticidal. We
4 hadn't done insecticidal.

5 MEMBER SONNABEND: Oh, I thought he
6 was doing -- oh, my bad.

7 I am still getting really confused by
8 these two lists out of order.

9 CHAIR RICHARDSON: So, we should go
10 back to elemental sulfur with you.

11 MEMBER SONNABEND: Okay, elemental
12 sulfur.

13 MEMBER THICKE: Right.

14 MEMBER SONNABEND: Which is one of
15 Harold's, so I can channel Harold, except not the
16 one I thought was coming up first.

17 Did lime sulfur already come up?
18 Okay.

19 Okay. Elemental sulfur is on here in
20 three places. It is used, firstly, as an
21 insecticide in 601(e)(5). It is also used as
22 plant disease control, which Lisa hasn't read,

1 but I guess we won't worry about that for right
2 now. So, 601(i)(10) and 601(j)(2) is the plant
3 and soil amendment.

4 We did not request a Technical Report.

5 There were 20 public comments, of
6 which 18 were in favor. PCO listed one material
7 used as insecticide, 1, as disease control, and
8 19 as soil amendments.

9 Numerous growers and other crop
10 producers submitted comments on how important
11 elemental sulfur continues to be to their
12 cropping systems. It is mostly used in organic
13 tree fruit, grapes, berries, and hop production,
14 but not exclusively.

15 CCOF listed it on 2,042 OSPs, and WSDA
16 listed -- they did theirs by percent -- 40
17 percent of their producers and 81 percent of
18 their tree fruit OSPs.

19 Cornucopia asked that specific uses
20 and annotations be considered for the ways that
21 it is used.

22 Organic Produce Wholesalers Coalition

1 shows a good cross-section of how necessary
2 elemental sulfur remains to producers for
3 controlling various bacterial diseases, pests,
4 and as a plant and soil amendment.

5 So, elemental sulfur remains a very
6 important and necessary material in organic crop
7 production.

8 Now I will just mention one thing that
9 I know confuses newcomers sometimes, which is
10 that sulfur is an element. So, it doesn't break
11 down any further than what it already is. There
12 are mined sources of sulfur, and those would be
13 automatically allowed and would not have to be on
14 the National List.

15 But, in fact, at the time that the
16 National List was created, when you bought a bag
17 of sulfur, you could not tell whether what you
18 were buying was the mined source or the not-mined
19 source, which is a byproduct, once again, of the
20 smokestack's capture and things like that.

21 So, the thing is that sulfur is always
22 like a 99.99-percent purity when you buy it. And

1 so, essentially, the elemental mined sulfur is
2 the same as the byproduct sulfur that is on the
3 market.

4 Now, since then, it has become
5 somewhat easier to find out. From what I have
6 seen at least, almost all of the sulfur that is
7 in the categories of disease control and
8 insecticide is still the synthetic sulfur, but
9 the sulfur used as soil amendments, at least the
10 Tiger 90, which is the brand common in the West,
11 is the mined sulfur. I don't know about eastern
12 forms of applied sulfur, but there is still mined
13 sulfur on the market, but not a substitute for
14 all the different uses of sulfur.

15 So, does anyone want to discuss
16 sulfur?

17 (No response.)

18 Okay. I am glad you are all so
19 pleased with our sulfur materials.

20 (Laughter.)

21 We will move on to lime sulfur.

22 Lime sulfur is also known as calcium

1 polysulfide. It is on the list twice, as an
2 insecticide in (e) and in (i) as a plant disease
3 control.

4 We did commission a new TR on lime
5 sulfur because the information in it was old and
6 not complete.

7 We received 20 public comments.
8 Certifiers discussed the importance for organic
9 crop producers, and one certifier discussed the
10 number of materials they certify.

11 A couple of comments of interest
12 groups taking a neutral position and asked that
13 annotations be considered to limit the use to
14 specific needs and applications.

15 Numerous growers and stakeholders
16 submitted comments on how necessary this material
17 is to fruit growers in disease and insect
18 control. There were also comments on how
19 important and necessary this material is in
20 aiding them in fire blight control with the
21 recent loss of antibiotics. Thus, the continued
22 allowance of lime sulfur is increasingly

1 important in organic apple production especially.

2 The OTA survey showed that it was
3 critical for organic crop producers.

4 WSDA stated that it is on 40 percent
5 of its certified producers' OSPs and 87 percent
6 of tree fruit producers' OSPs.

7 Organic Produce Wholesalers Coalition
8 polled its members and found this material
9 continues to be important. They provided the
10 following statement:

11 "Many of the materials currently under
12 the 2017 sunset materials review were accepted by
13 organic certification bodies prior to the
14 implementation of the National Organic Program.
15 They were considered to be part of the
16 traditional definition of organic and in line
17 with the principles of organic production. In
18 short, these materials were part of the
19 foundation on which organic trade was built."

20 Lime sulfur remains an important and
21 very necessary component of organic crop
22 production.

1 Is there any discussion on lime
2 sulfur?

3 (No response.)

4 All right. I guess I will just make
5 one comment in regards to a few people who talked
6 about adding worker safety annotations and things
7 like that.

8 While this stuff is not pleasant to
9 use, and with regular sulfur there definitely
10 needs to be protective equipment, with this stuff
11 it is not so much that it is toxic as much as it
12 is incredibly sticky and it gunks up everything
13 and gets in the way. No applicators like using
14 it.

15 But we, at least in our State and I
16 believe nationwide, have pretty clear-cut rules
17 to protect workers who apply these materials.
18 And we would not think of having workers go into
19 the field without the protective equipment on.
20 And the penalties of OSHA or some other
21 occupational safety audit are so much worse than
22 organic penalties that we would not ever try to

1 violate them.

2 So, I really feel that it is outside
3 the purview of the organic regulations to put
4 worker safety restrictions on the use of these
5 materials because that is covered in other areas.

6 More discussion, any discussion on
7 lime sulfur?

8 (No response.)

9 Okay. Then, we will move on to the
10 next thing.

11 I will just also tell you that I spent
12 a bunch of hours of my time before coming to this
13 meeting commiserating with our growers who are
14 losing their orchards to fire blight this year,
15 particularly pear orchards.

16 As I said repeatedly here, the
17 research being done in Washington does not work
18 in California. It needs to be tested everywhere
19 in the country. And the California pear
20 situation is very much different. We have much
21 humid and hotter conditions, and very, very long-
22 term organic growers are very distressed over the

1 situation.

2 Okay. Next is horticultural oils.

3 This one is Harold. Okay.

4 Horticultural oils are a synthetic
5 substance used as an insecticide and a
6 suffocating agent and for plant disease control.
7 The restriction limits them to narrow-range oils.
8 These also are one of the historical items which
9 are foundational to the organic farming movement.

10 There were 19 written comments.

11 We did not request a TR for this,
12 right? Yes.

13 There were 19 public comments
14 received. Some public commenters asked that it
15 be annotated, and if it could not be annotated,
16 it should be delisted.

17 WSDA says it is used by 87 percent of
18 organic tree fruit growers and 44 percent of
19 producers over all OSPs.

20 CCOF has it listed on 1,041 OSPs.

21 The OTA survey showed used on 550
22 acres and still necessary.

1 Organic Produce Wholesalers Coalition
2 also found this material remains very important,
3 and the statement that I read previously applies.

4 The annotations suggested were about
5 worker safety and effects on non-target
6 arthropods.

7 And horticultural oils remain very
8 important and very necessary for organic crop
9 production.

10 Any discussion of horticultural oils?

11 (No response.)

12 All right. Insecticidal soaps, which
13 I have Paula down. Did we end up with --

14 MEMBER THICKE: We did that while you
15 were gone.

16 MEMBER SONNABEND: Oh, you did it
17 while I was gone?

18 MEMBER THICKE: Yes.

19 MEMBER SONNABEND: Okay. Were there
20 any discussion points raised I should know about?

21 MEMBER THICKE: The comments basically
22 were pretty positive and there weren't any --

1 MEMBER SONNABEND: Okay. Okay.

2 Sticky traps and barriers. I believe
3 that is Colehour.

4 MEMBER BONDERA: Okay. Thank you.

5 Again used as insecticides, and let's
6 see what I can say, because it really is a wide
7 range of traps and coatings from a range of
8 materials, coated paper, coated plastic, sticky
9 chemicals that are brushed onto plants. You
10 know, there is some potential waste from the
11 coated plastic, and the sticky coating can
12 include volatile attractants.

13 Most are non-specific and kill non-
14 target insects as well, inevitably. So, I think
15 that that was part of the questioning we put
16 forth in terms of wide range of products covered
17 by the listing. Can it be categorized by use and
18 type of material?

19 And so, I think, generally speaking,
20 the public input in terms of relisting has been
21 supportive. Yes, I think pretty much that it has
22 been in the support relisting.

1 I think that there are a number of
2 people or entities that were seeking additional
3 information or clarification on issues like,
4 should the Crops Subcommittee explore the
5 possibility of somehow ensuring targeted use of
6 the traps?

7 And I think there was something about
8 the fact that back in 1995, when there was a TAP
9 review, that one of the TAP reviewers suggested
10 that the traps were compatible with organic only
11 in processing plants, and another one that should
12 be used for monitoring or mass trapping. I think
13 that kind of relates a little bit to the organic
14 processor, the OPWC's statement of the frequent
15 use, especially in greenhouses, processing
16 plants, storage areas, et cetera, because I think
17 that that is a typical area of use for these
18 traps, but definitely not exclusive.

19 Like I already said, most of the
20 comments were in support of relisting. And I
21 think that is all I have to say unless there are
22 other Committee members who have something to

1 add.

2 Thank you.

3 MEMBER SONNABEND: Discussion?

4 (No response.)

5 All right. We will move on. Next is
6 sucrose octanoate esters.

7 Paula?

8 MEMBER DANIELS: Okay. So, this is a
9 type of sugar, but it is considered synthetic
10 because of the manufacturing process. It is
11 actually approved for food use by the FDA. And
12 it does biodegrade. It doesn't seem to have any
13 persistence in the environment. It is registered
14 as a biopesticide with no known risks to the
15 environment.

16 The solvents used in the manufacturing
17 process are of a low toxicity. So, there is no
18 registered concern about discharges.

19 There is a possibility that there are
20 other natural substance oils which could be used
21 as alternatives or other management practices.
22 But, in general, the public comments, the one

1 public comment received was in support, and there
2 was no opposition.

3 MEMBER SONNABEND: Discussion?

4 (No response.)

5 Okie dokie. Now we have pheromones,
6 a Harold one.

7 Okay. Pheromones, as you know, are a
8 semiochemical used as an insect attractive. They
9 work, well, there are several ways. Lures are
10 used in traps that are the type that draw the
11 pheromone, the moths into the trap where they,
12 then, get attached to the sticky stuff and can't
13 get out. But they are also used in impregnated
14 twist ties which secrete pheromone to attract the
15 male moths, and then, they can't find the females
16 because all they can find is the twist ties, and
17 they fly around and get confused, which is why
18 they are called confusion lures.

19 In addition, there are now some what
20 we call the puffers, which are a box that you
21 mount in the orchard that emits a very teeny puff
22 of the pheromone compound every so often on a

1 prescribed set schedule, and covers an area of a
2 couple of acres around. Until recently, these
3 had not been formulated with only List 4 inerts,
4 but in the last few years there have been puffers
5 available with only List 4 inerts that would
6 comply.

7 The twist ties, though, do have some
8 List 3 inerts in them to help them stabilize in
9 the plastic and not get released all at once and
10 anti-UV protectants. And so, there is a special
11 entry of inerts on the list for passive dispenser
12 pheromones, which is the twist ties.

13 We received 29 public comments. PCO
14 had answered a question posed by the Crops
15 Subcommittee stating that there are no
16 encapsulated forms of pheromones used in organic
17 crop production. Although others did not answer
18 this directly, I already knew this to be true.
19 Just from the work in OMRI, there have been no
20 encapsulated pheromones that were approved
21 containing all List 4s because the encapsulation
22 tends to need List 3s to formulate them.

1 WSDA stated it is used by 79 percent
2 of tree fruit growers. PCO had 13 users. CCOF
3 has 450 producers on their OSPs.

4 One commenter mentioned, "It would be
5 absolutely absurd to remove these important tools
6 for organic crop producers for use on their
7 farms. The loss of pheromones would force tree
8 fruit producers out of organic production
9 altogether."

10 Organic Produce Wholesalers Coalition
11 found them very important in tree fruit
12 production and to help monitor insect pressure to
13 avoid having to spray more often in not just tree
14 fruits, but in berries and in other crops.

15 Pheromones remain important and very
16 necessary for organic crop production.

17 Any discussion about pheromones?

18 (No response.)

19 Okay. I'm glad everyone likes our
20 materials we have on the list so far.

21 Lisa, did you cover vitamin D3?

22 DR. BRINES: Yes.

1 MEMBER SONNABEND: Yes. Okay.

2 So, the next one is vitamin D3, and
3 that one is Paula.

4 MEMBER DANIELS: So, we are
5 considering this because of vitamin D3's use as a
6 rodenticide, obviously different from the food
7 supplement. The extraction process does use
8 organic solvents and ultraviolet light, but
9 there's no known environmental impacts from the
10 manufacture or use or no notable impacts.

11 There are alternative natural
12 materials that have been identified such as smoke
13 bombs or castor bean oil pellets or sprays. It
14 is also noted that those are fairly labor-
15 intensive in use, though. And other management
16 practices identified are other deterrents such as
17 rotten eggs, animal scents, hair, repellant
18 plants, castor bean, daffodils, squirrel
19 euphorbia, or predators such as corn snakes,
20 cats, and owls. But the problem with the
21 predators is they may also consume chickens and
22 eggs. So, there is also some discussion about

1 the use of traps.

2 In terms of public comment, the
3 relisting is supported by three, Phillips
4 Mushroom Farms, Northwest Horticultural Council,
5 and the Organic Produce Wholesalers Coalition.

6 It is opposed by Beyond Pesticides
7 because of the concern of poisoning children or
8 pets and non-target wildlife with vitamin D3.
9 And Cornucopia opposed it because of the long
10 retention time and, therefore, the risk to
11 predators.

12 Did I put everybody to sleep?

13 (Laughter.)

14 I could sing it next time.

15 MEMBER SONNABEND: Anyone?

16 MEMBER THICKE: I would comment, Zea.

17 MEMBER SONNABEND: Okay. Francis.

18 MEMBER THICKE: Yes. It is not clear
19 to me how effective it is from the comments.

20 MEMBER DANIELS: Yes.

21 MEMBER THICKE: Also, it seems like it
22 is kind of a long death for the animal or

1 something. So, I am not real --

2 MEMBER DANIELS: Vitamin D3? Oh, I'm
3 sorry, I didn't mention that. Yes, it basically
4 poisons. They put a lot of vitamin D3 in the
5 areas where the rodents would be prevalent. The
6 idea is that it creates a -- I have forgotten now
7 the exact mechanism of action, but it poisons the
8 animal. I think it creates a problem with their
9 cardiovascular system.

10 MEMBER THICKE: I think it does. It
11 gives them heart disease, I think.

12 MEMBER DANIELS: Yes. Right.
13 Exactly. Yes.

14 MEMBER SONNABEND: Mac?

15 MEMBER THICKE: I'm sorry?

16 MEMBER SONNABEND: Well, Mac had his
17 hand up, so I was just calling on him next.

18 MEMBER STONE: As a poultry farmer, if
19 you have poultry grain, you have rodents. So, we
20 have gone to the D3. As advised, you still use
21 the bait stations, so there is not access to any
22 other creatures besides the little hole that it

1 can go in there.

2 It is very effective. Again,
3 certifiers are sort of watching to make sure you
4 don't impact non-target pests or non-target
5 creatures.

6 But it is very effective, however it
7 works.

8 MEMBER DANIELS: Could I follow up
9 that with a question? So, to Francis' point,
10 though, how immediately effective is it? How
11 long does it take after application?

12 MEMBER STONE: We kind of had a bit of
13 an issue before we could locate it. We had to
14 purchase it online. We couldn't find it locally.
15 And it took a week or 10 days before we noticed a
16 full knockdown. And then, we haven't seen any
17 sense. But the bait stations are still out.

18 MEMBER DANIELS: But you generally
19 don't necessarily know how long it takes the
20 rodent to die because he is inside the little
21 hole.

22 MEMBER SONNABEND: You don't know when

1 they eat it, in other words.

2 MEMBER DANIELS: Yes.

3 MEMBER SONNABEND: And I will say this
4 is one we did get, I think, at least one public
5 comment that said it didn't work. But it is one
6 I see on inspections a fair amount because there
7 are very few choices for rodent controls. And
8 about half the users say it works great, and the
9 other half say it doesn't work and they wish they
10 had something stronger.

11 But, to the extent that some people
12 are to make it work and there are so few choices
13 for rodent control, I feel like it is fairly
14 important.

15 MEMBER STONE: I think some of that
16 may be eliminating other food sources, so it
17 drives them to the bait. It is a hard, little
18 pellet thing. It is not like sprinkled around.
19 It is a hard, little bait.

20 MEMBER SONNABEND: Okay. Any more on
21 vitamin D3?

22 (No response.)

1 Okay. So now, we got back to Lisa, I
2 believe, for the next section.

3 DR. BRINES: Thank you.

4 The next set of substances fall under
5 paragraph (i) as plant disease control. I will
6 read all of the listings, including some that
7 have been previously discussed. And I will leave
8 it to the Board if they want to return to other
9 discussion on those items.

10 So, under (i) as plant disease
11 control, coppers fixed; copper hydroxide; copper
12 oxide; copper oxychloride. Includes products
13 exempted from EPA tolerance, provided that copper
14 materials must be used in a manner that minimizes
15 accumulation in the soil and shall not be used as
16 herbicides.

17 Copper sulfate substance must be used
18 in a manner that minimizes accumulation of copper
19 in the soil, hydrated lime and hydrogen peroxide.

20 As previously mentioned, there was a
21 new Technical Report prepared for hydrogen
22 peroxide.

1 On the next slide, continuing, we have
2 lime sulfur; oils, horticultural; narrow-range
3 oils as dormant, suffocating, and summer oils;
4 potassium bicarbonate, and again, elemental
5 sulfur.

6 As I think I previously mentioned for
7 both lime sulfur and potassium bicarbonate there
8 are new Technical Reports available. For
9 potassium bicarbonate it was a limited-scope
10 Technical Report.

11 Thanks.

12 MEMBER SONNABEND: All right. So, on
13 our charge here, it is fixed coppers is the next
14 one. Since copper sulfate is really a type of
15 fixed copper, I am going to cover them both
16 together. This was my material.

17 We did not do a TR because a very
18 extensive TR was conducted in 2011. This, of
19 course, is also a very historic material, but has
20 been quite controversial the whole time.

21 I do want to say that, while I didn't
22 try to count up the number of public comments on

1 this, we did get some very high-quality comments
2 on this. And particularly commendable I thought
3 was the one from NOC which approached it from
4 what I thought was a very common-sense point of
5 view of, you know, clearly, this is too important
6 of a material to just outright ban, but there are
7 so many issues with it that we really need to
8 call for more research. And they gave a good
9 itemization of the different types of research
10 that were needed and where there are some
11 unanswered questions in what we know about copper
12 so far that particularly applies to organic.

13 Because we clearly all know that it
14 might have a negative effect on aquatic systems,
15 but restricting it from every single organic farm
16 when some of them won't have any impact on an
17 aquatic system is maybe not an appropriate way to
18 go, rather than maybe changing the annotation to
19 further restrict it in some way that makes sense
20 in the future.

21 We did feel like the past Board had
22 taken a very precautionary approach to this

1 material by the annotation that they did put on,
2 that they must be used in a manner that minimizes
3 the cumulation in the soil and they must not be
4 used as herbicides.

5 So, we asked growers how much they
6 were still widely used in the field and whether
7 people were testing for copper or in other ways
8 monitoring accumulation. And then, we asked the
9 certifiers what their approach was to enforcing
10 this annotation, whether they were requiring
11 testing or monitoring plans or other practices.
12 And had they issued non-compliances from this?

13 We tried out something new in that,
14 instead of a standard checklist here, we provided
15 supplemental information in the form of what I am
16 calling a non-checklist. Because it does address
17 all the OFPA criteria with both the pros and
18 cons, but it does not create a situation where we
19 have to check both boxes on the SNO and does not
20 have as many duplicative questions as I feel our
21 checklist does.

22 Once again, NOC seems to be the only

1 ones who actually noticed this enough to say that
2 they liked the new form because they felt the
3 issues were covered in it. They liked the new
4 approach. We didn't get any really negative
5 criticism over not using the new approach.

6 I think that because the TR was quite
7 complete and because we were able to cite large
8 sections of the TR in the approach that we used,
9 and then, people could go look up further
10 references, it gave a good starting point for
11 people who wanted to address the concerns about
12 copper.

13 The responses to our directed
14 questions include several comments from growers
15 saying that this was very essential to their fire
16 blight control programs.

17 And just as an aside, we did not hear
18 from pear growers on this, but pear growers
19 really can't use lime sulfur. And so, copper is
20 what they need to use. Unlike myself, as an
21 apple grower, who I never used the antibiotics
22 and I actually have not ever used copper, but we

1 use lime sulfur as a key control, and then,
2 followed by sulfur, and this year for the first
3 time used Blossom Protect, but it is too early to
4 see if it worked or not yet.

5 So, people were still definitely
6 relying on copper for fire blight control as well
7 as for control of a key amount of other diseases,
8 which the comments from the Organic Produce
9 Wholesalers group spelled out what some of those
10 diseases are and how important copper is.

11 From the certifiers, we heard that
12 some of them are requiring routine testing;
13 others of them are requiring more what they call
14 a monitoring plan in which they ask growers to
15 particularly elaborate testing among other
16 monitoring practices that they may use. And they
17 have not issued any non-compliances on
18 accumulation copper, but they have issued non-
19 compliances based on growers not having a
20 sufficient monitoring plan, which I thought was a
21 very appropriate response.

22 But I think it is one that shows that

1 on the whole the annotation as posed is working
2 for the situation that is being addressed, which
3 is the accumulation of copper in soils, which we
4 did provide a little bit of supplemental
5 information that was not in the TR from the
6 Cornell publication about organic pest control,
7 that sort of gave a frame of reference for how
8 much a typical yearly application of copper would
9 cause to accumulation.

10 And that indicated that it would take
11 several decades for copper to accumulate to a
12 point where it would be really a problem. Of
13 course, this concept of accumulation was first
14 brought to our attention by the Europeans, but
15 they had had 100 years or more of coppers use in
16 some of their wine-growing areas that had led to
17 inadequate -- you know, problematic accumulation.
18 And we don't have that long history of organic
19 production on the same soils with copper that
20 they have there.

21 So, we definitely are going to move
22 forward to put this on our research priorities.

1 I think I can say on behalf of the Committee that
2 we are likely to do that and that we may want to
3 add or subtract from what the commenters have
4 provided. But, in the meantime, we recognize
5 this is a very important material. On the whole,
6 while people agree that it needed to be studied a
7 lot more, there were very few objections to
8 keeping it on the list as a really last-resort
9 tool.

10 Discussion about copper?

11 (No response.)

12 I have put everyone to sleep with
13 that.

14 (Laughter.)

15 All right. We will move right along
16 here. So, next is hydrated lime.

17 Okay, are we all getting sick of my
18 voice?

19 Did we talk about it already? No,
20 that was hydrogen peroxide.

21 Hydrated lime is also known as slake
22 lime. It is calcium hydroxide. It is on the

1 list for disease control. It was a confusing
2 listing at the time because what was first
3 reviewed by the Board was the old terminology for
4 what is known as Bordeaux mix. Bordeaux mix is a
5 mixture of copper sulfate and hydrated lime.

6 This is what caused the 100 years of accumulation
7 in the wineries because this was the very first
8 compound that was discovered that was effective
9 in pest control.

10 It was realized that you couldn't have
11 something as colloquial as Bordeaux mis on the
12 list. And so, it was separated into copper
13 sulfate and hydrated lime.

14 The fact is anymore that Bordeaux mix
15 is not so commonly used because these other
16 copper products have come along that will allow
17 effectiveness at a much lower rate of elemental
18 copper. And we in the fire blight world -- and I
19 am sure you heard Harold talk about this before
20 -- we are eagerly awaiting the new product
21 ProVista which is going to have something like
22 only 20 percent copper instead of the typical

1 like 50 percent, basically, because of
2 micronizing and effective formulation to make it
3 go a lot farther, enabling you to use much less
4 copper. So, this is something we are all looking
5 forward to in tree fruit.

6 But, anyway, hydrated lime does
7 continue to be used for very specific uses for
8 plant disease control. And we got very little
9 public comment about it. We had some group
10 support its continued use and some growers
11 support it, that they needed it, and received no
12 real impetus to take it off the list except for
13 those few people who want everything off the
14 list.

15 Discussion, hydrated lime?

16 (No response.)

17 All right. Potassium bicarbonate.
18 Potassium bicarbonate was not on the original
19 National List because it didn't exist as a
20 formulated best product then.

21 It was reviewed in 1999, and then, we
22 commissioned a limited-scope TR for this round.

1 The TR focused on alternative materials and
2 practices that could potential serve as possible
3 replacements for potassium bicarbonate.

4 We asked the questions of how many
5 people were using it and did they get a desired
6 result from it, and is it still needed in organic
7 farming? There were seven direct public
8 comments. In answer to the question about if it
9 was still important, several commenters said that
10 it was still important and it is the primary
11 material used to control powdery mildew post-
12 infection in organic tree fruit and berry crops.

13 It was also mentioned as a good
14 material to use alternating with sulfur because
15 it helped avoid resistance problems and it was a
16 lot safer and less volatile than sulfur. And this
17 was particularly true in hot temperatures.

18 CCOF listed it on 396 OSPs. And this
19 is high because it is very widely used in grapes.

20 Even some environmental groups pointed
21 to the fact that it is more environmentally-sound
22 and safer than many of the alternatives.

1 The Northwest Horticultural Council
2 said it is an invaluable tool for apple and pear
3 growers for powdery mildew and scab.

4 WSDA listed it on 60 percent of
5 certified organic tree fruit growers and 32
6 percent overall.

7 Also, the Organic Producers Wholesale
8 Coalition points out that it is very important in
9 greenhouses, probably also for mildew control in
10 those humid conditions in greenhouses.

11 And several other miscellaneous crop
12 producers commented on the importance of the
13 material.

14 So, we feel that it does remain an
15 important material in organic production.

16 Discussion, potassium bicarbonate?

17 (No response.)

18 All right. I think the rest are
19 duplicates from previous listings. Does anyone
20 want to bring any of them back up in this
21 section? Things like elemental sulfur,
22 horticultural oil, hydrogen peroxide?

1 (No response.)

2 Okay, back to Lis.

3 DR. BRINES: Thank you.

4 The next set of materials fall under
5 Section 205.601(j) as plant or soil amendments.

6 Aquatic plant extracts other than
7 hydrolyzed extraction processes limited to the
8 use of potassium hydroxide or sodium hydroxide.
9 Solvent amount used is limited to that amount
10 necessary for extraction.

11 Elemental sulfur; humic acids,
12 naturally-occurring deposits; water and alkali
13 extracts only.

14 Lignin sulfonate, chelating agent,
15 dust suppressant.

16 Magnesium sulfate, allowed with a
17 documented soil deficiency.

18 Micronutrients, not to be used as a
19 defoliant, herbicide, or desiccant. Those made
20 from nitrates or chlorites are not allowed. Soil
21 deficiency must be documented by testing.

22 Soluble boron products.

1 Sulfates, carbonates, oxides, or
2 silicates of zinc, copper, iron, manganese,
3 molybdenum, selenium, and cobalt.

4 Liquid fish products can be pH-
5 adjusted with sulfuric, citric, or phosphoric
6 acid. The amount of acid used shall not exceed
7 the minimum needed to lower the pH to 3.5.

8 Vitamins B1, C, and E. And of these
9 materials, the Technical Report was updated for
10 vitamins B1, C, and E. And that report just
11 recently posted for the public on the NOP website
12 this Monday.

13 Thank you.

14 MEMBER SONNABEND: Okay. So, the
15 first one up is aquatic plant extracts, and that
16 is Carmela.

17 MEMBER BECK: So, I have heard this
18 mentioned today. One of the organizations stated
19 the following: that "Almost all of the 2017
20 sunset materials for crops are in active use by
21 the trade and are considered to be necessary to
22 production and handling of fruits and

1 vegetables." So, I just thought I would start
2 with that because I thought it was relevant.

3 There was overwhelming industry
4 support for the relisting of aquatic plant
5 extracts. OMRI reported a total of 62 registered
6 products. Those in favor stated that seaweed
7 extracts are an important element of the
8 fertility program on many organic farms, and that
9 removal from the National List would
10 significantly impact a large number of growers.

11 There was one organization opposed to
12 relisting because they stated that it is
13 inconsistent with organic production practices to
14 use synthetic materials.

15 The Subcommittee didn't have any
16 questions for the public on this particular
17 material.

18 Are there any questions?

19 MEMBER SONNABEND: Anyone on aquatic
20 plant extracts?

21 (No response.)

22 Okay. Boy, when we talk about this in

1 OMRI, we can talk about this for hours. But I am
2 sure you would get more bored than you already
3 are now.

4 (Laughter.)

5 Next is humic acids. Carmela?

6 MEMBER BECK: All right. So,
7 similarly, there was an overwhelming industry
8 support for the relisting of humic acids.

9 OMRI reported a total of 78 registered
10 products. Those in favor stated that humic acids
11 are a very important element of nutrient
12 management for plant and soil health in organic
13 farming systems.

14 There was one organization opposed to
15 relisting humic acids because they said that they
16 are essential or compatible with organic
17 production.

18 The Subcommittee did not ask any
19 questions of the public on this particular
20 material.

21 MEMBER SONNABEND: Discussion?

22 Oh, Jean? Good.

1 CHAIR RICHARDSON: Carmela, can you
2 remember or reflect on why the organization said
3 that these were not compatible with organic
4 production?

5 MEMBER BECK: The comment is "Humic
6 acids do not meet the criteria under OFPA. There
7 are environmental hazards in the extraction.
8 They are not essential and not compatible
9 production." That is what I took from the
10 comment. I don't have additional information.

11 That was Beyond Pesticides.

12 MEMBER SONNABEND: Okay. I do have
13 discussion on this one and did not get a chance
14 to bring it up at the Subcommittee, but was
15 reminded of it recently.

16 We ran into some significant around
17 this in the last five years, which I didn't
18 realize that the listing had not been put onto
19 the National List the way that it was reviewed by
20 the original NOSB. Because the words that were
21 used and the products that was used was "humic
22 acid derivatives". So, it was not meant to

1 include humic acids that were extracted
2 naturally, either with water or with some other
3 natural mineral being mixed with it. And yet,
4 the National List only includes the humic acids.

5 And so, the particular problem was
6 that the Japanese, before equivalency, would not
7 allow these humic acids and would not even allow
8 the naturally-derived ones. Hopefully, the
9 equivalency agreement has now solved that or not?
10 Yes.

11 Nonetheless, it needs to be clearer
12 that this is the ones that are extracted without
13 synthetic alkalis and not the ones that are
14 naturally-reacted, which don't need to be on the
15 National List if they're naturally-reacted.

16 So, we asked in the classification of
17 materials draft for this to be corrected in the
18 guidance. But, see, since we have not seen the
19 final to see if this was corrected, if this does
20 not come out by fall, I am going to try to
21 propose an annotation proposal to go along at the
22 same time to clarify this point. Because it is

1 still very important to some companies who do
2 want to distinguish their products as being made
3 with natural extractives rather than the
4 synthetic ones on the National List.

5 Did everyone understand that? Okay.
6 We will talk about it more in Subcommittee, I'm
7 sure, but I just feel like it is a long -- I
8 mean, I can't even tell you how much time I spent
9 in the past 10 years trying to convince Japan
10 that they were naturally-extracted humic acids.
11 And nothing you could say would work, until we
12 got equivalency.

13 MR. McEVOY: Yes. Just to add to
14 that, yes, we did lots of meetings with the
15 Japanese during the equivalency discussions about
16 the humic acid, in particular, because prior to
17 the equivalency arrangement, there was -- well,
18 it started with three materials that Japan had as
19 critical variances, the humic acids -- and it is
20 late in the day, so I am not remembering the
21 other two.

22 But one came off --

1 MEMBER SONNABEND: Potassium
2 bicarbonate and lignin sulfonate.

3 MR. McEVOY: Okay. Thank you. That
4 is why we are a community here. Everybody is
5 helping out.

6 So, yes, there was that distinction
7 between the naturally-based alkali-extracted
8 humic acids and the synthetic alkali-extracted
9 acids. And they didn't care; from the Japanese
10 perspective, it was the humic acids themselves
11 that did not meet the Japanese organic standards.

12 But, over time of explaining the
13 systems in the U.S., especially in the more arid
14 regions of the U.S., they understood the
15 necessity of the material. And the equivalency
16 arrangement, there is no critical variances
17 between Japan and the U.S. So, it is no longer
18 an issue with the equivalency with Japan.

19 But you do make that very important
20 distinction that there are these two different
21 types of alkali-based -- alkali-based or alkali-
22 extracted? -- extracted humic acids, one that is

1 natural and one that is synthetic.

2 MEMBER SONNABEND: Okay. Further
3 discussion on that?

4 (No response.)

5 Okay. Move on to lignin sulfonate,
6 and that is Carmela.

7 MEMBER BECK: Okay. There was
8 industry support for the relisting of lignin
9 sulfonate for use as a chelating agent or dust
10 suppressant.

11 OMRI reported a total of 16 registered
12 products. It was noted that this material is
13 often in branded materials that are not reviewed
14 by certifiers. And so, numbers are likely
15 underreported.

16 Those in favor stated that they rely
17 on the material to keep down the dust and as a
18 binder for their organic fertilizer manufacturing
19 process.

20 Some growers noted that they are not
21 aware of any alternatives.

22 There were two organizations opposed

1 to relisting because one stated that lignin
2 sulfonate is a byproduct of paper pulping; they
3 don't meet the requirement of OFPA.

4 And the Subcommittee asked two
5 questions of the public. The first question was
6 whether removal of lignin sulfonate as a floating
7 agent would disrupt your business. And I think
8 this is probably where the OTA petition for
9 removal comes into play. They conducted a survey
10 and noted that the floating agent, it is not used
11 as a floating agent in the industry. There were
12 two certifiers that came back and said that they
13 did not have clients that were utilizing it for
14 that purpose. So, it appears to be no.

15 The second question was, should the
16 use lignin sulfonate be subject to documented
17 monitoring of wastewater in the OSP? I don't
18 show any responses for that particular question.

19 That's all I have.

20 MEMBER SONNABEND: Discussion, lignin
21 sulfonate?

22 Mac?

1 MEMBER STONE: So, what is the status
2 of the petition and how does it intersect with
3 this decision in the fall?

4 MEMBER SONNABEND: Carmela, do you
5 want to respond or do you want me to?

6 MEMBER BECK: No, go ahead.

7 MEMBER SONNABEND: Okay. The petition
8 is to remove one use of it but keep the other,
9 and we are going to try to see if we can make
10 that go forward, but I am not sure if we have to
11 do it as an annotation change or if they can just
12 go that way.

13 MEMBER STONE: Because the sunset
14 might be ahead of the petition decision? Okay.

15 MEMBER SONNABEND: Jean?

16 CHAIR RICHARDSON: I'm not a great fan
17 of lignin sulfonate. When I did the research
18 when I was preparing materials on the aquatic
19 materials that we were looking at that are
20 presently on the back burner, the information
21 coming from the sources, the development of it is
22 a byproduct of the pulp and paper industry, are

1 pretty unpleasant.

2 The material is soluble in water, and
3 it is clearly seen to have negative impacts on
4 aquatic ecosystems. So, from my perspective, I
5 would be happy to see it removed.

6 Did the Subcommittee look at the OFPA
7 criteria when they were reviewing this?

8 MEMBER SONNABEND: Carmela, can you
9 answer that?

10 MEMBER BECK: Yes, the Subcommittee
11 did look at that, and we thought that it was
12 compliant.

13 MEMBER SONNABEND: And for the
14 historical perspective, when this was reviewed to
15 get put on the list, the main available
16 alternative as a chelating agent, not as a dust
17 suppressant, because with a dust suppressant, the
18 main alternative is just clean water. But, as a
19 chelating agent, the main alternative is EDTA.
20 And, sure, we could petition EDTA and put it
21 right on the National List if you would like to
22 open that can of worms, those worms right there.

1 (Laughter.)

2 CHAIR RICHARDSON: Well, let me just
3 add, though, I think that when you write your
4 next chapter of this story, Carmela, I would
5 really like to see you look into what is in the
6 lignin sulfonate and how does it move from the
7 pulp and paper industry into the water, and what
8 type of effect that it has, to look at the
9 science and the environmental impact associated
10 with that. So that we can see it in the template
11 when we are looking at it and the public are
12 having the ability to respond.

13 MEMBER SONNABEND: And I do want to
14 mention one more thing about this which is
15 context. Once again, I don't know the
16 concentration of it as dust suppressant so. But
17 chelating agent, it is used with micronutrients,
18 micronutrients that are applied at 1 pound per
19 acre of material, of which, you know, less than
20 half of it is the lignin sulfonate. So, it is
21 going on in very, very tiny amounts. It is
22 almost like an ancillary substance for the

1 delivery of micronutrients.

2 But we don't have that category in
3 crops, and we still should look at the OFPA
4 criteria. I am not saying that. But it is not
5 used in high concentrations.

6 CHAIR RICHARDSON: Well, one other
7 point I would just like to throw out there is
8 that, when the pulp and paper industry -- the way
9 in which this spent liquor is derived, there are
10 several different processes whereby the pulp and
11 paper industry -- they didn't process like the
12 crack process, et cetera.

13 So, some of these processes have the
14 ability to generate a range of dioxins. So, even
15 though it might be a minuscule amount, there is a
16 cumulative impact effect. You know, if it is
17 dust, it gets up in the air or it is in the
18 water. Either of those ways, you have, I think,
19 a potential impact that I'm not comfortable with.

20 MEMBER SONNABEND: Do you mean dust in
21 manufacture? A dust suppressant, it goes on in
22 water.

1 CHAIR RICHARDSON: So, either of those
2 ways, it is likely to, I believe it is likely to
3 have a potential negative impact.

4 MEMBER BECK: But I just wanted to say
5 that I do have in my notes that the OTA did say
6 that the use of it as a dust suppressant didn't
7 affect aquatic life. But I hear what you are
8 saying, Jean, and we will make sure that we flesh
9 out the details; that there is more information.

10 MEMBER SONNABEND: Uh-hum?

11 MEMBER DANIELS: I just wanted to
12 comment that I agree that that is a concern, and
13 I think we did discuss in Committee the
14 manufacturing process. And that was one of the
15 questions that we raised to the public, as you
16 can see here. Question No. 2 was asking for
17 information regarding processes, and the
18 potential of impacts on aquatic ecosystems was
19 something we did talk about.

20 We didn't get any comments back on
21 that. I'm not sure what our process is then if
22 we don't get a comment from the public, if we

1 want more information from another source.

2 CHAIR RICHARDSON: Right, and we have
3 the public out there. So now, they know. Okay.

4 MEMBER SONNABEND: But, once again,
5 this does suffer from the reality that is not
6 necessarily listed on the labels. So,
7 particularly if a grower is using a
8 micronutrient, they don't necessarily know it has
9 lignin sulfonate as a chelating agent. So, they
10 don't know that that is what they would have to
11 comment on.

12 MEMBER DANIELS: And it may not be a
13 user or a grower who might have the information
14 on the impact of aquatic ecosystems.

15 MEMBER SONNABEND: Right. Someone
16 might that have information without them, but we
17 are not going to get a lot of user comments, I
18 don't think.

19 Okay. We will move on to magnesium
20 sulfate. And that is -- okay, go ahead.

21 MEMBER BECK: Okay. So, there was
22 industry support for relisting of magnesium

1 sulfate. OMRI reported a total of 26 registered
2 products.

3 Those in favor stated that it is used
4 by farmers to amend trace mineral deficiencies.
5 It is our best option for correcting magnesium
6 deficiencies, both foliar and soil applications.

7 There was, similar, the same
8 organization that was opposed to relisting, they
9 felt that synthetic plant nutrients should not be
10 taking the place of organic soil-building
11 practices.

12 Let's see, we had one question for the
13 public, and it looks like there were five
14 response. So, the question was, is non-synthetic
15 magnesium sulfate available in the marketplace?

16 Then, the ACA letter said that, "The
17 only non-synthetic magnesium we have reviewed is
18 in the form of potassium magnesium sulfate
19 langanite." They said, "It's available in the
20 broader marketplace, but it's not always readily
21 available to producers at their local suppliers.
22 It is also impossible to discern at the point of

1 purchase what is synthetic and what is non-
2 synthetic."

3 They stated that their internal
4 database, materials database, only indicates that
5 there are only three non-synthetic sources that
6 have been reviewed and approved, and that from
7 their perspective, there is not a significant
8 amount of non-synthetic magnesium sulfate
9 available.

10 Beyond Pesticides mentioned langanite
11 and dolomite. Another alternative that was
12 mentioned was Epsom salts.

13 And then, OMRI stated that there are
14 very few, if any, non-synthetic sources of
15 magnesium sulfate available.

16 PCO said that they had approved 47
17 products that contained non-synthetic magnesium
18 sulfate in addition to the 67 products that
19 contain a synthetic form.

20 So, those are the five responses to
21 that particular question.

22 MEMBER SONNABEND: Discussion about

1 magnesium sulfate?

2 (No response.)

3 Moving right along, micronutrients.

4 Carmela?

5 MEMBER BECK: Okay. So, again, there
6 was overwhelming industry support for the
7 relisting of micronutrients.

8 OMRI reported a total of 90 registered
9 products. Those in favor stated that use
10 corrects mineral and nutrient deficiencies.

11 The OTA survey reported that farmers
12 use micronutrient products seldom or routinely
13 and rate micronutrients products as critical to
14 the success of their operations.

15 There were two organizations opposed
16 to the relisting because they stated that
17 synthetic micronutrients are incompatible with
18 organic production.

19 They also suggested the Crops
20 Subcommittee address each micronutrient, looking
21 at the manufacturing impacts, essentiality, and
22 compatibility of each.

1 Let's see. We asked a question of the
2 public. That question was whether or not the
3 current annotation applies to today's practices
4 and procedures. And I have recorded that we have
5 three responses.

6 So, PCO had stated that they would
7 support an annotation change or guidance on
8 enforcing the existing annotation that would
9 allow for operators to also use tissue testing to
10 justify the application of micronutrients.

11 The WSDA Organic Program would like to
12 propose the annotation, quote/unquote,
13 "Deficiency must be documented to better allow
14 for the range of tools used by producers to
15 assess the nutrient needs of their crops,
16 including soil or leaf tissue analysis, recorded
17 visual observations of micronutrient deficiency,
18 and documented regional soil deficiencies."

19 And then, CCOF recommends that the
20 annotation allow for other methods to show need
21 for micronutrients. And examples that they gave
22 were Certified Professional Agronomist

1 recommendations. And then, they suggest removing
2 the words, quote/unquote, "by testing" after the
3 word "documentation". CCOF supports the
4 prohibition of use as defoliant and suggests
5 naming inappropriate uses.

6 Those are the three comments that we
7 received on that particular question.

8 Questions?

9 MEMBER SONNABEND: Discussion on
10 micronutrients?

11 Francis?

12 MEMBER THICKE: Just a comment on
13 allowing Certified Agronomists to recommend
14 micronutrients. I think it would be fine as long
15 as they don't sell the product, which often they
16 do.

17 (Laughter.)

18 MEMBER STONE: We had a conversation
19 yesterday about soil deficiency must be
20 documented by testing. Did we sort of agree that
21 testing may include plant tissue testing? It
22 doesn't automatically mean soil testing, right?

1 MEMBER SONNABEND: Yes.

2 MEMBER STONE: We agreed on that?

3 MEMBER SONNABEND: But just the
4 testimony had to do with the fact that testing is
5 not necessarily the only way to document a
6 deficiency. And I can give a good example to
7 illustrate this.

8 In our quest for cultural and other
9 practices to control fire blight, one of the key
10 ways to do this is to make sure that your plant
11 is properly hardened off and very strong going
12 into winter. And all the publications that have
13 come out from the researchers on fire blight and
14 the Organic Center's publications, the webinars,
15 the work of David Graninstitute and others,
16 suggests a fall spray of calcium plus boron to
17 properly harden the wood off against fire blight.

18 Well, our soils, for instance, don't
19 quite test deficient in boron, but they test sort
20 of right on that line of boron. And so, if my
21 certifier was totally enforcing the law in an
22 absolutely strict way, I might not be able to use

1 that material. And yet, all this printed
2 literature says it. Our crop advisor says it.
3 And it doesn't matter what brand we use, because
4 there are several brands out there. But that is
5 an example of some key important thing that we
6 are sacrificing by having this very limited
7 annotation.

8 Nick?

9 MEMBER MARAVELL: Yes, in our area
10 boron, for example, you know, if you grow certain
11 crops such as alfalfa, you get a standard
12 recommendation without testing out of the
13 University because our soils are deficient and
14 alfalfa takes up so much per year. And they
15 recommend a certain amount on each year.

16 We don't apply it, but I am just
17 saying, if you were going to apply it, this would
18 sort of mean you would have to test every year
19 for something where you are going to get the same
20 result after alfalfa.

21 So, there should be some alternatives
22 available to document the need because the

1 University has done the research ad infinitum
2 already.

3 MEMBER SONNABEND: Further comments on
4 micronutrients?

5 (No response.)

6 Okay. We will proceed, and we may
7 take up an annotation change at the fall meeting.

8 All right. Liquid fish products.

9 Carmela?

10 MEMBER BECK: So, again, there was
11 overwhelming industry support for the relisting
12 of liquid fish products.

13 OMRI reported a total of 68 registered
14 products. Those in favor stated the following:
15 it is a primary and fundamental fertility tool.
16 They are widely used as part of their crop
17 fertility regimes.

18 Per the OTA survey, the vast majority
19 of responses report using liquid fish products
20 routinely and rate liquid fish products as either
21 more necessary or critical to the success of
22 their operations.

1 There was an organization opposed to
2 relisting because they stated that they remove
3 valuable nutrients from marine or aquatic
4 ecosystems and, again, are incompatible with
5 organic production.

6 The question that we asked the public,
7 we asked if the annotation is sufficient for
8 situations when fish is blended with other
9 ingredients. I recorded that we had four
10 responses.

11 Let's see. CCOF said that the
12 annotation is sufficient when blended with other
13 ingredients.

14 OMRI said that they interpret the
15 annotation for liquid fish products to mean that,
16 when blended with other ingredients, only the
17 amount of acid needed to bring the fish component
18 down to a pH of 3.5 is permitted, that they do
19 not permit manufacturers to pH-adjust fish and
20 other ingredients together. They, then, said
21 that they would like the NOSB to discuss whether
22 this listing includes non-fin fish; for example,

1 crab or shrimp products.

2 CCOF stated that the annotation is
3 sufficient, and PCO said that it has been PCO's
4 practice to require the pH of the liquid fish
5 product to be measured prior to the liquid fish
6 being blended with other ingredients.

7 And that's all I have.

8 MEMBER SONNABEND: Any comments on
9 fish products?

10 MEMBER DANIELS: I just have a
11 question about it. So, we mentioned this before
12 when talking about fish products, and Jean did
13 earlier today, about the impacts on the fisheries
14 from using fish oils, or however the fish are
15 derived.

16 And I am sorry that I am not
17 remembering this discussion in Committee. I
18 don't know if I was there or not. I might have
19 been, but I'm not remembering it.

20 So, there is, I think, a considerable
21 amount of concern about the impact on fisheries.
22 About 85 percent of them are considered

1 overexploited at this point. And I am wondering
2 if this one of those situations where we can
3 evaluate, also, for other alternatives. And I am
4 not recalling the discussion on when there are
5 other alternatives for this.

6 MEMBER SONNABEND: Okay. Well, this
7 is a fertilizer.

8 MEMBER DANIELS: Right.

9 MEMBER SONNABEND: So, of course,
10 there are other alternatives. But it is also
11 true that, unlike fish oil, this is almost always
12 fish waste products and fish byproducts of other
13 uses of fish. And they take, not always, though,
14 but often -- oh, you think fish are being fished
15 just for fertilizer? Not most of the ones that I
16 am familiar with, but maybe some. But, in any
17 event, if we want to make that distinction, we
18 could proceed to take a look at that.

19 Jean?

20 CHAIR RICHARDSON: Yes. I mean, the
21 fish fertilizers are fabulous. I know it is
22 really, obviously -- I would not want to vote

1 against it. But I do have to agree that there
2 are some serious aspects of the overfishing.

3 In fact, last night at the reception
4 I was talking to one of the inspectors who had
5 been doing inspections of some of the places
6 where these materials are made in South America,
7 which is relatively calm, as you know, off of
8 Chile. And it is definitely whole fish that were
9 being harvested to be used in this.

10 So, the assumption that we have got
11 fish waste products going into this I think is
12 just sort of wishful thinking. And I don't have
13 a perfect answer. I think these are excellent,
14 very focused, very useful fertilizers that I
15 would not want to take out of a farmer's toolbox,
16 but I think in some way or another we have to
17 reflect that seriousness when we put out the
18 template for the public, for step two, so that we
19 create an ongoing record of a level of concern
20 for the need for the protection of world
21 fisheries.

22 And that is a concern. It is part of

1 our conservation biological diversity issues that
2 are so important to organic agriculture overall.
3 If that is recorded and it is out there, then it
4 will become part of the history. Hopefully, over
5 time we can work more holistically with other
6 fisheries to do a better job at protecting and
7 conserving.

8 MEMBER DANIELS: Right. And, I mean,
9 there is the potential because at this point we
10 are actually producing quite a bit of farmed fish
11 in the world, not necessarily in the United
12 States, but in the world. There is more farmed
13 fish being produced than beef.

14 If there are byproducts from farmed
15 fish that could be used for the creation of this
16 particular material, whatever it is called at
17 this point, then maybe that is a better way. So,
18 I think the question is an investigation into the
19 source of the material.

20 MEMBER SONNABEND: We could ask OMRI,
21 for instance, to study for us how many of their
22 products come from fish scraps versus being

1 directly fished, because they do have that
2 information in their files.

3 MEMBER DANIELS: Right. But, I mean,
4 even with fish scraps, you still have the fish
5 caught at some point. So, you know, there is
6 just that whole question of the source.

7 I agree, it is just a question at this
8 point, like identifying it as an issue for
9 inquiry.

10 MEMBER SONNABEND: Uh-hum. So noted.

11 So, anything else about fish?

12 (No response.)

13 Okay. Next is vitamin B1, C, and E.
14 Carmela?

15 MEMBER BECK: Okay. So, I have
16 recorded here there were no comments in support
17 of relisting vitamin B1, C, and E. Vitamin B1,
18 C, and E products were not included on OMRI's
19 2017 sunset partial list of registered products.
20 Most indicated that they are rarely used
21 individually, but are included as ingredients in
22 some of the products they see for fertility.

1 Let's see. I have here that PCO
2 identified 46 materials.

3 There was one organization, again,
4 that opposed the relisting because they state
5 that vitamin C and E are used as plant growth
6 promoters and vitamin B1 is used to stimulate
7 rooting and cuttings, and that synthetic growth
8 promoters and growth hormones are not compatible
9 with organic production.

10 We didn't ask any questions of the
11 public, but I guess the TR was just published.
12 So, I haven't had a chance to look at that.

13 That's all I have.

14 MEMBER SONNABEND: Any discussion?

15 Lisa?

16 MEMBER DE LIMA: Did you say that
17 nobody was in favor of keeping it on the list,
18 Carmela?

19 MEMBER BECK: I don't have record of
20 any comments in support.

21 MEMBER DE LIMA: So, is it something
22 you guys would consider removing?

1 MEMBER BECK: I think, yes, I mean,
2 once we look at the TR, we will see what comes
3 from that.

4 MEMBER SONNABEND: I do think that
5 this is one that a lot of times it is a sub-
6 ingredient in another branded product. So, the
7 person doesn't know they are using it. That is
8 something OMRI could probably help us with also.
9 I am not sure if they have it as a separate
10 listing on their spreadsheet that they turned in.
11 But we could try to help identify how many
12 sources of it there are.

13 Any more?

14 (No response.)

15 Okay. Next is -- Lisa, have you
16 covered ethylene or do we go back to you? Okay,
17 Lisa?

18 DR. BRINES: Thank you.

19 We will cover Sections (k) and (l)
20 next.

21 So, under Section 205.601 (k) as plant
22 growth regulators, ethylene gas for regulation of

1 pineapple flowering.

2 Paragraph (1) as floating agents in
3 post-harvest handling, lignin sulfonate, and
4 sodium silicate for tree fruit and fiber
5 processing.

6 Thank you.

7 MEMBER SONNABEND: So, just those
8 things in this group?

9 Okay. Ethylene. That was Harold.

10 Ethylene is a synthetic substance used
11 as a plant growth regulator. It is, I should
12 mention, a synthetic analog of a non-synthetic
13 substance that is given off by fruits as they
14 ripen.

15 In this case, for the use in crops, it
16 is being used for the regulation of pineapple
17 flowering. The fairly-extensive Technical
18 Reports were done in the past, the most recent
19 being a Supplemental one done in 2011.

20 This has been a hard one for the Board
21 to deal with throughout its time because most
22 pineapple, with the exception of Hawaii, most

1 pineapple is grown in other countries. And being
2 able to get input from the growers in other
3 growers in other countries has been challenging.

4 So, we posed several questions to try
5 to identify from certifiers, if not growers, with
6 information on the current technique of applying
7 ethylene, and to separate it, if necessary, by
8 the scale of the size of the producer. Also, to
9 look at what alternative materials have been in
10 use, and whether those were working out well or
11 not.

12 Well, that looks like sort of a
13 duplicate question.

14 So, we received four public comments.
15 Well, I can't tell here if that is a "4" or a
16 "5". We received either four or five comments.

17 Cornucopia and Beyond Pesticides asked
18 that we delist it.

19 The ACA has two pineapple growers, and
20 neither of them use it, but they state it is
21 important to larger-scale growers that have
22 longer seasons that they crop with.

1 And then, the Organic Producer
2 Wholesalers Coalition indicated that it was very
3 important for the tropical fruit, the pineapples
4 that they bring into the country.

5 Now at least one of those comments, or
6 maybe another one that he didn't mention, I saw
7 was from a small-scale producer describing the
8 alternative methods that they did use. And they
9 said that those methods worked for them, and that
10 they did not work on a large scale, which is why
11 the large-scale growers had to use it.

12 Also, we did not hear it this time,
13 but one of the key arguments in the past for it
14 was that this is really a workers' safety issue
15 because it enables the workers to go through the
16 fields fewer times to harvest the pineapples, and
17 pineapple fields are dangerous places to be with
18 those giant spines, the spined leaves that come
19 out of the pineapples.

20 So, I will open to discussion now.

21 I have mixed feelings personally about
22 this one, and I do think we need to discuss it.

1 Nobody wants --

2 MEMBER STONE: I guess maybe it was my
3 first meeting, so I am not sure why the overlap
4 here; we're just backed up sunset, I guess. But
5 it seemed like it was Luis -- is that his name?
6 -- that came up from Central America and had
7 very, in my mind, powerful images of the value of
8 it to his ability to harvest and get pineapples
9 to this country. He was pretty emphatic about
10 how difficult it would be, if not devastating,
11 for those growers to get pineapples up here.

12 MEMBER SONNABEND: Jean?

13 CHAIR RICHARDSON: Can you give us
14 some specificity as to the environmental negative
15 impacts from the ethylene gas?

16 MEMBER SONNABEND: Harold didn't leave
17 me his backup notes, in that he was the point
18 person on this one. I'm sorry.

19 I mean, the TRs do have quite
20 extensive discussions of this, and there are
21 several of them.

22 CHAIR RICHARDSON: Yes. Because I'm

1 like you, I have mixed feelings about this. And
2 yet, as Mac says, it will have a serious impact
3 on small-scale farmers.

4 MEMBER SONNABEND: Yes. And I just
5 don't think we have really ever gotten an
6 appropriate amount of input on this.

7 One of the things, the comment that we
8 did hear from the small grower is that the
9 equipment needed to be able to do this is quite
10 expensive, and therefore, only accessible to
11 large-scale growers.

12 But in the first couple of rounds we
13 heard from grower groups, a bunch of small
14 growers who had chipped in through their
15 cooperatives to have access to that equipment.

16 So, it is just really hard to know how
17 to evaluate something where the people who are
18 doing it are so far away and don't even know we
19 are talking about it.

20 Colehour, do you want to --

21 MEMBER BONDERA: Yes. I think, Jean,
22 your question is important, but I think I am not

1 going to be able to address the scientific
2 explanations of the hazards of ethylene gas on
3 both human beings and the environment, but they
4 are pretty extensive.

5 So, I think the reality goes back
6 historically, that the use really is a question
7 of economics and farm size, and not whether or
8 not it is necessary. It is about like the
9 wholesale group points out, if we want pineapples
10 on the shelf 12 months of the year all over the
11 world, this is the kind of thing that is
12 required, is synthetic products to enable
13 organics to be able to achieve that.

14 And so, I think it is really a
15 question of what the approach to the topic is.
16 It is not at all essential for organic production
17 of pineapples. There is zero conversation about
18 that. So, if essentiality is a critical variable
19 for us to determine, pineapples do not need
20 ethylene gas. I mean, they naturally produce it.
21 You don't need to apply ethylene gas for uniform
22 ripening of pineapples in order to have organic

1 production. So, it is not that it is an
2 essentiality at all. It is just a business
3 question in terms of wanting the ripening at the
4 same times for the export market, et cetera.

5 So, I think that we have to factor in
6 all of the whole range of considerations when we
7 are looking at that. And I think that the point
8 that you bring up of ethylene gas' environmental
9 impacts and the difficulties with it I think are
10 critical for us to have considered seriously.

11 And I wish Harold were here to be able to address
12 it more thoroughly because I am not prepared to.

13 But I think that we can't factor out those
14 issues, either.

15 MEMBER SONNABEND: Lisa?

16 MEMBER DE LIMA: So, I think in one of
17 the older TAP reports, to Jean's question, that
18 the environmental impacts went back to how it was
19 produced. So that it was from hydrocarbon
20 feedstocks, so crude oil, if that is how it is
21 still produced. I mean, maybe that has changed;
22 I don't know.

1 MEMBER SONNABEND: Nick?

2 MEMBER MARAVELL: Yes, just a quick
3 observation. This is another good example of the
4 necessary versus essential, and the words of the
5 statute are "necessary". So, this is a difficult
6 one to consider.

7 MEMBER SONNABEND: Anything else?
8 Anyone else?

9 Colehour? And then, Paula.

10 MEMBER BONDERA: And I think your
11 point is well-taken, Nick. And excuse me,
12 because it is not necessary for organic
13 production, is all you need to do, because that
14 is reality. It is not.

15 Because I live in Hawaii and I have
16 pineapple production, and none of my neighbors
17 and myself, none of us use ethylene gas for
18 uniform ripening, which was not true when Hawaii
19 was a large pineapple exporting state and they
20 were large-scale production facilities.

21 MEMBER SONNABEND: Paula?

22 MEMBER DANIELS: All I was going to do

1 was point out there are two ways of concern as
2 well. Since we are trying to give notice to the
3 public, whoever it might be, you know, beyond the
4 ones in the room, that we have a concern about a
5 particular product or material, ingredient, that
6 I am just echoing the concerns about it for
7 discussion in September.

8 MEMBER SONNABEND: Those of you in the
9 audience who have any outreach to pineapple-
10 producing countries, if you could please
11 circulate this, you know, that people need to
12 speak up in the next round?

13 Okay. We are ready to move on. Well,
14 we discussed both uses of lignin sulfonate, I
15 think.

16 So, sodium silicate.

17 MEMBER DANIELS: I think that's me.

18 MEMBER SONNABEND: Yes.

19 MEMBER DANIELS: This is a sort of
20 liquid glass. It is a glass-like product, and it
21 is sometimes known by the brand-name Water Glass.
22 It is used in processing fiber, but, also, it

1 seems dominantly that it is used as a floatation
2 because it increased water density, so it is used
3 for floatation, it seems largely in the area of
4 pear handling to separate pears, so they can be
5 moved into packaging and transport more readily.

6 So, while it is classified GRAS,
7 Generally Recognized As Safe by the FDA, there
8 are some questions that were raised about
9 chemical interaction producing a high acidity if
10 it is accidentally mixed with lignin sulfates,
11 although that material is used for the same
12 purpose. So, it seems unlikely that that might
13 happen, but that is a cautionary note.

14 While it does dilute and depolymerize
15 quickly in the environment, it is considered an
16 inert. It is not biodegradable, and it is
17 classified as a water hazard in Germany, although
18 at a low level.

19 So, there are some potential
20 environmental impacts due to runoff from its use
21 or manufacture. It may increase soil acidity.
22 It may increase nitrogen concentration in the

1 soil. It may have an impact on the nitrogen and
2 phosphorous balance in aquatic environments,
3 which could have an impact on phytoplankton
4 diversity. And it also may increase pH levels in
5 aquatic environments.

6 So, we don't know of any known
7 alternatives from a material standpoint, but
8 because it is being used to minimize fruit damage
9 during the packing process, some of the
10 identified alternative handling practices would
11 require additional handling time.

12 One was described as distribution
13 versus dumping onto the conveyor or using padding
14 or lining on picking containers. In fiber
15 processing, an alternative is to avoid bleaching
16 because it has a role in that process.

17 So, we had some questions for
18 discussion which are presented up there or for
19 comment, asking for some comment on potential
20 cumulative impacts to soil health and aquatic
21 life and whether there is any recent scientific
22 information on that, and whether there are any

1 other practices for pear or tree fruit handling
2 that would be a reasonable alternative to this
3 for a wet dump. I think that is what it is
4 called.

5 So, in terms of public comment, there
6 was one citizen support -- it is classified as
7 citizen, but just a general I guess person versus
8 an organization. And then, opposition was
9 registered from Beyond Pesticides with a question
10 on health impacts on workers and the question
11 about whether there was a preservative effect on
12 pears.

13 That concludes my report.

14 MEMBER SONNABEND: Discussion?

15 Jean?

16 CHAIR RICHARDSON: All right, Paula,
17 I will you on the spot.

18 So, I don't understand how it works.
19 And that also uses the word "processing," and
20 yet, the section is floating agent and post-
21 harvest handling. And then, it has got this
22 phrase "fruit and fiber processing".

1 So, is it in the right section? Can
2 you describe to me what happens?

3 MEMBER DANIELS: Well, I can't comment
4 on whether it is in the right section. I don't
5 feel that was my decision.

6 But my understanding of how it works
7 is that it increases the water density. So, it
8 is added into a big container. It increases the
9 water density, and then, it is used as a
10 floatation. It is primarily in pears. I think
11 that is the industry that is most impacted or
12 that most uses this.

13 So, the pears float to the top, and
14 then, they are able to be scooped out and removed
15 onto conveyor belts and in other processes for
16 handling, and it minimizes damage because pears,
17 in particular, have delicate skins. That is my
18 understanding of how it is used.

19 CHAIR RICHARDSON: And then, the
20 fiber, what is the fiber?

21 MEMBER DANIELS: I forget that one.
22 I'm sorry. I would have to look it up. I forgot

1 that one.

2 Because it has this density, I think
3 it is used to separate. So, my recollection is
4 this is also used as a flocculation. So, it
5 increases the density of certain materials. So,
6 it helps those materials flocculate, in other
7 words, move to the top, so they can be skimmed
8 off and removed. So, I think that is what
9 happens in the fiber processing. It just
10 separates out different maybe sediments. It
11 might be sediments. But don't hold me to that
12 one.

13 CHAIR RICHARDSON: Thank you.

14 MEMBER SONNABEND: More discussion?

15 (No response.)

16 Okay. Back to Lisa.

17 DR. BRINES: Thank you.

18 We will move on to paragraph (m) and
19 take this one on its own. So, under Section
20 205.601(m) the listing is: as synthetic inert
21 ingredients as classified by the Environmental
22 Protection Agency, EPA, for use with non-

1 synthetic substances or synthetic substances
2 listed in this section and used as an active
3 pesticide ingredient in accordance with any
4 limitations on the use of such substances.

5 EPA lists four inerts of minimal
6 concern. In support of this review, there was a
7 Technical Report developed for a subset of EPA
8 List 4 ingredients under the category of
9 nonylphenol ethoxylates, or NPEs.

10 Thank you.

11 MEMBER SONNABEND: Thank you.

12 This one is mine.

13 Okay. Well, we talked a bit already
14 about the Design for Environment Program and how
15 we are attempting to work with them. They had
16 indicated early in the process that this
17 category, nonylphenol ethoxylates, would not
18 pass. And we decided, as the Subcommittee, that
19 we might as well start getting people ready for
20 this now. And so, the best way to do that seemed
21 to be to do a TR for them, make it clear from the
22 TR that there were alternatives, and the TR did

1 mention lots and lots of alternatives.

2 However, because we don't know exactly
3 what products they are in, we can't tell if a
4 particular alternative listed in the TR works for
5 the exact particular use that the formulators are
6 using it for.

7 So, we did ask the questions which we
8 were hoping the industry or the users of it -- I
9 don't mean the users of the products; I mean the
10 formulators of the products that have it in it --
11 to respond.

12 The questions were if these
13 alternatives were suitable for their product, so
14 they could start the reformulation process, and
15 then, would two years' notice from now or from
16 fall be sufficient time for them to reformulate
17 it and get it through the reregistration process?

18 We got no direct answers to those
19 questions. We clearly have trouble reaching this
20 component of the organic industry because, in
21 fact, say I make a horticultural oil and I happen
22 to be paying attention to OMRI. Well, my inert

1 ingredient's package is bought from a third
2 company which may be overseas, which is barely
3 paying attention to me, much less to OMRI, much
4 less to us. So, getting this information where
5 it needs to go is really very problematic.

6 We did receive a number of public
7 comments, and I am not quantifying them here. I
8 am just going to tell you the concerns raised.

9 One, this is happening way too slow,
10 and they wish they had banned them yesterday.
11 This is something I think most of us in the room
12 would agree with. It is very, very slow trying
13 to work through the government process.

14 Two, inerts aren't really inert, and
15 we really have to be scrutinizing them carefully
16 because they have a lot of unintended and many
17 negative effects. Well, we completely agree with
18 that one, too. At least inerts are not inerts or
19 they wouldn't be in there. And so, it is a
20 misnomer to call them inerts, but I am not going
21 to call them ancillary substances and pest
22 control materials, either.

1 (Laughter.)

2 And three, the NPEs are bad, and
3 people mistakenly thought this was a proposal
4 that is actually on the table, when it is not.
5 It says we are considering doing an annotation
6 change to restrict these.

7 Part of that consideration, though,
8 has to be, can we reach the desired community in
9 time to start the process rolling? I was hoping
10 we would do this by this notice and eventually
11 this will filter out to the people who need to
12 see it.

13 OTA and others questioned why we were
14 doing this when we should just let the regular
15 Design for Environment Program take its course.
16 And the reason was because we knew it would take
17 a long time to reach these particularly bad
18 actors. We knew they aren't going to pass, and
19 we do need to start the practice, the ball
20 rolling as soon as possible, to aim towards
21 getting these out.

22 So, I have understood from our talks

1 with EPA, because they have been trying to get
2 these out for a while, there aren't very many of
3 this class of materials used. I think our chart
4 of them had three or four different compounds,
5 but one thing, we don't know how many products
6 are used on or if those products all fall into
7 one generic group on our list. Like if only
8 coppers have them, only oils have them, or
9 whatever.

10 And all I can say is, as we proceed
11 with the Design for Environment, we are going to
12 take closer look, see if we can tease out some of
13 the information about what removing these would
14 do; also, talk to them about if there are other
15 of our groupings that aren't likely to pass their
16 program, so we should take steps to review them
17 ourselves early, and try to figure a way into
18 pushing this into further action.

19 So, discussion on inerts?

20 Jean?

21 CHAIR RICHARDSON: So, I am doing
22 iodine, as you know. I'm talking about that

1 tomorrow. Of course, we have this similar issue
2 with the NPEs in all the teat dips.

3 Similarly, we had been thinking that
4 we would be conserving, doing some sort of an
5 annotation to limit the NPEs. But what it appears
6 to be is the berry industry has already
7 recognized that this is a serious issue, and they
8 are already taking huge steps to radically
9 reformulate.

10 So, just thinking of how long, whether
11 it is the EPA that takes the steps or whether it
12 is your Subcommittee that takes the steps to
13 start the ball rolling, I think that the word is
14 out on the street.

15 But the more you can put into the next
16 template in terms of spelling all that out, I
17 think that we will not only begin to be a
18 catalyst for that change, but it may end up that
19 it is not necessary for us to do it. The EPA
20 might even jump in because there are some
21 international implications here as well as within
22 the country.

1 MEMBER SONNABEND: Well, it was all
2 that we could do to get the TR back and posted,
3 which was just a few days before our deadline for
4 turning this in.

5 And so, while I have extensively read
6 the TR since then, for this, we had to keep it
7 fairly skimpy without the information from the TR
8 thoroughly digested.

9 Any more discussion?

10 Mac?

11 MEMBER STONE: So, excuse me if you
12 all talked about this Monday morning before I got
13 here, but we lost a wealth of institutional
14 knowledge on this with the rotation of the Board.
15 But am I correctly remembering that it
16 technically listed 4 or just 3(a)? And do we
17 need to change nomenclature in this situation?

18 MEMBER SONNABEND: We can't change
19 nomenclature now because we can't do it at
20 sunset, and we don't have a substitute program in
21 place to renew inerts. So, List 3 has never been
22 allowed. This is just List 4. There is a list

1 4(a) and a List 4(b) in the old schematic, and
2 that is now being replaced.

3 The new system, I can never remember
4 the exact categories. It is exempt from
5 tolerance, and there are certain categories.
6 But, hopefully, in our process of the work the
7 Design for Environment, we have been told that
8 some of the inerts from the list that we gave
9 them are already on their list and they have
10 already reviewed a good chunk of them. But there
11 is still a good chunk that are unknown as far as
12 their program is concerned. So, they will have
13 to set up a program to review them.

14 MEMBER STONE: And the Inerts Working
15 Group is still active, just a new name?

16 MEMBER SONNABEND: Yes. Paula has
17 joined the Inerts Working Group, along with
18 Emily, Lisa, and two representatives of the EPA.
19 And I imagine in the future we will have someone
20 from Safer Choice, is what it is called, joining
21 us.

22 More discussion?

1 (No response.)

2 All right. I realize that we are at
3 time for the meeting. We have one more 601 and
4 then all of 602 to go. Are we charging through?

5 Okay. Lisa?

6 DR. BRINES: Thank you.

7 The last substance for consideration
8 under 205.601 is under paragraph (o) as
9 production aids, microcrystalline cheesewax, CAS
10 No. 64742-42-3, 8009-03-8, and 8002-74-2, for use
11 in log-grown mushroom production. Must be made
12 without either ethylene, propylene copolymer or
13 synthetic colors.

14 Thank you.

15 MEMBER SONNABEND: Colehour?

16 MEMBER BONDERA: Okay. Thank you.

17 Well, let's see what I can add to this
18 reality. I guess I will just go through briefly
19 the background information and then summarize up.

20 So, microcrystalline cheesewax is used
21 to seal the plug or the sawdust spawn that is
22 used to inoculate logs for growing mushrooms.

1 Just so that is straight-up.

2 It is a petroleum product. There are
3 all of those annotated requirements, but it is a
4 petroleum product. It is not used in very big
5 quantities because it is just sealing the spot so
6 the mushrooms can spawn in the log.

7 So, there is a natural or a soybean-
8 based, soy-oil-based available option. That was
9 part of our questioning. I guess, do the
10 questions appear in front of me? I guess they
11 are not there, but they were: is soy wax non-
12 synthetic and is soy was sufficiently available
13 to meet the needs of producers who grow organic
14 mushrooms on logs? Yes, those are there, but
15 that is fine. There they are.

16 So, I think the question at hand
17 didn't get a lot of input from the public. I
18 think there wasn't strong support at all, and
19 there wasn't strong opposition because there
20 really was basically nearly none. There was some
21 commentary related to that the soy oil option
22 should be pursued.

1 I think that is where we are sort of
2 left with the process, is the fact that the non-
3 petroleum alternative is available --

4 CHAIR RICHARDSON: A quick point of
5 order. But over there in the far corner you can
6 see Harold.

7 MEMBER BONDERA: Oh, sorry. Excuse
8 me.

9 (Multiple people saying, "Hi,
10 Harold.")

11 MEMBER AUSTIN: Hello, everybody. Hi,
12 everybody. Wish I was there with you, but I am
13 sure I have left you all in good, capable hands.

14 MS. BROWN ROSEN: Get well soon,
15 Harold.

16 MEMBER AUSTIN: Keep up the good work,
17 everybody.

18 CHAIR RICHARDSON: All right,
19 Colehour.

20 MEMBER AUSTIN: Thank you all for your
21 well wishes.

22 (Applause.)

1 MS. ARSENAULT: Hey, Harold. Tell
2 Judy thank you for all of us.

3 MEMBER AUSTIN: Now you guys need to
4 get back to work.

5 (Laughter.)

6 MEMBER BONDERA: Yes, yes. Thank you.

7 MEMBER AUSTIN: Thanks, everybody.

8 MEMBER BONDERA: So, where I was was
9 something about soy wax. So, getting it listed
10 would be the next logical step in terms of
11 replacing the petroleum product.

12 And so, I think that probably the
13 conclusion, it makes sense that we would have the
14 microcrystalline cheesewax remaining on the list
15 until the soy wax is listed and is sufficiently
16 available, which I don't really -- like I
17 suggested, we didn't get the input to say that it
18 is sufficiently available and, like I just said,
19 it is not currently even listed. And therefore,
20 we can't be switching to it instantaneously.

21 But I think that is a summary of the
22 conclusions of the information put forth. I

1 don't know if anybody has any additional thoughts
2 or comments on this.

3 Thank you.

4 MEMBER SONNABEND: Discussion?

5 Mac?

6 MEMBER STONE: I'm not that familiar,
7 but it seems like beeswax was considered, but it
8 has potential for disease or something to come in
9 with it, that they don't like it. Is that right?

10 MEMBER SONNABEND: Boy, we heard input
11 when it got originally put on the list, but it
12 was so long ago I cannot remember.

13 MEMBER STONE: Yes. Sorry.

14 MEMBER SONNABEND: Anyone else?

15 (No response.)

16 All right. Done with 601.

17 Just a few more to go on 602.

18 (Applause.)

19 Lisa?

20 DR. BRINES: Thank you.

21 I will read the total of Section
22 205.602 materials as a group. These fall under

1 non-synthetic substances prohibited for use in
2 organic crop production.

3 (a) Ash from manure burning.

4 (b) Arsenic.

5 (d) Lead salts.

6 (e) Potassium chloride, unless derived
7 from a mine source and applied in a manner that
8 minimizes chloride accumulation in the soil.

9 (f) Sodium fluoaluminate.

10 (h) Strychnine.

11 And finally, (i), tobacco dust,
12 nicotine sulfate.

13 Thanks.

14 MEMBER SONNABEND: Okay. The first
15 one is ash. I believe that is Colehour.

16 MEMBER BONDERA: Yes, I get to do (a)
17 and (i).

18 So, ash from manure burning. Like the
19 background says, it was placed on the list, on
20 205.602, because of its incompatibility with
21 organic production.

22 I'm quoting from it, but burning these

1 materials is not an appropriate method to use to
2 recycle organic waste and would not be considered
3 a proper method in a manuring program because
4 burning removes the carbon from these wastes, and
5 therefore, destroys the value of the materials
6 for restoring soil organic content.

7 Burning as a disposal method of these
8 materials would, therefore, not be consistent
9 with the various sections. So, that is in the
10 preamble to the proposed rule.

11 I don't think that there is any strong
12 feelings in terms of that somehow ash from manure
13 burning should be permitted, although I think, to
14 carry on with what I was saying, if we are going
15 to have soil fertility in Tilth, we really can't
16 be burning the products, the manure that is going
17 to be created in that.

18 I did hear that we have a petition to
19 consider some new source and means of using
20 manure ash, but that is not on the table at this
21 time. I think it would be hard for me to imagine
22 how such a thing could be justified. But I think

1 you never know.

2 So, my sense is that, given no contest
3 and not very much content on the subject at all,
4 that it would seem like it should remain as a
5 not-allowed material.

6 Thank you.

7 MEMBER SONNABEND: Thank you.

8 Discussion?

9 (No response.)

10 Okay. I imagine these are going to go
11 quickly because most of these are on here for a
12 reason that we don't object to.

13 (Laughter.)

14 All right. The next one is --

15 MEMBER THICKE: That's me.

16 MEMBER SONNABEND: Okay. Thank you,
17 Francis.

18 MEMBER THICKE: Actually, the next
19 two.

20 MEMBER SONNABEND: Okay.

21 MEMBER THICKE: Neither arsenic or
22 lead salt had any comments that I could find

1 anywhere. One person had them listed on the
2 bottom of another comment, but no comments about
3 that.

4 Basically, they are toxic materials
5 that are natural, and there is no reason to take
6 them off the list that I know of. Like anybody
7 has said, we should farm.

8 Unless anybody has any comments, I
9 don't know why we can't just consider them both
10 done.

11 MEMBER SWAFFAR: Okay. Any comment?

12 (No response.)

13 Okay. The next three of them are
14 mine.

15 Potassium chloride. Potassium
16 chloride is one of those odd ones that is
17 prohibited but not prohibited.

18 In one of our more arcane NOSB
19 meetings, when we discovered that things had to
20 be presented this way, we were sort of horrified.

21 This is one of those ones that it is
22 sort of unclear how much of it is still in use in

1 the field. And so, we did solicit information
2 back. We did get a wide variety of responses
3 from MROs, primarily, and certifiers, indicating
4 that it is used in quite a few products.

5 Now we didn't ask the question on how
6 the annotation is being enforced about minimizing
7 chloride accumulation, and we probably should
8 have in retrospect. But we also didn't get any
9 comments that this annotation was the wrong one
10 to have or even that it should be completely
11 prohibited. So, I think we will see when we come
12 to the next round what happens.

13 Sodium fluoaluminate is on the list as
14 a non-synthetic prohibited. I understand that
15 the mine where they were mining it has been
16 closed for some years now. It was in Greenland.
17 But there is no point in doing anything with
18 this, in case they ever open it up again. And we
19 didn't receive any comment either way on this
20 that I recall.

21 Strychnine. Is strychnine mine? Yes.

22 Strychnine is for rodent control, but

1 it is also very toxic to a wide variety of other
2 living things. We received no public comment
3 that we should change its status in any way.

4 So, any discussion on those three?

5 (No response.)

6 Okay. Moving on to the last one,
7 tobacco dust, which is Colehour.

8 MEMBER BONDERA: I apologize. I
9 wasn't quite ready for it to go that fast. You
10 said fast, and I was thinking it was going to be
11 a few more minutes. But, yes, I will wrap you
12 all up.

13 Tobacco dust, nicotine sulfate, again,
14 not only not allowed, but it is no longer even
15 for sale in the United States. Keeping it on the
16 list makes sense, just so that people who are
17 growing tobacco can't be creating dust that they
18 are somehow making use of, because it is a very
19 toxic product, a nice, effective toxic pesticide.

20 So, I think there were really no
21 thoughts or comments for me to want to share from
22 people saying that we really need to change this

1 listing or delist it.

2 I think, unless somebody has something
3 to add that I have missed, I think that is all
4 there is to share.

5 MEMBER SONNABEND: Thank you.

6 Is there any discussion on tobacco
7 dust?

8 (No response.)

9 Okay. I think this concludes the
10 Crops Subcommittee presentation for today.

11 (Applause.)

12 CHAIR RICHARDSON: Thank you very
13 much, everyone.

14 This meeting is recessed until
15 tomorrow morning at 8:30.

16 Thank you.

17 (Whereupon, at 5:49 p.m., the meeting
18 adjourned for the day, to reconvene the following
19 day, Thursday, April 30, 2015, at 8:30 a.m.)
20
21
22

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Spring 2015 Meeting of the
National Organic Standards Board

Before: USDA

Date: 04-29-15

Place: La Jolla, CA

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2015 MEETING

+ + + + +

THURSDAY
APRIL 30, 2015

+ + + + +

The Board met in the Ballroom Salons
A-D, La Jolla Marriott, La Jolla, California, at
8:30 a.m., Jean Richardson, Chair, presiding.

PRESENT

JEAN RICHARDSON, Chair
TRACY FAVRE, Vice Chair
HAROLD AUSTIN, Secretary*
CARMELA BECK
COLEHOUR BONDERA
TOM CHAPMAN
PAULA DANIELS
LISA de LIMA
NICK MARAVELL
ZEA SONNABEND
ROBERT "MAC" STONE
ASHLEY SWAFFAR
JENNIFER TAYLOR
FRANCIS THICKE
C. REUBEN WALKER

*participating via Skype

ALSO PRESENT

MICHELLE ARSENAULT, Advisory Board Specialist

LISA BRINES, List Manager, National Organic

Program

CHARLES BROWN, Brownseed Genetics

EMILY BROWN ROSEN, Technical Support

MATTHEW DILLON, Clif Bar Family Foundation

MAC EHRHARDT, Albert Lea Seed

MILES MCEVOY, Designated Federal Officer,

Agricultural Marketing Service, Deputy

Administrator

JAMES MYERS, Department of Horticulture, Oregon

State

JESSICA WALDEN, Materials Specialist

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1 P-R-O-C-E-E-D-I-N-G-S

2 (8:31 a.m.)

3 CHAIR RICHARDSON: Welcome to the
4 fourth day of our marathon meeting. I hope you
5 were all able to get out to a nice dinner and
6 enjoy some of that lovely warm air. For some of
7 us we have to go back probably to snow, so, you
8 know, we're bracing ourselves here.

9 So, this morning we will have the
10 Materials Subcommittee give their report, which
11 will include the Seed Purity Panel, these four
12 gentlemen in front of us. And I apologize for
13 them that their backs are to the audience, but
14 you know how these things go. They're nice guys.
15 I can see their faces, they look really good, and
16 I'm sure you'll get the opportunity to talk with
17 them, if you would like to, at the break.

18 So -- yes, Calvin?

19 MEMBER WALKER: Thank you, Madam
20 Chair. And we are certainly delighted that
21 everybody's here. This is our last day, we hope
22 things go well. And for the Seed Panel

1 Committee, we're definitely glad that you're
2 here. If you feel more comfortable, maybe two of
3 you can face the audience, just in case you may
4 say something that -- it may create a physical
5 reaction, so.

6 What we'll do next, we'll turn
7 everything over to Ms. Zea Sonnabend and she will
8 moderate this session. Zea.

9 MEMBER SONNABEND: Okay. Welcome to
10 the Expert Seed Panel at the NOSB. We have been
11 considering the issues of prevention strategies
12 to use to keep GMOs out of organic, as well as
13 the issues of seed purity and how important that
14 is to organic.

15 And, Michelle, do we have the -- okay,
16 she's working on it.

17 To this end, we have invited four
18 knowledgeable people from different areas of
19 expertise to speak to us today to address some of
20 this issue. Our Subcommittee prepared six
21 questions in advance and we gave them to our
22 panelists to ask each one to address the ones

1 that they feel comfortable. They don't have to
2 deal with all six, but these are some of the
3 things that we're exploring in this issue, and
4 they are parallel but not the same as the
5 questions posed in our discussion document for
6 preventive strategies.

7 And so we will have them each give a
8 short presentation of their perspective on some
9 of these issues, and then we will open it to the
10 Board to ask further questions of the panelists.

11 So, I am going to read their bios all
12 at once now, and then we will launch right in.

13 So, our first presenter will be
14 Matthew Dillon, the Director for Agricultural
15 Policy and Programs for Clif Bar and Company, a
16 leading manufacturer of nutritious and organic
17 foods. He is the Director of Seed Matters, an
18 initiative of Clif Bar Family Foundation, to
19 improve organic seed systems.

20 In his role, Matthew is the company's
21 liaison with state and federal officials on
22 organic policy issues. He works with leaders in

1 the organic industry, NGOs and academia. At Seed
2 Matters, Matthew directs an effort to support
3 projects to conserve crop diversity, protect
4 farmers' roles as seed innovators, and re-
5 invigorate public seed research.

6 Prior to joining Clif Bar, Matthew was
7 the Founding Director of Organic Seed Alliance.
8 He launched the nation's first organic plant
9 breeding research and seed production education
10 programs.

11 In 2012, he was appointed to serve on
12 the USDA National Genetic Resource Advisory
13 Council, otherwise known as NGRAC, which is a FACA
14 board, like the NOSB, that advises the Secretary
15 on strategies toward maintaining agricultural
16 plant diversity and strengthening public sector
17 of plant breeding.

18 Then we have Dr. James Myers,
19 Professor of Vegetable Breeding and Genetics,
20 Department of Horticulture, Oregon State
21 University. Dr. Myers holds the Baggett-Frazier
22 Endowed Chair of Vegetable Breeding and Genetics

1 in the Department of Horticulture at Oregon
2 State. He has been there for 19 years.

3 He works on a number of crops,
4 including dry and snap beans, edible pod pea,
5 broccoli, tomato, winter and summer squash, and
6 sweet corn.

7 Prior to OSU, he bred dry beans at the
8 University of Idaho Kimberly Research Station for
9 ten years and he released 13 dried bean
10 varieties.

11 His main interest has been to improve
12 vegetable and field crop varieties for disease
13 resistance, human nutrition, and taste and
14 flavor. He's Project Director for the Northern
15 Organic Vegetable Improvement Collaborative and
16 recently served on the Oregon Governor's Task
17 Force on Genetically Engineered Agriculture.

18 And it doesn't say this on here, but
19 he's also the co-author of the book on organic
20 plant breeding with Edith Lammerts Van Bueren, of
21 the Netherlands, and is the author of the paper
22 that was referred to in the public comment that's

1 available through the Organic Seed Alliance
2 website about the uses of cell fusion in Brassica
3 breeding.

4 The next one would be Mac Ehrhardt.
5 Mac is a third generation owner of Albert Lea
6 Seedhouse in Albert Lea, Minnesota. It's a
7 family owned and operated seed company that has
8 been providing field seed to farmers in the
9 region and nationwide since 1923.

10 He grew up in the seed business and
11 received his formal ag education at the
12 University of California, Davis. He's worked
13 full time at Albert Lea Seedhouse since 1991 and
14 was instrumental in guiding its growth, including
15 the launch of certified organic field seed in
16 1996. Albert Lea is one of the largest suppliers
17 of certified organic grain and forage seed in the
18 nation.

19 Lastly, Charles Brown, who started a
20 company called Brownseed Genetics, in 2000, so
21 that he could focus full-time on corn inbred
22 research and development. He had founded the

1 retail portion of his business in 1979, called
2 Brown Seed Farms, which is a seed company
3 distributing corn, alfalfa, soy beans, and field
4 seed.

5 After that company had grown 400
6 percent in market capitalization, he sold the
7 retail portion in 2006 to focus on breeding.
8 Brownseed Genetics has a focus on early maturity
9 and enhanced quality traits, utilizing classical
10 breeding techniques in marker assisted selection.
11 Brownseed has grown to be a significant
12 independent early maturity corn breeding program
13 in the United States, has released a number of
14 inbred lines to industry, and it has research
15 presence in five foreign countries.

16 Charles has been a long-time member of
17 the American Seed Trade Association and the
18 Minnesota and Wisconsin Crop Improvement
19 Associations. He's active in the preservation of
20 non-GMO corn germplasm.

21 Some of his other industry
22 contributions has been he presented before the

1 NGRAC committee on corn germplasm. He has been
2 an AFRI/NIFA panel reviewer for grant proposals
3 involving plant breeding. He was the ASTA
4 Organic Seed Committee chair, and he presented at
5 the AC21 on coexistence issues.

6 So, without further ado, I'm going to
7 let Matthew pick us up.

8 MR. DILLON: Thank you, Zea. And thank
9 you to the National Organic Standards Board for
10 this opportunity to engage in a discussion with
11 you.

12 It's a daunting task and I applaud
13 your efforts for taking up this issue. It is a
14 very complicated issue, as you all know by now.
15 And I believe one of the common themes that
16 you're going to hear from my fellow panelists
17 today is that, given the complications, it is
18 important to be cautious, it's important to
19 engage in due diligence and data collection, and
20 it's important to go slow.

21 We often say that seed work is slow
22 work. It takes seven, ten, twelve years to breed

1 a new variety and get it into the commercial
2 marketplace. Sometimes longer. Seed work is
3 slow work and we have to be deliberate in our
4 approach to seed, whether it's in breeding and
5 production or in our decisions regarding
6 regulations.

7 My fellow panelists and I talked a
8 little bit before the session yesterday, and
9 through e-mails over the last couple of weeks,
10 and really decided that, given our different
11 areas of expertise, it would be good for me to
12 start on a kind of broad overview of the
13 challenges in the seed sector as they pertain to
14 this issue of contamination from genetically
15 engineered traits.

16 And my colleagues here today will go
17 more down into the numbers and the challenges
18 that are faced every season by organic plant
19 breeders and seed producers, both conventional
20 and organic.

21 I know that there was very little
22 public comment on this issue when the NOSB

1 provided this guidance. And that does not
2 surprise me, because seed really is the forgotten
3 first child of agriculture.

4 Most consumers, most food companies,
5 most retailers, and an unfortunate number of
6 farmers, are either completely unaware or choose
7 to ignore the role that crop genetics have in the
8 sustainability of food and fiber production, the
9 nutritional value, and other attributes that seed
10 can provide to our food crops and fiber crops.

11 Seed is forgotten. The seed industry
12 is very hidden behind big walls of intellectual
13 property and consolidation. And in fact,
14 information in seed itself is very hidden. You
15 cannot look at a corn seed and know if that seed
16 is organic, conventional, or genetically
17 engineered.

18 That information is not available from
19 simple visual view. You can also not know the
20 breeding methodologies and pedigree of that seed,
21 if it contains any distinct genetic or allelic
22 diversity from the thousands of other corn seeds

1 in a pile, or what intellectual property
2 restrictions that seed might carry.

3 The Board asked us six questions on
4 the guidance document. And I'm going to take the
5 last question first, because it really is the
6 most important question and it's also the
7 simplest to answer.

8 The question is this: "In your
9 opinion, are organic prevention measures enough
10 to enable organic farmers to coexist with
11 neighboring conventional farmers, with or without
12 seed testing?" The answer is no.

13 The answer is that, regardless of
14 testing or not testing, coexistence is not so
15 achievable by simple guidelines. Life and
16 biology are fluid and permeable and no such
17 measures will give the growers, consumers, or the
18 market an assurance that final product can meet a
19 purity standard of zero or 0.1 or 0.9.

20 No, you cannot create coexistence
21 through these guidelines. I think that's
22 important to recognize. In fact, I would say

1 it's almost akin to standing in front of a
2 blazing fire and trying to put that fire out with
3 a wet sponge. A few droplets may fall from that
4 sponge and diminish the fire in some minor way,
5 but you're also at risk, potentially, of that
6 sponge drying and igniting your very hands.
7 So we must proceed with caution, even as we are
8 forced to proceed, because we do have to address
9 this issue.

10 There are two structural issues that
11 must be addressed before we can get anywhere near
12 approaching zero to low presence of GE traits in
13 organic food or organic seed.

14 The structural issues are, one, a
15 broken federal regulatory system for evaluating,
16 monitoring, and oversight of genetically
17 engineered crops. We all know that. We all know
18 that it's broken and so I will not belabor that
19 point today. It's not the purpose of this
20 meeting.

21 Number two, structurally, is a
22 dominated and concentrated seed system that is

1 also broken, perhaps even more broken than the
2 regulatory system and more broken than the food
3 system. I want to focus my comments and answer
4 your other questions that you pose, including
5 farmer-saved seed and threshold through this lens
6 of a broken seed system.

7 Let me start with a concrete example
8 that pertains to the issue we have in front of us
9 today: cotton. You could substitute alfalfa
10 instead of cotton for most of what I'm about to
11 say, but the situation would be even worse, and
12 rather than be even more of a pessimist, I
13 thought I'd give you a slightly less worse crop,
14 and start with cotton instead of alfalfa.

15 There is one plant breeder in the
16 United States working on cotton for organic
17 farming systems: Dr. Jane Dever from Texas A&M
18 University. I've gotten to know Jane, both
19 because we fund her breeding program and one of
20 her graduate fellowships through Seed Matters, but
21 also because Jane and I serve on the National
22 Genetic Resource Advisory Council together as

1 advisors to Secretary Vilsack.

2 Before returning to the public sector
3 to work on non-GMO and organic cotton, Jane
4 worked at Bayer CropScience breeding biotech
5 cotton. She knows better than anyone in the
6 industry that even in a primarily self-
7 pollinating crop -- cotton is a crop that
8 primarily shares pollen via self-pollination and
9 genetics via self-pollination -- there is gene
10 flow. Contamination happens.

11 I've been learning a lot from her
12 about that. She's actually in Burkina Faso right
13 now, a major cotton producing country that is
14 certified by Ecocert, a French certifier.
15 And this very day and yesterday, they were
16 discussing arbitration procedures for a 0.9
17 percent threshold that Ecocert holds Burkina Faso
18 to.

19 And her question to the administrators
20 of Ecocert were: "Would you occasionally have a
21 1.2 percent level of contamination, or would you
22 have no organic cotton at all?" Because that is

1 the question you face. The choice is that
2 simple. If we set thresholds through the NOP,
3 we, too, must be prepared for this conversation
4 and this simple, but awful choice: Organic with
5 low levels, but above what some may see as ideal,
6 or no organic crops at all in certain key crops.

7 To stick with cotton, in the United
8 States last year, we saw an increase of 14
9 percent in organic cotton acreage. Fourteen
10 percent increase in acreage. No other crop that
11 I know of in organic has double digit growth in
12 acreage. We all wish we were seeing double digit
13 growth in acreage in corn, soy, wheat, oats,
14 vegetables, animal feed. Cotton: 14 percent
15 increase. One of the few crops that has seen
16 that kind of good news.

17 It's good for the fiber sector, it's
18 good for dairies that use the seed for feed.
19 It's good for consumers who choose to cook with
20 cotton oil. Conventional cotton is one of the
21 most toxic crops grown. Agrochemical-intensive,
22 bad for soil, bad for microorganisms in the soil,

1 for water, for farm workers and the health of our
2 planet.

3 So, how many organic seed companies
4 are serving this boom in the U.S. organic cotton
5 market? Zero. There are no companies producing
6 organic cotton seed. How many conventional seed
7 companies are serving this market? Last year,
8 two. In the coming year, that number is likely
9 to drop to one, as one of the two has been bought
10 by a larger competitor and will be consolidated
11 into a primarily biotech program.

12 Would any spinach, tomato, corn
13 producer be happy with one seed option? Not
14 likely. But one is better than none, and none is
15 what the cotton sector could have if we rush into
16 thresholds without cautious data collection and
17 discussions.

18 Cotton genetics are under consolidated
19 ownership, primarily with large players such as
20 Bayer and Monsanto. This is unlikely to change
21 in our lifetimes. That is a reality. Unless the
22 Department of Justice and the USDA take back up

1 the ball they dropped on antitrust investigations
2 in seed, this is unlikely to change. And they
3 are unlikely to take it back up after already
4 having had an investigation, having heard from
5 thousands and thousands of farmers that there is
6 a problem with antitrust in seed, but still doing
7 nothing.

8 The situation is not likely to change.
9 Development of an organic cotton seed market is
10 going to take decades. One of the graduate
11 students we fund through Seed Matters in organic
12 plant breeding has plans to start such a company,
13 so there is some hope. But solutions in seed,
14 again, are slow solutions by the very nature of
15 the product that we are developing.

16 So, one company. Discussions I have
17 had suggest that that remaining company, All-Tex,
18 would likely stop producing non-GMO conventional
19 cotton for the organic market due to risk.

20 Serving such a small market, they
21 simply have to know that that market will buy
22 their product -- they simply have to know that

1 the market will always buy their product if it is
2 of reasonable quality, including trueness to type
3 or genetic purity.

4 The industry standard for trueness to
5 type in most traits in cotton is 98 percent.

6 Trueness to type: 98 percent; or allowable off-
7 types: 2 percent. Many of those off-type traits
8 have a phenotypic expression. That is, you can
9 visually look at the plant with the unwanted
10 traits and see those in the field and rogue them
11 out. That is not the case for genetically
12 engineered traits, like herbicide resistance or
13 BT.

14 The challenges of roguing unwanted
15 transgenic traits out of the field are not
16 challenges, they are impossibilities at the field
17 level.

18 So, what of starting with clean
19 breeder stock or foundation seed stock? Yes,
20 just as in corn, this is a possibility, but,
21 again, where does a seed producer get their
22 genetics from in cotton or corn? You primarily

1 lease them from the dominant breeding companies,
2 the Big Three, the biotech firms that, one, don't
3 really care about your thresholds in market and
4 so aren't going to reveal data on contamination
5 even if they are testing.

6 And, two, they make you the lessee,
7 the company that wants to lease their parent
8 lines and produce the seed, they make you sign
9 material transfer agreements that do not allow
10 you to test or use it for any purpose other than
11 producing a commercial seed crop.

12 Now, I hear there has been some gains
13 in this in corn, and Charlie is going to address
14 this, but there is not in cotton and there is not
15 in other sectors.

16 So, do we want organic cotton or do we
17 want an ideal? An ideal that will drive organic
18 cotton production to international markets
19 because we can't meet the threshold in the U.S.
20 Do we want organic corn or do we want an ideal
21 that continues to drive organic corn production
22 more and more to Eastern Europe to get low level

1 or no level detection of GE corn, as is already
2 the case?

3 What do consumers want? What do
4 organic farmers want? What is best for the
5 water, the soil microorganisms, bio-diversity and
6 farm worker health here in rural America?
7 Imperfect organic or no organic in key crops?

8 I want to be clear: I'm not saying we
9 should do nothing. And I'm not saying we
10 shouldn't consider testing in thresholds and
11 starting with conventional seed. I am saying
12 that we have to be cautious. Look not only at
13 this issue in terms of crop biology and
14 reproduction in gene flow, but also in terms of
15 the viability and lack of viability in the seed
16 sector.

17 Corn is actually one of the most
18 viable seed sectors for organic. But in Organic
19 Seed Alliance's 2014 survey of organic crop
20 producers, it showed that more than one-third of
21 organic producers rely on conventional corn seed.
22 There still is not enough organic corn seed even

1 in that market.

2 So, we have to consider the
3 ramifications of these thresholds on seed
4 producers serving organic and how many would
5 potentially leave the marketplace. The solution
6 -- because I think we do need to get to solutions
7 -- is to spend more time on data.

8 And, in fact, there are multiple
9 efforts and initiatives underway in the USDA for
10 this purpose. And so the recommendations of NOSB
11 really should be delayed until some of that data
12 collection comes in and we have it.

13 I'm involved in some of those
14 initiatives through my role in the National
15 Genetic Resource Advisory Council. I wish that I
16 could talk openly about the progress and
17 recommendations that we have underway, but I've
18 been told by USDA I need to wait, understandably,
19 until the proposals and reports have been vetted
20 and final approval is given. I will share as
21 much as I can today about three, and wrap up
22 after that.

1 First of all, the Agricultural
2 Research Service of the USDA has, right now, a
3 proposal underway for revising and updating
4 agency policies on practices for handling GE
5 traits, and the unintended presence of those
6 traits, in USDA ARS breeding crop stock and in
7 our gene bank collections, a primary source of
8 seed for plant breeders.

9 The procedures and the practices focus
10 on the major five crops and they encompass a
11 variety of elements. One, a well-documented
12 review in accessible best management practices
13 for maintaining seed purity, both in breeding and
14 gene bank programs. Two, testing for purity at
15 critical control points. Three, mandatory purity
16 testing of new varieties or enhanced germplasm
17 before formal release. Four, guidelines for
18 mitigating the effects of unintended presence of
19 GE traits in breeding stocks and the gene banks.
20 And, five, communication strategies for
21 disseminating information.

22 This proposal is under review by our

1 NGRAC Council at this moment before moving it on
2 to the NAREEE Board, the National Agricultural
3 Research Extension and Education and Economics
4 Advisory Board, and then on to the Secretary.

5 And while I can't speak to specifics,
6 I do think that ARS approach to practices in
7 testing and tolerance, which are addressed in
8 that proposal, are highly pertinent to this
9 conversation. Based on what I do know, that
10 proposal should be finalized some time later this
11 summer to the National Genetic Resource Advisory
12 Council. We have just submitted a report to
13 NAREEE that is under review before going to the
14 Secretary.

15 We are addressing the ongoing
16 evaluation of the pool of commercially available
17 non-GE and organic seed. Again, availability of
18 these seed, non-GE and organic, are very
19 pertinent to the discussion of thresholds,
20 because if thresholds lower what is already a low
21 commercial pool, we have problems.

22 We're also identifying market needs

1 for producers serving these GE-sensitive markets.
2 A few other tasks in that report that pertain to
3 this committee. But I want to say that, while it
4 should be out in a month or two, I can say that
5 the recommendations and discussions that we have
6 had around testing and thresholds are strongly
7 coupled to responsibilities and costs, including
8 the responsibilities of the GE developer and
9 provider for testing and ramifications of market
10 loss. We are strong in those recommendations,
11 unanimously as a Council.

12 Third, the USDA's Economic Research
13 Service is conducting a study that includes
14 producer surveys on the economic implications of
15 coexistence, and we really do need to take time
16 to let ERS finish that survey, as, again, it will
17 provide important data. We know seed is a
18 vector, but we also know that there are many
19 others.

20 Here is the reality. None found in
21 10,000 is not workable, as you will hear from
22 others on the panel. None found in 3,000 is

1 probably not workable in most crops. 0.1 is
2 absolutely unworkable. 0.9 is doable sometimes.
3 But we need to be prepared for the sometimes when
4 it's not, and the ramifications of a bad pollen
5 event and a bad season, as we had 2013, when corn
6 growers who plant in isolation of time
7 experienced an extended time window of
8 pollination for their GE counterparts, and GE
9 corn pollen flooded into the conventional and
10 organic fields.

11 Are we ready to tell organic corn,
12 soy, alfalfa and cotton producers that they need
13 to find a new crop or go back to conventional
14 farming? That is the question we have to always
15 keep in the forefront in this discussion.

16 A reminder that creating too high of
17 a bar really can diminish grower options in seed
18 and restrict access to optimal genetics, putting
19 these growers at a competitive disadvantage and
20 potentially restricting not just the growth of
21 the organic market, but the stability of organic
22 acreage today.

1 Organic with low presence is better
2 than no organic at all, from the perspective of
3 ecological impact, farm worker health, and
4 benefits to rural economies. Our ideal desires
5 should not hold us hostage, should not keep us
6 from the benefits of an imperfect system.

7 I desire for Citizens United to go
8 away, but it exists. Does that mean I give up
9 working to improve democracy, government
10 agencies, regulations, and laws? Do I stop
11 voting, do I ignore even highly imperfect
12 benefits we have in our current democratic
13 system? Of course not. None of us do. We work
14 towards the ideal, but we have to live in the
15 reality, even as we aim to improve it.

16 I think the information provided by my
17 fellow panelists today will help provide some
18 groundwork and pathways for further discussion
19 and, again, a call of caution for any immediate
20 action. Thank you.

21 MEMBER SONNABEND: Okay. Michelle,
22 do you have Dr. Myers' presentation? Okay.

1 DR. MYERS: Thank you, Zea, for
2 allowing me to address the Board today on this
3 matter of seed purity.

4 I have a slightly different
5 perspective, coming from Oregon. There is
6 certainly a different mix of genetically
7 engineered crops in the state. Seed production
8 is very important.

9 If you take the Willamette Valley,
10 where I'm located, there are about a million
11 acres that are farmable, and maybe half of those
12 are in seed crops. So, you know, in terms of the
13 GE type of crops that we see in the Valley, sugar
14 beets is a major one. And that's sugar beets
15 seed production, in our case, which is different
16 than anywhere else in the U.S.

17 There is a little bit of silage corn
18 that is grown and that sometimes is a source of
19 contamination for our fairly large sweet corn,
20 processing sweet corn production that we have
21 there.

22 We have had considerable discussion

1 about things like canola, and canola is excluded
2 from certain regions of our valley, and from
3 elsewhere in Oregon, because of its potential for
4 contamination of some of the vegetable seed crops
5 that we have.

6 That's an issue that may change at
7 some point in the future. These things are
8 certainly revisited periodically. And with grass
9 seed production, we currently, to my knowledge,
10 don't have any transgenic grasses growing in our
11 valley, but Oregon has been the site of a couple
12 of unintended releases of genetically engineered
13 grasses.

14 So, because of the importance of seed,
15 we have developed regulation systems for this
16 based on pinning maps, exclusion zones, and
17 various types of isolation.

18 This is an example of a pinning map
19 for the Willamette Valley which shows where
20 various vegetable seed crops of many different
21 species are being grown. Each one of these
22 circles has -- the larger diameter is a three-

1 mile radius, which is the typical exclusion zone
2 required for sugar beets and table beets and
3 chard. The inner circle in those is a two-mile
4 radius, which is the exclusion zone if you're
5 growing a Brassica vegetable seed crop, for
6 example.

7 So, this is how we've dealt with seed
8 issues. And some people have suggested that
9 these might be a way of dealing with genetically
10 engineered crops for food production.

11 I would also bring to the attention of
12 this committee the Governor's Task Force on
13 Genetically Engineered Seeds and Agricultural
14 Products. This is a report that's now available.
15 The committee that I served on was a combination
16 of people from all aspects of the farming
17 community, as well as academics, and we tried to
18 address all the issues around genetically
19 engineered crops and their interaction with other
20 forms of agriculture.

21 There was no attempt to reach
22 consensus with this particular committee, rather

1 we just tried to get all the issues out on the
2 table. So it provides some idea of what the
3 issues are, at least from an Oregon perspective.

4 I have the coexistence outline on
5 this. We did cover certain aspects of
6 coexistence, I would say that there is probably
7 some legislation that will be coming out on this.

8 As I mentioned, some people have
9 proposed that the seed production rules in Oregon
10 might serve as a model for coexistence. And with
11 seed you have a relationship where everybody is
12 equal. Nobody wants contamination. But when you
13 get to food crops, this sort of relationship
14 falls down because people that are producing GMOs
15 don't necessarily care where their pollen or
16 their seed goes, so the burden falls on the
17 person who has the market that demands purity.

18 One of the pieces of legislature
19 making its way through the Oregon House right now
20 is a bill on coexistence requiring the Oregon
21 State Department of Agriculture to provide a
22 mediation program. I don't know if this will

1 actually be the best solution, but it's one
2 attempt to deal with issues of coexistence for
3 us.

4 So, I tried to take a look at the
5 biology of the questions that we had, and that's
6 my perspective in terms of addressing these. I
7 don't have a lot of data. This is an area where
8 I think there is generally a large lack of data.
9 It's certainly one of the things we encountered
10 on the Task Force, that there wasn't much data to
11 really be able to come to a conclusion on some of
12 the issues.

13 So, in addressing question number one,
14 about sources of contamination, that's a sort of
15 question where it's really going to depend on the
16 crop and the environment in a major way.

17 For seed crops, what's the degree of
18 outcrossing? You have things like beans and
19 peas, which are essentially self-pollinated,
20 ranging to peppers and tomatoes that may show a
21 little more outcrossing, to crops which are
22 highly outcrossed, like squash and corn and

1 others.

2 Is a crop clonally propagated? Is seed
3 reproduction even involved? That's going to have
4 an influence. What part is the part that is
5 consumed? Is it a seed part of the plant, the
6 reproductive part of the plant, or is it
7 vegetated? Is it the mature or immature
8 reproductive part, for example.

9 There is also an environmental
10 influence. For example, with insect-pollinated
11 crops, pollinator diversity is going to affect
12 the amount of outcrossing that you might see.
13 I have had experience with this, with beans, in
14 Idaho versus Oregon, where pollinator diversity
15 in southern parts of Idaho is very low. You see
16 very little outcrossing. I see a much higher
17 rate of outcrossing in beans in Oregon with our
18 greater pollinator diversity.

19 Things like pollen longevity will also
20 affect the degree of outcrossing that you might
21 find with, you know, hot dry conditions reducing
22 pollen viability so it's not as viable over a

1 long period of time.

2 So, these will all affect, you know,
3 what happens with contamination. It's going to
4 be very much site-specific and crop-specific.
5 The pollen dispersion in Brassicas, for example,
6 is something that kind of represents the -- is a
7 good example of what I'm talking about. Most of
8 the Brassica pollen disperses within about ten
9 meters of its source, but pollen movement has
10 been detected up to four kilometers. That's
11 primarily through insect pollination, but we find
12 in the Brassicas that pollen can also be wind
13 transmitted, and that's been detected up to one-
14 and-a-half kilometers from the source.

15 Brassica pollen can usually live four
16 to five days under normal temperature conditions.
17 This might be reduced if temperatures were
18 cooler. So, you can have a situation where a bee
19 picks up pollen from one field, goes back to the
20 hive, comes out the next day and will carry
21 pollen to another field.

22 Sources of contamination, again, the

1 main thing that I see here is that, with things
2 like self-pollinated crops and clonal crops,
3 adventitious presence is going to be your primary
4 source of contamination, and things like soybean,
5 potato and apple would be examples of these.

6 With outcrosses, it's going to be a
7 combination of both pollen drift and adventitious
8 presence. With vegetative crops, where the
9 vegetated part is the part that's eaten, it's
10 primarily going to be adventitious presence, such
11 as sugar beets and/or alfalfa.

12 I've tried to put together this chart,
13 which may be a little bit difficult to read,
14 which is trying to address questions one and two
15 about sources of contamination and then level.

16 On this chart, I won't go through all
17 the detail on it, but it will be available to the
18 committee. I try to show the crop, the GMO crop,
19 the source crop for contamination, what the at
20 risk crops related to that are and then kind of
21 an educated guess as to seed source, whether its
22 organic, conventional, tested or untreated and

1 the level of risk that would be of contamination
2 in these seeds. I would like to see data to
3 replace what are my educated guesses there.

4 And then I've tried -- the last column
5 is where the greatest risk comes from. Is it
6 though pollination or is it through some sort of
7 adventitious presence in the particular crop?

8
9 Canola, in my opinion, is probably
10 going to be one of the most contaminated, at
11 least based on the literature that I've been able
12 to see, the conventional lots, the seed lots of
13 canola -- and there is published information on
14 this. For example, one paper cited that three
15 varieties in 14 tested exceeded the maximum
16 allowable contamination. And in another study,
17 half of the 27 samples tested showed
18 contamination beyond the maximum level
19 acceptable.

20 We've also had a graduate student at
21 Oregon State work on outcrossing between canola
22 and other vegetable Brassicas. He was able to

1 detect transgenes and contamination in a seed of
2 vegetable Brassica rapa crops from canola,
3 however he did not detect the same when he looked
4 at Brassica oleracea.

5 Brassica rapa would be the Asian
6 vegetables. Brassica oleracea would be things
7 like cabbage and broccoli and so forth. So even
8 when you get a cross, an interspecies cross, and
9 an aborted seed, you can still detect and get a -
10 - you can detect a GE event here.

11 So, question number three was
12 addressing testing standards for seeds and
13 practicality, cost, and integrity. I have some
14 general comments on this particular one. I think
15 we tend to think in terms of using polymerase
16 chain reaction as a means for testing. And
17 that's certainly going to be the most precise
18 form of testing. It can be fairly expensive to
19 do. There may be other ways to think about doing
20 testing with things like grow outs, visual
21 inspections. For example, if you have a crop
22 like table beets or chard and you're concerned

1 about sugar beet contamination in that crop,
2 you're going to get a very different phenotype in
3 a hybrid plant. And if you go out to a seed lot,
4 you should be able to visually identify those
5 plants.

6 Another way to go about this sort of
7 thing is, if you're concerned about, say, a
8 Roundup Ready contamination event, is to take a
9 seed lot and grow it out and then spray it and
10 look for any resistant individuals to test.

11 That sort of thing will -- that might
12 not be possible in some cases because of material
13 transfer agreements or license agreements that
14 prevent you from doing that type of testing on
15 the material.

16 ELISA is the other form of testing.
17 People may be familiar with these in terms of the
18 test strips. These are not as accurate. They're
19 fairly quick. But it won't be quite as accurate.

20 I have one thing that people may want
21 to take as a guideline, is to look at the
22 literature for detection of seed-borne diseases

1 in crops, because those have been worked out for
2 detecting presence of seed-borne disease at very
3 low levels. And so there may be some guidance
4 there.

5 So, question number four was looking
6 at the testing program impact on genetic
7 diversity. I would say if only certified organic
8 seed crops were allowed at this point and time,
9 we would see a major bottleneck and a major
10 hardship for growers.

11 If we allow conventional untreated
12 seeds after testing, there is probably going to
13 be less impact on genetic diversity. Really what
14 we need in the long run is more breeding of crops
15 for organic systems and increasing the amount of
16 diversity that's available in terms of varieties
17 for organic growers.

18 And then, finally, I want to address
19 a couple of other comments to the committee about
20 what will be the nature of genetically engineered
21 crops down the road. Companies are beginning to
22 use technologies that do not require federal

1 oversight, so there may be instances where a crop
2 is genetically engineered, but we don't know it.
3 Or a variety is genetically engineered and we
4 don't know it and it leads to contamination.

5 And some of these new technologies
6 coming online, it may be very difficult to detect
7 GE contamination, even with techniques like
8 polymerase chain reaction.

9 Some of these are things like
10 cisgenics, where transformation uses genetic
11 material from the same species. The newest
12 technique that's coming down the road is genome
13 editing, which is basically a site-directed
14 mutation process and that, I think, will be
15 exceedingly difficult to detect unless you know
16 of the specific event.

17 And, you know, I think the committee
18 needs to look at questions as to whether
19 something like that is considered a genetically
20 engineered crop. And I would say I believe this
21 committee has seen the Ethics of Plant Breeding,
22 the principles of IFOAM developed by Edith

1 Lammerts van Bueren, but that, I think, it helps
2 provide guidance in a case like this.

3 And those are my comments. And thank
4 you.

5 MR. EHRHARDT: So, I'd like to thank
6 the Board for inviting me to speak today, as
7 well. I hope that I am able to provide some
8 specific information that you'll find interesting
9 and useful in this discussion.

10 So, again, I'm Mac Ehrhardt, a third
11 generation seedsman from Albert Lea, Minnesota.
12 I live and work about 10 miles north of Iowa, so
13 right in the heart of the corn and soybean
14 country.

15 On the slide there, you can see we're
16 standing in one of the rare oat fields in
17 Freeborn County, Minnesota. Starting on the left
18 there is my dad, who is 87, who was the second
19 generation; my brother Tom, who owns and operates
20 the business with me; my cousin; my daughter,
21 Isabel, who didn't want to be there at all and is
22 not interested in the seed business; myself; and

1 then my brother-in-law. So we're a small company
2 and there's about 30 of us that work there year-
3 round.

4 So, what I'm going to talk about
5 today? I'm not going to try to address all the
6 questions posed in Zea's e-mail to me. I'm going
7 to really try to tackle question number three in
8 a very specific way. I'm just going to look at
9 it from a really practical perspective. And by
10 practical, in my case, I mean from a perspective
11 of a seed person, who works with field seed. So,
12 I don't know anything about vegetable seed. To
13 be honest, I work almost exclusively with field
14 seeds, and that would be corn, soybeans, oats,
15 wheat, barley, a little bit with alfalfa.

16 So these are seeds that are going to
17 be used. The farmers are going to plant and
18 they're going to grow and they're going to use
19 the forage or the grain from these seeds to feed
20 the animals, or they're going to sometimes end up
21 in oatmeal or corn chips.

22 Let me make a couple of basic points.

1 All species are not the same, and I know this is
2 completely obvious to everybody in this room, but
3 sometimes we make the mistake of thinking that
4 because something is obvious, it's therefore
5 trivial. And this is not trivial at all. There
6 are huge differences in the challenges faced from
7 a contamination and prevention strategy
8 standpoint by these different species.

9 I'm going to give some specifics on
10 the current state of contamination, at some risk
11 to myself and some other companies that I got
12 data from. And then I'm going to give you my
13 opinion on this idea of a threshold and maybe
14 some next steps.

15 So, I'm going to start with soybean
16 seed because it's a lot easier to talk about. As
17 Jim had already mentioned, soybean -- I think he
18 mentioned soybeans are largely self-pollinating.
19 And the picture I have there is a soybean flower
20 between a plant breeders thumb and forefinger.

21 And if you look at that flower on the
22 plant itself, it's very self-contained and it

1 cannot be, for the most part, cannot be cross
2 pollinated by any neighboring plants without some
3 kind of intervention either by a plant breeder or
4 a very aggressive bee.

5 And for that reason, soybeans are one
6 of the crops that are considered an at risk
7 species, because we have our own outbred
8 soybeans, et cetera, that, in my opinion, it
9 would be possible to meet a very tight non-GMO
10 standard or a threshold with soybean seed. As
11 long as we do the things that are outlined in the
12 best management practices and the guidance
13 document and the things we ordinarily do in the
14 seed production, which I'm not going to read to
15 you there, but these are just all things we
16 normally do in seed production.

17 As long as we follow that and start
18 with clean seed, which is sometimes a challenge,
19 we could meet a pretty tight threshold. And to
20 give you some specifics, so, here, rather than
21 provide the actual data, which is really hard to
22 read, I summarized it. And so this is non-GMO

1 conventional and organic soybean seed tests from
2 our seed lots in 2013 and 2014.

3 And this lists the GMO percentage of
4 the finished lot. So, in yellow there, you will
5 see conventional non-GMO soybean seed. And we
6 tested a total of 30 lots, and of those 30 lots,
7 we got a zero detect in 24. So, that's pretty
8 good.

9 And I won't read the rest of it. You
10 can see there was different levels of
11 contamination in these different lots. But
12 overall, the picture there is pretty good.

13 On the organic soybean side, it is
14 even a little bit better. We started with 31
15 lots. We got 28 of those lots with zero detect.
16 So, really not bad at all, in my opinion. Maybe
17 it's not impressive to some people in the room,
18 but I think we did pretty well.

19 And a couple of bullet points there.
20 The GMO tests were initially done with a 750 seed
21 bioassay, which Jim referred to. This is
22 essentially a grow and spray. Positive tests

1 were followed up with either a 1,500 seed
2 bioassay or a quantitative PCR test to really
3 nail down exactly how contaminated the seed was.

4 All the soybean seed followed the best
5 management practices outlined in the guidance
6 document. And I'll just roll ahead here, I
7 guess. And I will also mention that the seed
8 represented all was probably planted on about 45-
9 to 50,000 acres, so it's not a trivial amount of
10 seed here that we're talking about. This is a
11 fairly significant amount of seed.

12 And by the way, to organic farmers, we
13 wouldn't sell any of the lots that tested
14 positive. That would be not something that we
15 would do at this point on soybeans.

16 So, corn, as has been mentioned
17 already several times, corn is a problem. And
18 why is corn a problem? Because it's very
19 promiscuous. And if you look that up in the
20 dictionary, you can read the definition I put up
21 there. Basically, a corn plant wants to have sex
22 with every other corn plant in the county. And

1 that's an issue.

2 In 2013, there were 96 million acres
3 of corn in the United States, and probably maybe
4 94 or 95 percent of that was genetically
5 engineered at some level. Furthermore, all, 99.9
6 percent, of corn grain produced in the United
7 States for silage is produced from hybrid seed.
8 And many of you in this room know this stuff, and
9 I'm sorry if I'm repeating things you already
10 know, but I think there are some people who may
11 not.

12 So, to produce any kind of hybrid
13 seed, but in this case non-genetically-engineered
14 hybrid seed or organic seed, you require two pure
15 inbred parents. So, a male parent and a female
16 parent. These are commonly contaminated at low
17 levels. Obviously, require isolation with
18 distance or timing, specialized production
19 techniques that I'm not going to go into, and
20 then dedicated processing of seed.

21 I did include a little picture there
22 of pollen grains. You can see it's essentially

1 like dust. And so corn pollen -- Charlie is more
2 of an expert than I am on this, and I think he's
3 going to address this -- but, depending on
4 temperature and humidity, can blow a mile-and-a-
5 half or more and contaminate crops that far away.

6
7 So, some issues in producing non-GE or
8 GMO seed corn. Nearly all the corn inbred parent
9 seed is developed and patented by Syngenta,
10 Monsanto, DuPont, and Dow, right? So these are
11 the inbred parents, the male and female parent
12 lines we're talking about.

13 The very limited availability of non-
14 genetically-engineered inbreds -- good news,
15 there's some good ones. Bad news is they do not
16 make -- the large companies do not make those
17 inbreds available to us in an untreated form.
18 So, obviously, to produce organic seed corn, we
19 need to plant untreated seed. We cannot get
20 untreated inbreds from Monsanto, Syngenta,
21 DuPont. They will not provide them.

22 There are small independent corn

1 breeders, and one of them is sitting up here at
2 the table with me, who are developing non-GE
3 inbreds and will make them available untreated.
4 But it's a very slow process, seven years on
5 average for one inbred, and with a very low
6 success rate, largely driven by economics.

7 We've already talked about the
8 contamination issue from pollen. I will also
9 mention producing organic hybrid seed corn
10 requires the coordination of two very specialized
11 sets of knowledge. So, you need to be able to
12 know how to grow organic corn, but you also need
13 to be able to know how to produce seed corn.

14 And in talking with different people
15 in the industry, we feel there are probably fewer
16 than 20 growers in the United States that are
17 able to do this on a commercial scale. Plant
18 breeders do this all the time, and that number
19 would be much larger if we included plant
20 breeders, but I'm talking about on a commercial
21 scale.

22 And so, in summary, so, the tighter

1 the GMO standard or the GE standard we impose on
2 hybrid seed corn, the smaller the pool of
3 available inbreds and hybrids. Hybrids,
4 ultimately, for farmers.

5 So, what does this look like from a
6 practical perspective? So, again, I'm showing
7 this data -- and this was shared with me. I got
8 two or three other seed companies to participate
9 in this with me. And I really, really appreciate
10 them being willing to share this data, because
11 there is absolutely no advantage to us to sharing
12 this data, right?

13 This doesn't make us look good to show
14 sort of our dirty laundry. But this is what it
15 is. And I'm also in an odd position of not being
16 able to thank them publicly because, of course,
17 they don't want me to name them.

18 So, this slide probably is the most
19 important, or the slide I've got that you're
20 going to find most interesting. So I want to
21 spend some time on it.

22 This represents -- and, again, I know

1 the question was asked about conventional non-GMO
2 seed corn, not about organic seed corn, but I had
3 much better data for organic seed corn and so I
4 decided to present this data to the Board.

5 So, this represents GMO testing
6 results on organic seed corn that we produced in
7 2014. So we tested all the inbreds before
8 planting them, and some of them we didn't use.
9 And then we tested the resulting hybrid seed.

10 So, in yellow, I've got the female and
11 the male parent seeds. And you can see, of the
12 females, we tested 23 different females, and two
13 of those females were zero detect.

14 All right. And you can see -- I won't
15 read you the rest of the numbers there, but you
16 can see what the progression looks like. Of the
17 males, and we tested 22 different males, one of
18 them was zero detect. And then you can see the
19 rest of the numbers.

20 Interestingly, they're not
21 contaminated at the high -- the male is not
22 contaminated at the higher levels, and there is a

1 technical reason for that which Charlie would be
2 happy to explain to you afterwards.

3 Then the resulting hybrid seed, a
4 total number of lots -- and if anyone doesn't
5 know what I mean by lots, so this would be a
6 specific hybrid and then it comes in different
7 seed sizes. So, we might have a small, flat, a
8 large round, et cetera. And each lot we treat
9 separately, because they get pollinated at
10 different times and they have different levels of
11 GMO contamination.

12 So although 110 lots that we tested --
13 I'm going to start from the bottom this time --
14 12 of them tested at greater than one percent GMO
15 contamination; 24 of them tested between a half
16 and one percent GMO contamination; and the rest
17 of them tested somewhere between zero and 0.5.

18 And the reason that there is that
19 weird thing there with the question mark and the
20 numbers is that I don't know exactly what they
21 did test, because the accuracy of the testing
22 methodology that we used would not allow us to

1 nail that number down.

2 And I outline that below. The parent
3 seed was all tested using realtime PCR
4 quantitative testing, and so those numbers are
5 absolutely right. But all the hybrid seed, we
6 used semi-quantitative strip testing. And below
7 0.5, to explain it this way, a 0.01 is exactly
8 the same as 0.49, statistically. So it would be
9 artificial to list different tests there.

10 All the hybrid seed followed this
11 outline of the best management practices outlined
12 in the guidance document, and in addition some
13 other things, including roguing, which was
14 mentioned earlier, and some other things that we
15 do.

16 And the last bullet point, this
17 represents a large amount of seed. Up on the
18 slide you're looking at between 30 and 40 percent
19 of the organic corn acres in the United States in
20 2015.

21 Now, I'm not going to get into what do
22 we do when something tests above one percent,

1 because different companies are involved and
2 different companies have different protocols and
3 different thresholds that they're comfortable
4 with.

5 But you can see that -- and this is
6 the real world right there that you're looking at
7 right now in corn. And, again, I wanted to
8 contrast corn with soybeans, which is a different
9 animal.

10 So, I want actually stop there. Is it
11 okay if I ask to see if there are any questions
12 on this slide? Because I really think this is
13 the meat and potatoes of my presentation.

14 MEMBER SONNABEND: Okay. If anyone
15 has a specific question on the cord slide? I
16 think we'll save our questions to the end for the
17 more general things.

18 MR. EHRHARDT: Okay. Good. I'm not
19 going to try to unpack this, because I'm running
20 out of time, but basically this demonstrates how
21 we have a small number of inbreds that we can
22 use, and the more we tighten that GE standard,

1 the fewer inbreds we are able to use to produce
2 organic seed corn.

3 I do want to give a shout-out to
4 PuraMaize, which is a really exciting genetic
5 construct that is not a GMO which allows for the
6 exclusion of alien pollen. And so PuraMaize is a
7 natural gene blocking system that impedes
8 fertilization from foreign pollen.

9 The technical term, and I'm really
10 proud that I'm able to pronounce this correctly,
11 is gametophytic incompatibility. I feel really
12 smart when I say it. I don't really know what it
13 means.

14 The cool thing that it does is
15 demonstrated right here. So, we have two
16 genetically identical hybrids, except one of them
17 contains the PuraMaize genetic construct. They
18 were grown in the same field, side-by-side, and
19 at pollination they were both dusted with Hopi
20 Indian Blue Corn pollen.

21 And you can see the results. The one
22 containing the PuraMaize is not cross-

1 contaminated. So, this is obviously really
2 exciting and would be a great way to control
3 genetic contamination both in seed fields and in
4 hybrid or grain fields or silage fields.

5 The problem you've got is that at this
6 point there are two hybrids in the whole United
7 States containing this genetic construct. It's a
8 very slow, tedious process to breed it into corn
9 and nobody is stepping up to the plate to, you
10 know, pump millions and millions of dollars into
11 that process so that suddenly we'll have hundreds
12 of corn hybrids for farmers to choose.

13 So, it is really cool. I know Charlie
14 has got another technology that he's working on
15 that does a similar thing. And I put this slide
16 in there because I wanted to talk a little bit
17 about -- I think this has an impact on how we
18 think about this threshold.

19 So, my concluding thoughts, and I put
20 the original question back up there. Please
21 involve stakeholders from across the seed
22 industry and the development of a GMO threshold

1 for seed. So, people from the beginning to the
2 end of the food chain, and also people from the
3 different parts of the industry, whether it's
4 vegetable seed or field seed or flower seed or
5 whatever. Again, a single threshold or standard
6 for all seed may not work because of the
7 different challenges facing different species.

8 Now, here's a real number for you. I
9 put my head together with some other folks who
10 work on organic corn. We felt like if the
11 threshold was set at 0.99 in hybrid seed corn, we
12 probably would discard 5 to 8 percent of our
13 inventory each year. And we actually feel like
14 that would be workable, because we're already
15 sort of there. We don't sell all the corn that
16 we grow because of the GMO problems we've got.

17 So, we feel like that would be
18 workable. Obviously it raises prices for organic
19 farmers when they buy seed, but that would be a
20 workable number. But we would need some time to
21 implement that standard. Again, the tighter you
22 set the standard, as has already been discussed.

1 And item four I think is really
2 important. Matt touched on it briefly. So who's
3 going to pay? So who's going to pay for the seed
4 that does not meet the standard and how is that
5 hidden cost -- how does that hidden cost affect
6 the price and diversity of the seed available to
7 organic farmers?

8 I know a seed company that has half a
9 million dollars of organic seed corn in a
10 warehouse and it's contaminated with a GMO level
11 that's too high to sell to organic farmers and
12 they can't sell it to conventional farmers
13 because they don't want that hybrid or those
14 hybrids, so who pays for that?

15 It might be unfair, but that's
16 something that people really have to take into
17 consideration. Thank you.

18 MR. BROWN: Good morning. I
19 appreciate the opportunity to share some
20 information with you this morning. Thank you.
21 All right.

22 I've been working on this seed purity

1 issue for 15 years and I'm allowed 15 minutes, so
2 it's about a minute per year, so I'll do my best.

3 I also like to try to put out there a
4 solution that as I see from sitting in the chair
5 of a seedsman, that we may consider.

6 Okay. Again, just a little of our
7 background. My grandfather started our company
8 in 1911, so we're 104 years old and we've been
9 around for a while.

10 Here's our plant about an hour south
11 of Minneapolis, on the river in Bay City,
12 Wisconsin. We have a 30,000 unit capacity. All
13 of our breeding is non-GMO in corn. I'm only
14 going to address corn this morning. That's what
15 my background is.

16 We use some the latest breeding
17 techniques, marker assisted gene mapping, NIR, DH
18 and et cetera. So what I'd like to visit with
19 you this morning is about a couple of slides on
20 context.

21 When we talk about standards, I want
22 to be very clear what standards we're talking

1 about, because there is different phases of corn
2 development from the nursery to the buyer. Also
3 I'd like to come at it from a little different
4 direction, potentially a way to consider this
5 very very difficult issue, an important issue of
6 seed quality, by addressing the forces that act
7 on seed quality.

8 I'd like to respond to question number
9 two, using a 2,000 Brownseed pollen study that we
10 conducted. And I'd like to apply that data, so
11 we said we needed to collect data, so I'm going
12 to do that. I'm going to apply some of the data
13 of actual pollen flow to a growing study that was
14 done on a real field this last summer.

15 I'd like to respond to question three
16 briefly, with what some of the activities that
17 we're doing as a company and investments that
18 we've made in seed purity. And then I'd like to
19 just mention a few efforts at ASTA and a possible
20 short term solution.

21 All right. Just so, Vince Lombardi,
22 you know -- every fall would say to his football

1 team, "This is a football." I don't know the
2 backgrounds of everyone here, but these are the
3 phases that corn goes through in development from
4 a single homozygous ear in a nursery, to the
5 grain or silage produced on a grower's farm.

6 And the first step is called breeder
7 seed increase. It's a controlled pollination
8 under bags; you're working with rows and
9 individual plants, not acres and the seed company
10 has production standards that they adhere to.

11 The progeny from that go into -- when
12 you get pollen levels of your inventory, it goes
13 to the foundation seed increase and that is
14 what's called a small isolation block. Those are
15 small fields. They're easy to isolate. The seed
16 company has production standards.

17 So my opinion is, on these first two
18 phases, I think it's very possible -- in fact I
19 know it is, possible to meet very high standards
20 of purity on corn. Where the heartburn shows up
21 is in the next level of increase and I think
22 that's what your standards are referring to when

1 I read the literature and your prevention
2 statements.

3 It gets to a seed field, which are
4 very large. Very large isolation requirement,
5 much higher risk. I thought it would be
6 interesting for you to understand in the organic
7 market, it's about 120,000 seed units, and that
8 sounds like a lot of seed, but it really is not.

9 As Mac pointed out, 96 million acres
10 annually is about 40 to 45 million units of seed.
11 So this is a very small market. Most of the seed
12 companies that provide organic seed are doing it
13 on a split basis.

14 They're handling GMO products along
15 with the organic, so they have many -- that
16 creates many difficult issues for them. Again,
17 the point I want to make is seed companies are
18 producing to production standards that they have
19 set for themselves. They have minimum guidelines
20 by the state and federal, but most of them are
21 setting their own standards which exceed those
22 standards.

1 I guess another thought I want to
2 mention to you is that as I think about setting a
3 standard or a threshold, I'm thinking of the
4 reason for that. And you know, one of the
5 reasons for doing something like that is to keep
6 willful negligence out of the system.

7 As I look around the seed system in
8 corn, I do not see seed companies trying to, so
9 to speak, pull a fast one and get lower quality
10 seed in the market. I see the people that are in
11 this market, currently trying to develop it, are
12 really doing what they can to develop a sound and
13 sustainable organic seed market.

14 Then the last phase is where the seed
15 company will take those parents that they've
16 crossed into a hybrid product and they'll bring
17 it to the grower. That's a production field, the
18 U.S. organic registered growers is somewhere
19 between 13 and 14,000 on 300,000 acres. So that
20 makes an average size per farm is about 23.8.

21 And the bad news there is part of the
22 biology of what we're talking about here, is that

1 as you get to larger field sizes, there is
2 something that will work in your favor and that
3 has to do with dilution of contamination of
4 field, but when your average field size is 23,
5 with the methods that we're moving towards on
6 detecting these proteins and also the small field
7 size, it's increasing the risk factor just
8 exponentially.

9 Also I wanted you to consider that on
10 farm, there are two different uses for organic
11 seed. Some of it, and this would be potentially
12 be a research question, how much organic seed is
13 really used on farm by the farmer, his or herself
14 and how much is it to a contract production,
15 which has their own standards.

16 So it would be something that you may
17 want to consider. All right. I just put a
18 picture up of what I just described so the upper
19 left-hand corner is your nursery -- breeder seed
20 increase.

21 The right would be an example of ISO
22 blocks and then in the lower left hand corner is

1 a seed crossing field where you've got the four
2 rows of female parent of the seed parent being
3 pollinated by one row of pollinators.

4 As Mac pointed out, the pollen from
5 that one row is fertilizes the silt of the female
6 rows and then ultimately those bags of seed
7 ending up on a growers field.

8 What I wanted you to consider also is
9 that as I read through these documents, we refer
10 to -- I'm going to say the hybrid increase of
11 this seed and mainly the genetic component, but
12 that's just one factor of the reality of high
13 quality seed.

14 You also have a very dynamic
15 environment and I'm going to show you a couple
16 studies here in a moment, that address that. And
17 also you've got market forces on this because, I
18 mean, as I do to ASTA and sit around with
19 seedsmen and ask them, "What do you think about
20 zero-zero-zero and they say, okay. But the cost
21 is going to be tremendously prohibitive."

22 We can do pretty much whatever you

1 want, but it's going to be prohibitive in cost.
2 So what I'd like you to consider is that
3 potentially we need more data, but we need, I
4 feel, to let the market help sort this thing out.
5 Markets have a way of really sorting out
6 difficult issues. I'll come back to that later.

7 Okay. On question two, "A farmer
8 plants seed at an at risk crop surrounded by the
9 same conventional GE crop, follows all prevention
10 strategies for organic producers. While a level
11 of contamination might be expected on the
12 average, is this level different when starting
13 with tested conventional seed and then untested
14 conventional organic seed?"

15 The first response on this is that
16 there is very little, as Jim pointed out, there
17 is very little data available on these issues in
18 the industry. I don't know where to go and find
19 answers with data, to these questions.

20 As seedsmen, since we were very close
21 to the dynamic environment, we basically approach
22 it like this. We have production standards that

1 we set up when we produce and then we see how the
2 environment treats us in that cycle and where we
3 ended up, and then we make a decision. Is that
4 something that we can put into the market or not.

5 All right. So what we did, is that in
6 River Falls, Wisconsin, we have a test plot and
7 if you would look at that strip right there, we
8 use that for applied research. We try to answer
9 an applied question every year.

10 So in 2000, we wanted to try to
11 quantify, how does pollen drift and can we
12 quantify it when we set up a study by distance
13 and by time delay on silt. And so what we did, is
14 we're capitalizing on the xenia effect that Matt
15 showed you on the PuraMaize where the pollen can
16 actually change the composition of that kernel
17 and if you have a blue kernel -- a blue plant
18 pollen falling onto a yellow kernel, it will
19 actually turn that kernel blue.

20 So what we did is we planted four rows
21 of blue corn and then we planted 80 varieties
22 with differing maturities in two different

1 ranges, an early set and a late set and we
2 measured the distance by row and then we kept
3 track of the pollen release -- it's called
4 floragran thesis of the blue, and then the silk
5 expression on all the yellow hybrids.

6 And this is basically how it mapped
7 out. It's sort of your standard bell curve. We
8 found that within about 50 feet, no matter what
9 you did, you had just tremendous contamination or
10 outcrossing of pollen or cross pollination.

11 As you got out toward the end of the
12 plot, you know you would see individual hybrids
13 that would have a response and what determined
14 that was due, is that if a hybrid was silking in
15 advance and the silk was available to that blue
16 pollen arriving, distance basically becomes less
17 effective.

18 And so how to apply that is if a
19 farmer is planting a field and he or she doesn't
20 know the flowering date of that GE crop
21 neighboring, you know, and they're silking out in
22 front of that, they're very vulnerable to

1 contamination and all the distance requirements
2 go out the window.

3 The previous slide was an early set.
4 They were matched up pretty close to the
5 flowering of the blue. This was a late set that
6 acted more like you would hope that within
7 probably 15, 20 feet you had high contamination
8 and I'll actually show you the numbers here in a
9 moment.

10 So this was the early set and these
11 are the varieties. These are the flowering
12 dates, July or August. These are the silking
13 dates. These are the number of blue kernels. We
14 took ten ears in each set. We peeled the husk
15 back and we counted the number of blue kernels.
16 We applied that to a 450 kernel average ear, so
17 we did it to a percentage of outcrossing.

18 We did a color chart on the distance
19 and then we have the days of silk to BAD the blue
20 and thesis delay. And so you'll see, I think the
21 most important number on this is that down in the
22 right-hand corner, the delay of silk was a

1 negative three of the blue release to a plus
2 seven.

3 So it pretty much laid right over the
4 top. We did see individual hybrid responses and
5 we think there are some regulator genes that
6 could be explored that were really close at
7 flowering or silking at the same time of the
8 flowering and did not pollinate or cross
9 pollinate.

10 This is a late set and you'll see as
11 it moved away from the blue corn, that the
12 percentages dropped dramatically. Again here
13 you'll see that the time delay was from a plus
14 three to a plus ten, so by moving the silk back
15 one week, we sort of fell into a more desirable
16 isolation pattern.

17 I will tell you also that this was one
18 year data. Unfortunately what a farmer is up
19 against, this data will change every year.
20 That's due to the amount of heat, the amount of
21 humidity during that flowering period.

22 There's a recent French study you're

1 probably aware of. They found viable pollen a
2 mile up in the air and showed that it was
3 actually moving two to three kilometers away from
4 the source field.

5 Another way to look at this data, that
6 we just said, okay. Let's just take a row, so
7 the four rows that were, for example, 72 feet
8 away from the blue, just by silk delay, if it was
9 a negative one, we saw the one show up, but we
10 saw that 4, 10 and 7 delay, that was desirable.

11 And so we were just trying to analyze
12 what's actually happening in that field. Okay,
13 so we got some data that we felt would be a
14 baseline data and if you would extrapolate this,
15 you can generate this data every year. You can
16 have thousands of data points.

17 Now, but what do we do with it? Okay,
18 so from this data would suggest a 100 foot
19 isolation with a seven day silk delay from
20 foreign pollen result in a high probability of
21 success to achieve .1 threshold or "none found"
22 in 3,000 seeds of hybrid.

1 All right. This is question number
2 three, Grow Alliance and Organic Valley did a
3 study this past year. Their goal was to assess
4 the feasibility and cost of producing organic
5 hybrid seed to a "none found" on 3,000 for
6 genetic purity regard to GMO simply by doing it.

7 And those, there's some of the
8 background of the test. It was set up well.
9 It's important for you to know the planting. The
10 nearest corn was 1,300 feet away, so that's, you
11 know over a quarter of a mile away. The planting
12 was delayed, so now they've got a two week offset
13 in pollen shed from surrounding fields.

14 Eight row male border for some buffer
15 and the male parent rows contained two plantings
16 so they could spread out the male pollen so sort
17 of protect the field from outside pollen. This
18 is what it looked like. This is actually the
19 blow up, the insert.

20 There's two zones of planting, a zone
21 1 and a zone 2; 1,300 feet nearest corn. The
22 nearest corn was a non-GMO variety. What they

1 found was in "none found" language that going
2 into the project, they tested their seed parents.
3 The male, they had "none found" language. One
4 found in 10,000. Estimated total GMO presence is
5 0.1. So that's a very rigorous standard.
6 They're trying to get it into "none found" area.

7 The female was "none found" in 10,000,
8 which a non-detect. What they found after
9 growing it was that the proposed standard of
10 "none found" on 3,000 -- their estimated GMO
11 present .1 percent, in zone one they found five
12 in 3,000 or .22. In zone two, they found three
13 in 3,000 or .12.

14 So their conclusion was "none found"
15 on 3,000 seeds standard for GM purity and a .1
16 threshold is not feasible for seed corn.

17 Okay. So we had some data to predict
18 that it would be okay for them to -- and they
19 could be successful at that "none found" and
20 there are other potential impacts on that. My
21 opinion was that the contamination resulted not
22 from blow in pollen, and that's a part of one of

1 your other questions, but it was more from having
2 the contamination being in that male, then one
3 plant can pollinate a very large area.

4 As Mac was pointing out that if you
5 have the contamination in the pollinator, you're
6 much more subject and much more vulnerable. If
7 it would have been one plant in the female row
8 that tassel would have been removed and they
9 probably had a higher probability of success.

10 If you remember Mac's slide up there,
11 he was showing the male parents actually had a
12 higher amount of contamination than his female
13 parents did, which is also real time that it
14 would be very difficult to make a very strict
15 standard with those.

16 Okay. The lesson learned is that with
17 the rising sensitivity of testing and dynamic
18 production environment, there is a risk in
19 establishing a threshold without enough data and
20 input from stakeholders.

21 The field production is not a precise
22 world. That's why we produce to a production

1 standard and then we see what we're basically
2 what we're dealt environmentally.

3 I talked to a lab technician recently
4 who does lab testing of samples in the industry.
5 She's just very worried about the sensitivity of
6 our detect going up and how that's going to
7 impact the seed business and worried that we're
8 going to destroy this business we're trying to
9 build.

10 The economics, I thought it would be
11 interesting for you to think of that. Now put
12 yourself in the seat of a seedsman and you have
13 customers and you want to grow a 40 acre seed
14 field, the seed acre fix in variable costs is
15 going to be between 35 and \$4,000, not including
16 opportunity cost and other costs, like lost
17 revenue, times 40 acres, that's a 144,000 to
18 160,000 decision that has variables that, if you
19 have a bad wind at pollination, if you have a
20 viable pollen environment, if you have co-
21 mingling, if you have dust on the seed in the
22 seed tower from post-harvest handling.

1 I noticed in your preventive
2 requirement, there is a mention, "clean your seed
3 house before you bring in organic seed."

4 Really what you're saying is, build a
5 dedicated system, because just in our small
6 operation, we have a quarter mile dish belts, we
7 have 30,000 bushel capacity that has dust on it,
8 we have ten machines that you can't access the
9 inside of incising, so you know, that's a very
10 large -- remember, the whole market is 120,000
11 bags, okay.

12 It's just things like this. This is
13 what gives seedmen, you know, heartburn. I mean,
14 let's say that you're detasseling today and
15 you've got a -- well, this would have to be a
16 rogue in crew, but you're detasseling and
17 someone, your field person schedules your
18 detassellers to go from a GMO seed field into your
19 organic seed field that you've done everything
20 right, and just their clothes carrying the pollen
21 would be enough to pollinate that field or
22 contaminate it above a very strict standard.

1 The other thing to remember is that
2 with is that if we set a standard too tight, what
3 I've been talking to seedsmen around, they're
4 basically throwing their hands up and just
5 saying, you know this is going to be very
6 difficult.

7 Okay. In 2008, we decided well, what
8 can we do. What can we do as seedsmen? We just
9 feel the farmer deserves the right to know the AP
10 presence of the seed that they're buying.

11 Both Mac and Matt alluded to the fact
12 that I would say 90 percent or better of the
13 germplasm in the corn industry is provided by the
14 top three breeding houses, who do not care what
15 the AP is. In fact they will not let you test
16 it.

17 That's the bad news, but the good news
18 is, thanks to our national plan germplasm
19 collection, they made some lines available in
20 2010 that some of us are old enough to remember
21 when they went into the collection 20 years ago,
22 and they're excellent lines and what's happening

1 in the seed industry is that most of the effort
2 is doing the conversion to the traits.

3 The baseline germplasm development has
4 slowed down, so it's not 20 years old anymore
5 folks. It's basically much less than that. In
6 our own program, we have four hybrids that are
7 competing with triple-stack industry lines and
8 they're conventional.

9 So we think that the regional
10 component of this breeding is just starting to
11 catch ahold and so we'll be less subject to the
12 dictates of upstream forces.

13 So what we did, is we worked with
14 Organic Valley. We received a grant. We wanted
15 to see in the breeder seed increase, can we start
16 with pure seed. We took 50 inbred lines, we took
17 individual ears and a long story short, out of
18 the 50, 49 of them were 0.0.

19 So we thought, there is some hope that
20 if we start with pure seed that we can increase
21 that breeder seed. So we feel at the breeder
22 seed level, and going to the foundation level,

1 holding to a tight standard is probably possible.

2 What was different about the system
3 that we put together was that we also, which was
4 new and as Mac said, "it's obvious," but it
5 wasn't happening, is that people weren't testing
6 their seed.

7 I would ask a foundation house, what's
8 the AP in that line that I'm going to plant from
9 organic seed, and they'd say, "I don't know. If
10 you want to know, you test it."

11 So they put all the burden back on the
12 seed companies and it's a very disorderly system.
13 But now as we have moved forward, the -- I mean,
14 we did this in 2008. We've invested over \$50,000
15 into the system. We made it available. The
16 market hasn't demanded it.

17 And so what we're doing on our own, is
18 we're working with a foundation house. We're
19 purifying their lines out of our own pocket to
20 help get the market forward. We just believe
21 that there is going to be a need for these pure
22 lines going forward.

1 We have isolation phenotypic seed
2 quality and seed purity requirements validated.
3 We call it Purity Plus, and these are the
4 standards that we're using, 1,300 feet of
5 isolation.

6 With us from biotech or trade corn, we
7 double that to 2,640, must be rotated ground or
8 phenotypic, not more than .1 off type and
9 condition, you can't have more than .2 of off
10 color off texture. These are the seed quality
11 standards that seedsmen currently use in corn:
12 99.5 pure seed, inert .5, other crop zero, weed
13 seed zero, standard warm 95, cold germ 85.

14 Now I'd like to point out to you the
15 0.0 in other crop and wheat seed, that's the only
16 place you're going to see a 0.0 in corn standards
17 and the reason for that is because there are no
18 weed seeds the size of a corn kernel.

19 So we can economically make that
20 separation to a high level of probability of
21 getting it absolutely clean. You normally will
22 not see that.

1 For every standard on corn, there is
2 some tolerance. For genetic purity, .5 one in
3 200, variance .5 one in 200 and AP of .1 or 95
4 percent competence level, none found in 3,000.

5 Okay. This is our actual schematic of
6 how we accomplish that and if you have questions,
7 you're welcome to contact me and I'd be happy to
8 fill you in on this.

9 This is the testing in each generation
10 that we're proposing and actually started. We're
11 in gen 2 of some lines right now for the
12 industry.

13 The cost of this is going to be
14 between 8 to 10,000 just for the lab work of an
15 inbred line. So it's all volume related. If you
16 have a line that's only going to be used on a 100
17 acres, it's going to be, you know not feasible.

18 If you have a line that's going to be
19 used on, you know a 1,000 acres, it's going to be
20 feasible.

21 ASTA current activities. We've been
22 working basically for genetic purity and for

1 genetic access for the organic grower in corn.
2 We've put together a Madison group and we're
3 currently surveying the member companies at ASTA:
4 What seed do they have available for organic?
5 What seed do they have non-GMO conventional for
6 the organic? That study is going to be presented
7 at our annual meeting in D.C. in June, and you're
8 welcome to have a copy of that.

9 Also we've been working very hard,
10 because we were concerned -- our goal is to get
11 the highest performing germplasm to the organic
12 grower at the lowest cost. And 90 percent of the
13 lines are subject to being pulled out of the
14 market on a 30 day notice.

15 So as we move forward, we want to put
16 a platform under that that the seed companies can
17 move forward with. We have a major seed company,
18 after three years now, are going to make their
19 lines available to a foundation house and they've
20 mentioned that they're going to make it available
21 to the industry at "none found" on 3,000 for
22 foundational seed.

1 So we are making some great progress
2 and there is a pipe line available. All right.
3 So in conclusion, seed companies all have
4 production standards for isolation, phenotype and
5 genetic purity.

6 So what if NOSB recommendation is to
7 support the production standards of seed
8 companies and make them public on a sister
9 website of AOSCA to the organic seed finder? And
10 that would allow market forces, your intelligence
11 of an organization is shared information.

12 And this industry would be much more
13 intelligent if we were sharing some information
14 and letting the market make decisions on these
15 difficult questions. For example, how do you
16 phase in a standard that would be rolled into a
17 market decision?

18 The AOSCA websites could become a
19 clearing house for production information for the
20 industry. So you have a buyer, let's say an
21 organic company is working with a grower and they
22 know that they're tracing back where they're

1 getting their seed -- now there is traceability.

2 They're saying this seed company, if
3 you go to this website, they're using -- you
4 know, let's say "none found" in 3,000 or whatever
5 their standard is. You can bet as seed
6 companies, we're all going to be watching that,
7 so we're competitive.

8 And then we'll be applying that to our
9 cost of production to see if we can or cannot
10 participate. And that would include quality
11 standards and yield trial data for USTN. Also it
12 would really help us if you could close the
13 loophole for organic seed in corn especially.

14 And after a farmer has been using, you
15 know, conventional GMO and making sure that
16 they're making efforts to use organic seed, that
17 would really help seed companies invest more in
18 the organic seed.

19 One way of doing that is by generating
20 data through the U.S. Testing Network, that could
21 be displayed on a website and also product
22 availability.

1 This would educate seed companies,
2 certifiers, growers, buyers and what is possible
3 in the seed quality. Through competition, we
4 would drive AP to the lowest level at the
5 economical cost. And those are my comments.

6 MEMBER SONNABEND: Okay. Thank you
7 very much. I think that was very informative for
8 us all.

9 At this time, we don't probably have
10 a full half hour, but we do have time for at
11 least a few questions from Board members. I see
12 Nick's hand first, and then Tom.

13 MEMBER MARAVELL: Yes. Thank you all
14 for an excellent presentation.

15 I would like to ask each member to
16 respond as they might want to on this. What
17 would be the disadvantage of letting market
18 forces in effect regulate the purity of the seed,
19 which is essentially the current situation, or at
20 least allowing that to proceed for the next five
21 to ten years?

22 MEMBER SONNABEND: Any of you can --

1 MR. BROWN: I think I just presented,
2 so I think I'm covered.

3 MR. EHRHARDT: So what would be the
4 disadvantage? I guess in my own mind, and it's
5 not really my job per se, but I feel like there
6 is a need to meet the expectation of the organic
7 consumer and so if we're not making an effort to
8 understand that expectation and try to meet in a
9 formal way, I think somebody else will.

10 All right. So that's what we've seen
11 with the growth of the non-GMO verified standard.
12 They've got a standard. It's very rigorous and
13 they have been very successful with it. Not that
14 the two can't exist together, but I think that
15 would be the risk of not attaching -- ultimately,
16 having some kind of threshold within the organic
17 standards.

18 MR. DILLON: I think that it's not an
19 either or, but that the risk of testing for
20 conventional seed that would eventually, I think
21 conventional seed companies might give up on the
22 organic marketplace.

1 And testing for organic seed is very
2 problematic in that organic seed in the end is an
3 agricultural product that's certified through the
4 National Organic Program process.

5 And to select just one agricultural
6 product -- seed, and require testing for it and
7 not require testing for the field corn or the
8 manufactured tortilla is very problematic and I
9 would actually question the legality of it, as to
10 single out a single product in a single producer
11 group for testing.

12 I think that Charlie's direction of
13 starting with standards is a very good place to
14 start while we're continuing to work on these
15 other USDA initiatives to get improved data and
16 to try to incentivize the growth of the organic
17 seed sector in other ways.

18 And I think that's a big call out that
19 Charlie made at the end, is that looking at the
20 derogations for allowance of conventional seed is
21 one way to start to stimulate the organic seed
22 sector, that has to also be very careful. It's a

1 crop specific issue.

2 But we really need investment and we
3 need food companies and retailers and consumers
4 to recognize that we need investment, not only in
5 our public plant breeding programs but actually
6 investment at the seed level.

7 Communicating with these companies and
8 saying, I'm willing to commit to this, this and
9 this. So I don't think it's an either or
10 situation, but I do think for now it's best to
11 collect information and have continued
12 stakeholder discussion and encourage the market
13 development of solutions.

14 MEMBER SONNABEND: Okay. Tom.

15 MEMBER CHAPMAN: I have two
16 questions. The first one, I want to pull up on
17 the points made by Charlie and Matthew right
18 there, about the commercial availability clause
19 on organic seed and the allowance for the use of
20 non-organic seed.

21 How has that contributed to the
22 situation we find ourselves in and the impacts

1 that they have on the quality and availability of
2 non-GE organic seed?

3 MR. DILLON: Well, I again, everything
4 is very crop specific. In the cotton example,
5 obviously you need the derogation if there are no
6 organic cotton seed companies, we need to allow
7 organic cotton producers to continue to get their
8 base germplasm from conventional companies.

9 Most cotton producers catch or save
10 their own seed, but they still need to go back to
11 foundation seed periodically and you have to have
12 a conventional market.

13 So certain crops, the thought of
14 closing out that allowance would be a disaster on
15 that industry. There are other crops, for
16 example, such as cover crops or potentially corn
17 and soy where it's time for us to start to look
18 at the allowances being given and consider
19 whether or not they are still needed and to
20 consider what that process and the framework for
21 that might be.

22 The value of doing that is that it's

1 not that organic seed companies necessarily
2 always care more than conventional. But they do
3 have more stake in the game. They've got that
4 name organic on their product and so they have
5 skin in the game.

6 They want to make sure that their
7 reputation and their integrity as an organic seed
8 provider remains high in a market that is high
9 demanding, even in the absence of specific
10 thresholds.

11 They're growers and companies buying
12 from those growers have high demands. I think it
13 also becomes a volume issue as Charlie somewhat
14 alluded to, once an organic seed company gets to
15 a certain volume, they can start to invest in
16 more of this infrastructure from testing and
17 isolation and production practices from
18 foundation seed on up.

19 And so that widens the pipeline and
20 widens the potential for success.

21 MR. BROWN: And Tom, just so I'm clear
22 in your question, is it referring to the loophole

1 of using conventional.

2 MEMBER CHAPMAN: Yes.

3 MR. BROWN: Okay. As a seedsman, I
4 tried to do that. I mean for years, when I was
5 in retail in the early 2000's. I would grow
6 three or four hybrids organically. My cost of
7 goods were three times what conventional hybrids
8 were.

9 It basically sat in my warehouse. So
10 it completely took out my incentive to build that
11 market in competitive hybrids. So I think it is
12 something that needs to be addressed. I think we
13 -- I think it's something we need to move
14 towards.

15 I don't think that a threshold should
16 be a -- I mean a standard should be put in
17 immediately on it, but I think if people knew
18 they really had to toe the mark on it, they would
19 figure out a way and again, a market force.

20

21 And then those that can't, they would
22 say I can't participate in this business. The

1 comment I get from time to time is that, "Well,
2 we don't have any data," or basically growers,
3 they get onto a hybrid and it's a conventional
4 hybrid and they don't want to look.

5 And I also think it's unrealistic the
6 way the NOP reads. The rule that the farmer will
7 do the test on their farm to see if the variety
8 is competitive with other varieties available. I
9 know of no farmers that have the time or the
10 expertise to do that in a statistically sound
11 manner.

12 So even if they would put a strip
13 trial in, that's one data point on one farm they
14 have to make decisions on, and we as seed people,
15 you know use thousands of data points.

16 And so I think that by having a third
17 party do the testing on it -- for example, USTN,
18 so the certifiers had a place to go and say,
19 "Well look, in your area, these varieties are
20 available. They're compared with other varieties
21 available," you know.

22 And have the certifiers move them, at

1 least really justify why they're not
2 participating in organic seed, would be a way to
3 start coming at that.

4 But we need data and we need some
5 support for that. Support of the USTN, I think
6 would be a good step.

7 MR. DILLON: Just to clarify, that
8 last use of testing by Charlie, he means
9 evaluation of the crop genetics in the field, not
10 testing of GMO contamination.

11 MEMBER SONNABEND: You had another
12 question?

13 MEMBER CHAPMAN: I did, yes. And
14 this is kind of directed to Mac, but anyone can
15 answer as well.

16 I want to kind of delve a little
17 deeper in your last concluding point that you
18 made or look at maybe it from a wider
19 perspective. What impacts, intended or not, do
20 you see a tight threshold having on the seed
21 industry? On the organic, non-GE seed industry?

22 MR. EHRHARDT: Okay. So specifically,

1 if we just took the proposed threshold for
2 conventional non-GE seed corn, it would have the
3 odd effect, I think, of driving smaller companies
4 out of that business.

5 And what you'd be left with are larger
6 companies that can have, say a hybrid that has
7 100 or 200,000 bushels of seed. They can test
8 lots until they find one that they can cherry
9 pick lots, that have a low GMO, and sell those
10 lots.

11 And the smaller companies would
12 basically get -- be out of that business, because
13 they don't have a big enough volume to cherry
14 pick lots and they can't afford the \$300 a test
15 that it takes to meet that standard.

16 So the immediate effect if it were
17 implemented tomorrow, that would be the effect is
18 you would drive the little companies out of that
19 business.

20 MEMBER SONNABEND: Other questions?
21 Francis.

22 MEMBER THICKE: Yes, thank you for

1 a very good presentation, all of you.

2 Back to the PuraMaize or what do you
3 call it gametophytic incompatibility or
4 something. What percentage purity -- is that 100
5 percent and can that go to other crops as well?
6 Could that be transferred to other crops?

7 MR. EHRHARDT: I bet there's somebody
8 else up here that can speak about its usefulness
9 in other crops. I can say that no one would ever
10 guarantee 100 percent, but I can also say that
11 most of the seed lots that we've tested have been
12 a zero detect.

13 MR. DILLON: There are multiple
14 gametophytic incompatibility traits or male
15 dominant factor traits is another way it's
16 called.

17 The PuraMaize one was released by
18 initially Hoegemeyer Hybrids from Nebraska and
19 Morey Johnson has been one of the primary
20 companies working with it, but others as well.

21 Dr. Major Goodman from North Carolina
22 State University is a corn breeder who is also

1 working on similar traits but a different genetic
2 component and the combination of the two genetic
3 components gives it a much higher rate of
4 protection to prevent the adventitious presence.

5 So that's one of the things that some
6 of the breeders are looking at as combining
7 different traits of male dominant factor genes.

8 In terms of other crops and Jim, maybe
9 you want to jump in here as well. It's certainly
10 theoretically possible and most breeders I talk
11 to say that yes, there's probability of finding
12 that in outcrossing crops. Not in selfers, but
13 in outcrossing crops. But I don't know of any
14 that have ever been experimented with directly.

15 DR. MYERS: Yes, I have to say that I
16 don't know of anything outside of maize that has
17 this particular trait. But yes, it is
18 theoretically possible to find.

19 MEMBER SONNABEND: Other question?

20 MR. BROWN: I just had a real quick
21 comment. A place that you can find the model of
22 the factor in uses of popcorn industry. They use

1 this all the time to keep dent corn out of the
2 popcorn.

3 MEMBER SONNABEND: Nick has another
4 question.

5 MEMBER MARAVELL: Well, Tom got two.

6 MEMBER SONNABEND: I'm not saying
7 you shouldn't.

8 MEMBER MARAVELL: This question is a
9 little taking you aside from your main
10 presentations, but what would be the procedures
11 and costs of remediation? Taking a crop line
12 that had a GMO contamination and breeding it back
13 to a more pure line.

14 What would be the process and the you
15 know, not dollar costs, but an idea of the costs
16 involved. You know, the type of activities
17 involved?

18 MR. DILLON: It's very crop specific.
19 As Jim pointed out, he actually pointed out an
20 exception to what I had said earlier. I had
21 said, you know you can't just visually look at a
22 crop and see a GE trait.

1 That's actually true that you can't
2 easily see the GE trait, but in the case of sugar
3 beets, the phenotypic form of a sugar beet is
4 different than a table beet or a chard and so in
5 that instance, very, very easy through roguing in
6 the field to eventually eliminate in something
7 like cotton or corn, not quite as easy.

8 One of the things that we have been
9 beginning to ask for on a more federal regulatory
10 level, and there's some things I can't speak to
11 here, is that these companies could be putting in
12 visual markers with the traits.

13 These transgenic traits could also go
14 with a visual marker so that it would be easier
15 to identify these traits in the field. They say
16 they do not want to do that. The industry, the
17 biotech industry, because they fear eco-
18 terrorism, agro-terrorism.

19 But the reality is that would go a
20 long way to making it easier for plant breeders.
21 And just to put it into perspective, it's
22 difficult for plant breeders with this.

1 If you are and I'm going to stick with
2 cotton, if you're a cotton breeder and you're
3 looking at 100 plants in a breeding plot, about
4 the size of a breeding plot, and you're selecting
5 two for a cross -- two parents for a cross, and
6 you pick the two best.

7 Well, what if you happen to have a lot
8 of insect pressure that year, and you pick this
9 one plant that just, boy, it's so great in terms
10 of its resistance to insects. Well, maybe that
11 one in your 100 is contaminated and has the BT
12 trait.

13 You make that cross your next
14 generation, what percentage of that next
15 generation progeny has the BT trait? You know,
16 50 percent approximately.

17 So it's very, very difficult to
18 monitor one and clean-up is very crop specific
19 and yes, it can be done somewhat with spraying
20 seedlings in the field for herbicide resistant
21 traits.

22 There are some low cost assays that --

1 a project we're funding at Texas A&M is low cost
2 assays in the field for cotton, to again find the
3 detection early.

4 MEMBER MARAVELL: Let me just
5 clarify. You're talking about bioassays while
6 the plant is still living.

7 MR. DILLON: It's still alive, yeah.

8 MEMBER MARAVELL: Right. I just
9 think people need to know that.

10 MR. DILLON: Yes, bioassays while the
11 plant is still alive. There are some things in
12 development, but generally speaking, because of
13 the number of plants you're talking about and
14 populations and all the rest, it's not cheap.
15 It's doable, but not cheap.

16 MR. BROWN: You're touching on
17 something that is really characteristic of this
18 GMO development. It used to be before GMOs, you
19 know, if you had a strawberry and you wanted to
20 remove a trait or change it, you could go back.

21 You can't with corn or with corn in
22 GMO. You can't take the genes out of -- or the

1 proteins out of the corn.

2 Now these lines in the commercial
3 products and in breeding stocks, they have been -
4 - they've been transformed and they're carried
5 forward in a manner that they want every single
6 plant to carry the trait.

7 So if you go back to a remnant seed
8 stock, every seed has that trait. Your only
9 chance of doing what you're suggesting is to
10 plant that out and make selfs on it and maybe
11 there is some segregation in there and you would
12 have to test every single ear and then find that
13 ear that did not show the protein and then move
14 that forward.

15 And the likelihood of -- it will take
16 about six generations, so using off season, you
17 could do that probably in three years and it is
18 possible, but it's very improbable.

19 MEMBER SONNABEND: Okay. I --
20 we're gonna probably have to wrap this up
21 shortly. Is there one more question and then I'm
22 going to reserve the last question for myself.

1 Mac.

2 MEMBER STONE: So you mentioned that
3 you had access to some other gene pools. How
4 shallow is the gene pool that you all have access
5 to, to start to work with and can -- is the seed
6 banks available on some of these different crops?

7 MR. DILLON: Well, it's one of the
8 things that the National Genetic Research
9 Advisory Council is looking at right now, is
10 genetic vulnerabilities, specifically in corn.

11 Everyone on the Council, including
12 this scientist geneticist from Dupont Pioneer
13 believes that we are in severe genetic
14 vulnerability in corn. We're seeing an increase
15 in crop epidemics in part because of climate
16 chaos and certain diseases like Goss's Wilt,
17 which used to just be in a few counties in
18 Wyoming and Nebraska, are now spreading across
19 the Midwest.

20 It is our belief that right now the
21 vulnerability in the field is severe. There is
22 of course, great genetic diversity in our

1 national collections and in our -- even the USDA
2 ARS system and our public plant breeding.

3 We do not know if that collection is
4 clean. But again, ARS has a proposal underway
5 that I think efficiently can begin to examine
6 that.

7 There are also still restrictions on
8 some of the stuff and what Charlie was eluding to
9 is that some things are coming off patent or
10 coming PVP -- some of these breeding materials
11 from 20 years ago and they do have some value in
12 breeding today and are good materials, but still
13 we're waiting for other things.

14 This is part of the broken system,
15 patents and PVPs and intellectual property
16 restrictions continue to slow down our ability to
17 breed for a new market, such as organic.

18 MR. BROWN: In corn, we're very
19 encouraged by genetic materials that are
20 available. It's not hard to get genetically
21 diverse in the current corn industry, because
22 it's so inbred.

1 Basically, when I started back in the
2 70's we had seven families we were working with.
3 It's down to two. That's a very hot group, but
4 basically it's two families and so as these lines
5 come off patent from our collection, we're -- in
6 our program, able to access three or four new
7 family lines that are broadening out the genetic
8 diversity.

9 There is also something called the gem
10 project out of which they've taken, it's a
11 private public consortium, where they've taken
12 tropical genes and introgressed them into corn
13 belt lines and they're releasing lines year to
14 year, so genetic diversity is actually -- we're
15 real encouraged by that, what's available.

16 MEMBER SONNABEND: Okay. So I'm
17 going to take us back up to the 30,000 foot view
18 here and talk about our work on keeping GMOs out
19 of organic in general.

20 And my question, first of all, we are
21 proceeding cautiously. Those of you who have
22 been following this, know we're two years and

1 counting into this discussion on seed purity.

2 We have not had a proposal yet for
3 testing. We are continuing to collect
4 information, but along with that collecting
5 information, we're balancing that with the need
6 to keep the pressure on to the other forces who
7 are promoting GMOs right and left and encouraging
8 their proliferation into trespassing into our
9 fields.

10 And so, you know, Matthew started out
11 addressing the question. The last question we
12 posed, which is are all the prevention strategy
13 measures we can do sufficient to keep GMOs out.

14 And he very clearly said the answer is
15 no. Now granted crop to crop sometimes, yes,
16 maybe. But we need to do more and that more is -
17 - takes a concerted effort of the entire organic
18 world and non-GMO world and consumer world.

19 It has to happen through labeling
20 efforts. It has to happen through litigation to
21 keep these things out and it has to happen
22 through us keeping organic standards strong.

1 So I'm asking you to say what else can
2 we do? What are the other ways besides what
3 we're doing to keep the pressure on, while still
4 maintaining organic integrity? The easiest
5 question, of course.

6 MR. BROWN: All right. I'll take a
7 swipe at it. I think we need data. I think we
8 need credible data and I think we need to have,
9 as Mac mentioned, stakeholder involvement.

10 If you try to put a -- to keep the
11 GMOs out, so to speak, from a vacuum, it's simply
12 not going to work.

13 So we need to work together. The
14 reason I like the market is because the market is
15 very efficient of sorting out things that don't
16 work. So I think the key word there is "out."

17 The fact -- the reality is in the
18 U.S., you know that the chances of us having no
19 GMOs in seed at a 000, you know. Non-detect to
20 the levels of our detection. That's just simply
21 not going to work.

22 It's just -- we -- it's just simply

1 impossible. I tried to show you some of the
2 reasons why that that can be impacted. You know,
3 with pollen being able to travel a mile, you know
4 if you look at some of the standards I've seen on
5 contaminatable crops, they have a standard of
6 three miles for corn.

7 You know, there's maybe a few counties
8 in central New Mexico that's going to work, but
9 in the corn belt, that just simply isn't going to
10 work.

11 So I think we need to keep -- use the
12 word, "out," as something that we let the market
13 help figure out. I mean what -- frankly, what's
14 the difference between .1 and .9?

15 That's where I struggle with in a
16 threshold. To a consumer, you know, and what's
17 the difference? To a seedsman, it could be
18 \$160,000. So I guess at some point, I don't
19 think we'll be able to keep it absolutely pure.

20 I think you have the people that are
21 in business right now are doing everything they
22 can to get it as clean as possible. Nobody likes

1 to have GMO AP presence in their seed.

2 They're really trying to do everything
3 they can, but we're subject to that environmental
4 -- those variables. So I've actually invested
5 and have a program in place to do what you're
6 saying, I think in the right manner, up through
7 the breeder's seed and the hybrid seed.

8 I'm still grappling with what can we
9 do in the hybrid seed. You know, originally we
10 thought "none found" in three, now we're starting
11 to reevaluate that we'll go back and look for
12 another couple of years. Is it none in a
13 thousand pool sample?

14 I like the "none found" for the
15 organic market, because it's true, in that
16 sample, it was evaluated there was "none found"
17 to the levels that we can detect. So it's a true
18 statement.

19 It does not say there is nothing
20 there. And I think if somebody tells you that
21 they can get it to that, I would really be highly
22 skeptical.

1 MR. DILLON: So there's a laundry list
2 of things that we can do, of course, to keep
3 fighting against the core regulatory -- lack of
4 regulatory framework on GMOs and many people in
5 this room are doing it, from legal to consumer
6 activist to lobbying, labeling, perspective --
7 but in the end, you know, this is an issue that
8 comes down to the smell of money.

9 We are never going to outspend them on
10 the Hill, but what we can do, is we can become a
11 big enough market that they have to pay
12 attention, and we're on our way to doing that.

13 We are now, as folks know, and crops
14 like fruits and vegetables are becoming
15 statistically so significant, they cannot ignore
16 organic. We're in all the major retailers.
17 We're the -- 70 some percent of households eat
18 some percentage of, you know, organic -- buy at
19 least one organic product.

20 If the market continues to grow with
21 integrity and the rules in integrity and
22 processes, if the market continues to grow, they

1 cannot ignore our demand for a stronger
2 regulatory framework that protects our
3 competitive interests and ability to operate as
4 farmers, as brands, and as consumer needs.

5 So in the end, I do think that market
6 growth is one of those things we don't talk about
7 as a solution, but it is one of the solutions
8 that we have to recognize is there.

9 MR. EHRHARDT: So to that, I'm --
10 Matthew said it very well. But I would just add
11 that for this, I think -- are you referring to
12 what this Board can do, if I understood you
13 correctly.

14 So, for to my mind, it's going back to
15 the idea of -- I hate committees, but having a
16 committee that's focused on thresholds and
17 involves stakeholders from throughout -- from
18 beginning to end of the food chain and from
19 different parts of the industry.

20 And recognize that not all species are
21 the same and may have -- and different species
22 may have to be dealt with in different ways.

1 But sending that signal that yeah,
2 you're taking this seriously. There does need to
3 be at least work being done on the development of
4 these thresholds.

5 MEMBER SONNABEND: Okay. Well,
6 thank you very much. We have reached our time.
7 That's very helpful and thank you for taking the
8 time out of your very busy planting schedules
9 right now to come down here.

10 MEMBER WALKER: Thank you, Zea.
11 Also I would like to say that based upon, I
12 believe Mac -- Matthew Dillon had mentioned that
13 the seed is the first, what -- unforgotten child
14 of agriculture and I agree. And I would
15 certainly hope that even though I will be off the
16 Board, that panels like this would continue as we
17 deal with this issue.

18 CHAIR RICHARDSON: Madam Chair, we
19 should continue.

20 MEMBER SONNABEND: Do you want to
21 take a break now or you want to --

22 MEMBER WALKER: Zea, you're up next.

1 MEMBER SONNABEND: Yeah. I mean,
2 maybe it would be our scheduled break time.
3 We're running just a little late, but let's have
4 a break and then we'll wrap this up right
5 afterwards.

6 CHAIR RICHARDSON: Okay. There will
7 be a ten-minute break and then we'll go back to
8 the materials sub-committee. Thank you.

9 (Whereupon, the above-entitled matter
10 went off the record at 10:26 a.m. and resumed at
11 10:41 a.m.)

12 CHAIR RICHARDSON: All right. The
13 sooner we get started the more likely we are to
14 get out of here by sunset. "Sunset" being your
15 favorite word

16 Okay. Before we jump back into the
17 Materials Subcommittee, we have to work out an
18 important thing to do with these earthworms.
19 Believe it or not we're going to do something
20 with these earthworms, right?

21 Zea.

22 MEMBER SONNABEND: Okay. Well, I

1 have to -- we have to have just a teeny ceremony
2 here before we kick off the next part.

3 Much as these earthworms would like to
4 stay for the methionine vote and they really
5 don't want to be pecked up by a chicken in a
6 field somewhere, and so we have decided to send
7 them on their way to a responsible organic farm
8 in the San Diego area. And so I would like to
9 present these earthworms to Karen Archipley from
10 Archi's Acres who will take them on.

11 (Applause.)

12 CHAIR RICHARDSON: I'm so relieved to
13 see those earthworms safe. Settled in a same
14 home, a friendly place.

15 Okay. Let's see, Colehour, you had a
16 quick thing you wanted to say before we go back
17 to the Materials Subcommittee.

18 MR. BONDERA: I do have a quick thing.
19 And I actually -- I apologize for interrupting
20 the Materials. I didn't mean to do it that way,
21 but I tried to slip in beforehand.

22 I just wanted to ask -- go back to

1 Crops. And I apologize that I didn't bring it
2 together during that conversation. I meant to,
3 but I really think when you were talking, Zea,
4 about inert ingredients, I sort of did a double
5 take in my mind and I've been thinking about it a
6 little bit because it's a little bit unclear to
7 me from the last Board meetings and a little bit
8 of our discussions in Crops Subcommittee, that I
9 had understood, and I guess I'm asking
10 clarification or figure to get it addressed.

11 I had understood that the program was
12 going to publish that list for inert ingredients
13 that the working group had been working on, or
14 had identified, I don't know what, in the Federal
15 Register how, but it was going to be put forth
16 publicly, because you were commenting that that
17 information wasn't -- isn't available.

18 And I just want to understand, because
19 I'm pretty positive I remember -- and I don't
20 know if it was Emily per se. She's not here.
21 But there was a presentation that we received
22 that said it was going to be happening. So I

1 just wonder if we're -- it just seems like time
2 is passing and I just think it's an important
3 thing for us to move forward if that's sort of
4 stopping it. Thank you.

5 CHAIR RICHARDSON: Okay. Got the
6 idea. So, Zea, quick response.

7 MEMBER SONNABEND: Yes.

8 CHAIR RICHARDSON: And then we'll get
9 back to Materials.

10 MEMBER SONNABEND: Yes. I think
11 you're misunderstanding a little bit what -- it's
12 two different things here we're talking about.

13 The list of inert ingredients, by
14 themselves, that was collected by the Inert
15 Working Group, has been in the plans to publish
16 in the Federal Register when the Notice comes out
17 indicating that we're going to review all the
18 inerts. But it has gotten stalled because of
19 waiting for the agreement with Design for
20 Environment, which will affect the other parts of
21 the Federal Register Notice of how we're going to
22 review the inerts. So that will come out

1 eventually.

2 But what I was saying yesterday was
3 not just the list of inerts, it was the
4 connection between those inerts and what products
5 they're in. And that's the information we do not
6 have access to. None of us do. I mean AMRY
7 (phonetic) does internally, and the EPA does
8 internally, but we don't -- we just have the name
9 of a long chemical. We don't know what thing
10 it's used in. So that's what I was talking
11 about.

12 CHAIR RICHARDSON: Great. Thank you
13 very much for your response. Now I'll return the
14 Board meeting back to Calvin for the Materials
15 Subcommittee.

16 MEMBER WALKER: Thank you Madam
17 Chair. Our next -- we have a discussion document
18 which will be led by Zea. It is entitled,
19 "Excluded Method Terminology," and after that we
20 will have another discussion document,
21 "Preventative Strategy Guidance for Excluded
22 Methods in Crops and Handling," led by Francis

1 Thicke. And please note that neither of these
2 two documents will be -- it's a discussion
3 document so there will not be no votes.

4 MEMBER SONNABEND: Thank you,
5 Calvin.

6 This is the second posting of our
7 discussion document on excluded methods
8 terminology for GMOs.

9 Once again, this is a good example of
10 how one short comment period is not long enough,
11 and even two short prior comment periods is
12 really not long enough to get the word out to all
13 the aspects of the organic community that need to
14 be thinking about this. And so, we did not get
15 very many comments in.

16 However, that being said, we got some
17 very interesting and useful comments in this time
18 and I'd like to particularly thank the Center for
19 Food Safety for doing a lot of work on this
20 presenting probably 15 or 20 scientific articles
21 that we can go back to and refer to as we make
22 our next round on this one.

1 And several other commenters gave, you
2 know, really informed and valuable comments that
3 we will use. Because this is a very complicated
4 document with a lot of parts to it and a lot of
5 areas that we're seeking to put on, I'm not even
6 going to really attempt to summarize it in the
7 short period we have today. I thought it was
8 more important to really get our expert panel on
9 the agenda. And, plus, it's information that
10 will take quite a while to digest.

11 But in general, what we're trying to
12 do is establish a framework against which we can
13 measure the types of genetic engineering that are
14 in use now and the types that are new and in the
15 pipeline and develop a clear framework so that in
16 the future these things can be evaluated and very
17 clearly articulated a prohibition. And doing
18 this without changing the rule at all. We're
19 trying to do this through guidance.

20 And then once we have a framework set
21 up to evaluate and can take care of the, you
22 know, probably three-quarters of them that are

1 very clearly prohibited, we can start to have
2 discussions about the remaining ones that there's
3 lack of clarity about, that there's disagreement
4 in the community about, and like that. And then
5 we can target our discussion in the places we
6 need it instead of being all over the map.

7 Rest assured that those areas of
8 concern that have been brought up, such as
9 synthetic biology and zinc nucleotase and the
10 ones that our Seed Panel just showed us -- some
11 new techniques that I can't remember, the
12 acronyms. But those will all be thrown into this
13 hopper and chewed up and thrown out, hopefully,
14 with a TAP.

15 And we're going to do this with as
16 much public transparency as possible, and this is
17 an ongoing effort.

18 So this may not -- we have it on our
19 work plan to come back in fall with another
20 discussion document. But in light of our
21 gigantic workload for the 2017 sunsets, this may
22 not come back again until next spring. But this

1 is not a finished product, and so it will be
2 coming back to us.

3 And I guess there's time for a few
4 minutes of discussion if we need to. Although
5 we're kind of not going through the content of
6 this right now. Okay, thank you.

7 MEMBER WALKER: Thank you Zea. Okay.
8 Next, Francis Thicke.

9 MEMBER THICKE: Thank you, Calvin.
10 Do we have -- there we go, slides.

11 So, just first of all to refresh what
12 this is all about, this prevention strategy
13 guidance for excluded methods. There are four
14 sections in it basically. Three of them having
15 to do with best management practices; one for
16 seed and crop production, one for livestock
17 production, and one for handling.

18 And then the part that got the most
19 discussion, or comments, was the area on seed
20 purity requirements for non-organic seed. We had
21 quite a few good comments, 18 comments, 4
22 individuals, and a lot of organizations gave some

1 in-depth comments.

2 Overall there are a couple of points
3 that I think were consensus. First of all, this
4 is a timely and important discussion issue. And
5 secondly, that we have to move slowly. We heard
6 today too that we have to be very careful that we
7 don't put ourselves in a corner somewhere. So
8 as we're working towards trying to determine
9 thresholds we need to move slowly.

10 Some of the comments. A couple
11 mentioned that we -- that prevention strategy
12 should be part of the organic system plan for
13 certified people, certified farms and handlers.
14 Secondly, that this should be implemented in the
15 context of sound and sensible. So we don't want
16 to put an undue burden from this on people being
17 certified.

18 Another point that came up was that
19 the NOP should provide guidance and training for
20 certifying organizations for GMO testing.

21 Okay. And this first step, to test
22 the purity of non-organic seed that's used under

1 the commercial availability clause. So that's --
2 I think people think that's -- a lot of the
3 comments seem to indicate that was a good idea.

4 Another point, a suggestion that we
5 should establish a task force that would survey
6 the levels of GMO contamination in both organic
7 and non-organic seeds and propose crop specific
8 thresholds and a timeline for implementing a seed
9 purity standard for non-organic seeds.

10 Standards for non-organic seeds will
11 probably become the de facto standard for organic
12 seeds. We had a couple of comments along those
13 lines.

14 And very importantly, we need lots of
15 input and guidance from seed producers and seed
16 sellers and farmers.

17 Another comment. Thresholds by crop
18 may be necessary. We certainly heard that today
19 too. More testing of seeds by accrediting -- I'm
20 sorry -- by certification organizations and
21 reporting those results back to the NOP so we can
22 build some database on what the levels of

1 contamination are.

2 More emphasis on using organic seeds.

3 We heard that today too.

4 And this is probably the most common
5 comment we got, is that the NOSB should advise
6 the USDA of the need for stronger regulations for
7 shared responsibility. So the GMO companies
8 really need to take some responsibility. We know
9 that's a difficult thing to do, and how are we
10 going to do that.

11 So the question is, who pays when the
12 seed can't meet a threshold. And without a
13 safety net the cost can be overly burdensome for
14 seed producers and farmers. So the consensus
15 seemed to be that the polluters should pay. But
16 how to get there, who knows.

17 And that thresholds could severely
18 limit the available genetic pool for organic
19 farming, and we heard that today too, so that's
20 how we have to be careful that we don't get
21 ourselves in a corner somewhere.

22 There was suggestions that in this

1 document we should separate out the section on
2 testing and thresholds and continue that
3 discussion as a discussion document in the
4 future. But we should take the rest of it, the
5 guidance for prevention strategy and bring it
6 forward as a proposal in the future, taking all
7 the comments that we've gotten.

8 And everybody likes to see some cows.

9 (Laughter.)

10 Any comments? Zea.

11 MEMBER SONNABEND: Well, I think one
12 of the most interesting things, or additional
13 needs that I've heard affect both prevention
14 strategies and what I'm working on for excluded
15 methods, is there really isn't any sort of
16 clearing house where someone can go to find out
17 what techniques of genetic engineering are used
18 and what exact varieties of genetically
19 engineered crops are out there on the market.

20 Apparently, Matthew has -- the Union
21 of Concerned Scientists does have a listing. May
22 or may not be complete and may or may not be

1 maintained anymore. I know it used to be when
2 there were a lot fewer of them. And within APHIS
3 there is a list of approved deregulated
4 varieties, I believe.

5 But these things are not readily
6 available so that if a certifier is trying to
7 enforce a GMO policy for prevention, they're not
8 able to get those resources easily.

9 And so more resources for the
10 certifiers in general, in addition to training,
11 is important for helping us to implement any
12 strategy.

13 MEMBER THICKE: Thank you. Other
14 comments? Okay.

15 MEMBER CHAPMAN: I'm interested to
16 know other members' thoughts on the comments from
17 the OTA, specifically around breaking out the
18 seed testing portion of the recommendation and
19 putting that as part of a separate proposal that
20 also would include a task force and a study
21 period to get more data as the panel spoke to its
22 need.

1 MEMBER THICKE: I think that's a
2 good idea because it's going to be ongoing
3 process and we need to bring experts from a wide
4 range of areas. Zea?

5 MEMBER SONNABEND: Yeah. The
6 Subcommittee has not met to discuss this
7 proposal. But it seems like that's very likely.
8 There's no way that -- from what we heard today
9 and our own knowledge, there's no way to advance
10 a seed testing proposal along with this
11 recommendation.

12 However, the rest of the prevention
13 strategy guidance, we very much do want to bring
14 forward as a proposal next time.

15 My personal feeling is that most of
16 these provisions already are covered in OSP, so
17 it doesn't need to be a separate part of an OSP.
18 But the reason that we designed it this way is so
19 that if a grower is challenged by a contamination
20 incident, for instance, or asked to prove to his
21 buyer that they're doing all the steps necessary,
22 they can have a concrete set of all of these

1 practices in one place that they can then provide
2 to that source to help -- to help their sales,
3 help their fight against contamination.

4 So, yes, I think it's entirely likely
5 that that's what will happen.

6 MEMBER THICKE: Anyone else? Did
7 you have something, Paula?

8 MEMBER DANIELS: Yeah. And I want to
9 thank you for your good work. This is a very
10 complex field, obviously. That's a huge
11 understatement just to say that. And I think I'm
12 playing a little bit of catch-up here, but I
13 wanted to take -- my question goes back to the
14 document that you prepared for discussion, and
15 there were several discussion questions that you
16 asked for comment on.

17 And the one that I don't remember
18 hearing any answer to, but maybe I wasn't
19 tracking it appropriately, was your question
20 about the Cartagena Protocol and terminology.

21 Do you have -- did you get a sense
22 from the past few days what the public response

1 is to that or --

2 MEMBER THICKE: For -- say it again?

3 MEMBER DANIELS: The Cartagena

4 Protocol. That was one of the discussion

5 questions.

6 MEMBER THICKE: Oh, no, we didn't

7 see any comments.

8 MEMBER DANIELS: Yeah, I didn't. So

9 I'm just wondering where the Committee stands on

10 that and the other questions that you raised for

11 discussion.

12 MEMBER THICKE: Go ahead, Zea.

13 MEMBER SONNABEND: That's actually

14 more a part of our other document on excluded

15 methods terminology.

16 MEMBER DANIELS: Isn't that what

17 we're talking about?

18 MEMBER SONNABEND: No. We're

19 talking about the prevention strategies.

20 MEMBER DANIELS: Oh. I was just

21 going through the book, sorry.

22 MEMBER SONNABEND: That's okay.

1 MEMBER DANIELS: See, I am just
2 getting caught up. Sorry. Sorry, Francis.

3 MEMBER SONNABEND: We did receive
4 some comments, mostly generally in support. Some
5 of them were not --- didn't like the part about
6 intraspecific crosses and want us to re-evaluate
7 that because that is the crux of the cell fusion
8 debate. But we'll try --

9 MEMBER DANIELS: I've got to tell
10 you. I went there three times to try to get
11 them.

12 MEMBER SONNABEND: Yeah. Michelle's
13 tried a lot too. It's not working.

14 MEMBER DANIELS: Yeah.

15 MEMBER SONNABEND: The first round
16 to comment on that we did receive more comments
17 about that. So it's likely we're going to
18 proceed with some level of attempt to adopt that
19 in the next round.

20 MEMBER DANIELS: Okay. It seems to
21 all tie together, which is why I was looking at
22 it together. Sorry for taking you off course.

1 MEMBER SONNABEND: It certainly does
2 tie together.

3 MEMBER THICKE: Nick, you got a
4 comment, question?

5 MEMBER MARAVELL: Yeah, on the
6 prevention strategies. The issue of dust, which
7 we heard from the panel on, I just wanted to sort
8 of clarify that this is non-viable material that
9 will be picked up in a test, but it won't
10 necessarily be able to propagate GMO seed.

11 So I guess my question is, is there
12 some way -- I mean it still needs to be
13 controlled. It's virtually impossible to control
14 it 100 percent. But is there some way to make
15 that clear in this prevention strategy that that
16 does not necessarily lead to the propagation of
17 GMO progeny but it certainly complicates the
18 issue of testing tremendously.

19 MEMBER THICKE: We can do that.
20 Good idea. Thanks.

21 I think maybe we should move on, do
22 you suspect? Okay. Calvin.

1 MEMBER WALKER: I'm not paying
2 attention.

3 To answer to Tom's question. I would
4 certainly say as a subcommittee chair, as Zea
5 mentioned and Francis, I think you would have 100
6 percent support of the idea of breaking those two
7 out and that will be taken up, I'll suggest.

8 Okay. I would like to say in closing
9 that we would certainly like to thank the
10 Materials Subcommittee. As a subcommittee chair
11 it's been very easy having Zea as a de facto
12 chair. Francis Thicke, and we have Nick
13 Maravell, and also Jennifer Taylor and Colehour,
14 and along with Mr. Harold Austin, it makes up for
15 a very good committee.

16 And we also appreciate Michelle
17 Aresenault of the program, and Emily Rosen who
18 have always been there to help us if we go
19 astray. Along with Betsy Rakola.

20 Madam Chair, that concludes the
21 Materials Subcommittee's proposal.

22 CHAIR RICHARDSON: Thank you very

1 much, Dr. Walker.

2 In mentioning Harold, you should know
3 obviously he's desperately trying to be part of
4 this meeting, even though it's a bit crazy
5 because he's getting physical therapy apparently
6 every three hours, poor guy. And will be flown
7 home, I think tomorrow, to Yakima. So he may or
8 may not come in by whatever Skype-y magical thing
9 they do nowadays. It may or may not happen, but
10 we certainly continue to wish him well.

11 So the next item on our agenda is
12 going to be the Compliance, Accreditation and
13 Certification Committee which is chaired by
14 Carmela Beck, whose birthday it is today.

15 (Singing Happy Birthday to Ms. Beck.)

16 MEMBER BECK: Thank you. Okay. So I'm
17 going to launch in to about five minutes of
18 reading, so hold on tight, and then we'll open it
19 up for discussion.

20 So the NOP -- are we putting it up on
21 the screen? Okay. Okay. I like the cows. The
22 cows are better.

1 Okay. I'll go ahead. So, the NOP
2 issued a memo to the Certification Accreditation
3 and Compliance Subcommittee, on November 19th,
4 2014, titled the Peer Review of National Organic
5 Program Accreditation Process.

6 The memo requested that the CACS do
7 four things: Provide feedback through a proposal
8 for the Spring 2015 NOSB meeting; provide support
9 for the NOP's peer review process; provide
10 recommendations for how the process should be
11 changed to be successful; provide any suggestions
12 for the NOP to consider in its implementation.

13 So to refresh our memories, and I'm
14 just going to read Section 205.509 titled Peer
15 Review Panel.

16 It reads: The administrator shall
17 establish a peer review panel pursuant to the
18 Federal Advisory Committee Act. The peer review
19 panel should be composed of not less than three
20 members who shall; one, annually evaluate the
21 National Organic Program's adherence to the
22 accreditation procedures in this subpart (f), and

1 ISO/IEC guide 61; two, evaluate the general
2 requirements for assessment and accreditation of
3 certification registration bodies and; three,
4 evaluate the National Organic Program's
5 accreditation decisions.

6 This shall be accomplished through the
7 review of accreditation procedures, document
8 review, and site evaluation reports. And
9 accreditation decision documents or
10 documentation.

11 The peer review panel shall report its
12 findings in writing to the National Organic
13 Program's program manager.

14 So, in past years the NOP has
15 contracted with third-party auditing
16 organizations to conduct peer reviews of an NOP's
17 accreditation process and decisions in order to
18 comply with a requirement that the USDA
19 Agricultural Marketing Service Administrator
20 establish a panel.

21 However, the 2010 Office of the
22 Inspector General audit of the NOP determined

1 that use of third-party review organizations to
2 conduct the peer reviews did not satisfy the PRP
3 requirements as defined in the regulation.

4 Prior to 2010 the NOSB provided three
5 recommendations on this topic, in 2001, 2005 and
6 2009.

7 The 2001 recommendation discussed
8 operating procedures and peer review panel
9 selection criteria. The 2005 recommendation
10 mostly assessed the 2003 American National
11 Standards Institute Audit, and the 2009
12 recommendation provided a historical overview on
13 the topic with the request for regular ANSI NOIG
14 audits including mandatory NOSB review of said
15 audits.

16 So we thank the NOP for issuing this
17 memo and for taking into consideration previous
18 Board member deliberations.

19 The Subcommittee supports the adoption
20 of a formal peer review panel process, and is
21 broadly supportive of the NOP proposal as
22 written.

1 The CACS has only suggested three
2 minor modifications to the NOP peer review panel
3 process concerning the number, composition, and
4 experience of the PRP members.

5 Those include: One, we have suggested
6 an increase of members from the three minimum to
7 at least five in order to provide ample breadth
8 of experience to adequately approach the wide
9 range of issues to be covered; two, we've
10 suggested giving priority to PRP candidates with
11 inspection, certification and accreditation
12 experience and; three, we've suggested the
13 inclusion of a current NOSB member, specifically
14 the CACS Chair or Vice Chair.

15 The Subcommittee thanks the public for
16 their meaningful comments and is in agreement
17 over the following three shared public comment
18 sentiment.

19 One, the panel is critical to consumer
20 confidence in the certification process and the
21 organic integrity of the organic label. Two, a
22 critical part of NOP's work is to accredit and

1 oversee the work of third-party accredited
2 certifying agents. The NOP's accreditation
3 program is the foundation of a sound,
4 functioning, organic regulatory structure. And
5 regular systematic audits performed by qualified
6 auditors form the basis for the continued quality
7 of this regulatory system.

8 And lastly, the organic community
9 supports continuous review and improvement to the
10 NOP accreditation system and continue to support
11 the required review of accreditation procedures
12 compliant with ISO/ICE 17011, formally named ISO
13 Guide 61.

14 And lastly, consistent with the OIG
15 audit of 2010, the Subcommittee is also
16 recommending that the NOP pursue a rule change to
17 Section 205-509 of the regulation titled peer
18 review panel, to remove the Federal Advisory
19 Committee Act reference, so that contractors
20 could be hired as an independent assessment body.

21 This particular recommendation,
22 despite being outside the scope of this proposal,

1 merits mention.

2 So that concludes the report on the
3 proposal. And I wanted to see if any Board
4 members had any points to bring up or discuss.
5 Comments? Mac.

6 MEMBER STONE: Just kind of a point
7 of reference. When a couple years back we were
8 working through the sound and sensible
9 initiative, it came up in conversation with those
10 involved in accreditation that having that
11 oversight at the NOP gave a lot of credence to
12 the next layer down of accreditation, and then
13 down to the certification.

14 So it plays back in to that whole
15 system, and I think it's very valuable.

16 MEMBER BECK: Thank you. Any more
17 comment?

18 CHAIR RICHARDSON: Are we ready for
19 the question?

20 MEMBER BECK: I believe so.

21 CHAIR RICHARDSON: There is a motion,
22 seconded motion, that comes from the

1 Subcommittee. The motion was made by John Foster
2 and seconded by Jean Richardson.

3 We do have -- we did discuss when this
4 came up before on another subcommittee vote, that
5 it's perfectly appropriate and within the rules
6 for us to have John Foster still as the maker of
7 this motion.

8 We also are ready for the vote. The
9 vote will start with Mac.

10 MEMBER STONE: Yes, ma'am.

11 MEMBER DANIELS: Yes.

12 MEMBER TAYLOR: Yes.

13 MEMBER MARAVELL: Yes.

14 MEMBER BECK: Yes.

15 MEMBER SWAFFAR: Yes.

16 VICE CHAIR FAVRE: Yes.

17 MEMBER CHAPMAN: Yes.

18 MEMBER. BONDERA: Yes.

19 MEMBER SONNABEND: Yes.

20 MEMBER de LIMA: Yes.

21 MEMBER WALKER: Yes.

22 MEMBER THICKE: Yes.

1 CHAIR RICHARDSON: The Chair votes
2 yes.

3 MEMBER AUSTIN: This is Harold. Yes,
4 ma'am.

5 (Applause.)

6 CHAIR RICHARDSON: Harold, were you
7 listening in to the presentation and the
8 discussion prior to making this vote?

9 MEMBER AUSTIN: Yes, Madam Chair, I
10 was, from my hospital bed.

11 CHAIR RICHARDSON: Well, we hope
12 you're doing well, and it's absolutely amazing to
13 see you taking part in this conversation. Thank
14 you.

15 MEMBER BONDERA: Point of order.

16 CHAIR RICHARDSON: I recognize a point
17 of order from Colehour.

18 MEMBER BONDERA: I apologize to all
19 attending and Harold, I'm not wanting to say this
20 to her about you, because I feel for you
21 intensely in terms of your situation. I am just
22 concerned about absentee voting and using

1 absentee voting in this process related to both
2 precedent, the PPM, and Robert's Rules of Order.

3 My understanding is that absentee
4 voting is, from Robert's Rules, a fundamental
5 principle of parliamentary law, which it says on
6 page 423, that the right to vote is limited to
7 members of an organization who are actually
8 present at the time that the vote is taken in a
9 regular or properly called meeting. Although it
10 should be noted that a member need not be present
11 when the vote is put. Exceptions to this Rule
12 must be expressly stated in the bylaws.

13 And I'm unaware of any such
14 information in any -- it's not NOSB's PPM or
15 anywhere else in terms of allowing absentee
16 voting.

17 CHAIR RICHARDSON: The Chair
18 recognizes the issue raised, the point of order
19 raised by Colehour. Yes, this is an unusual
20 situation, although perhaps we may end up having
21 all of our meetings as virtual meetings in the
22 future, which would make our interpretations

1 always a bit complex.

2 Obviously as a courtesy to Harold, it
3 seems to me an extremely appropriate thing to
4 allow him to vote on anything that he has
5 actually heard discussed at this meeting because
6 he is virtually present. I can see him and I can
7 hear him.

8 In addition to that we aren't just
9 governed by Robert's Rules of Order. This were,
10 also governed, as you said, by the PPM and by
11 FACA and by tradition, and I hope we would add
12 sort of kindness and courtesy into this as well.

13 In addition, I believe we did seek, as
14 I would like to have some feedback on this from
15 our Parliamentarian, Dr. Brines, in a second.
16 But it's my understanding we did also consult on
17 -- immediately following Harold's accident with
18 the Office of General Counsel in order to
19 determine that actions such as this could in fact
20 take place and be legally considered on the
21 record, provided that Harold could hear what
22 we're deliberating at the meeting.

1 So, Dr. Brines, could you give us some
2 comment back on that. Thank you.

3 DR. BRINES: Just a moment. Thanks.

4 MEMBER MARAVELL: Madam Chair? While
5 we are waiting.

6 CHAIR RICHARDSON: Not ready yet.
7 Okay. Nick?

8 MEMBER MARAVELL: Yes. Could I
9 suggest, perhaps, a one or two minute recess
10 while we're waiting for Dr. Brines?

11 CHAIR RICHARDSON: Why? Do you need
12 a recess, Dr. Brines, to give us a
13 Parliamentary response?

14 DR. BRINES: Getting there. Thanks.

15 Yeah, I don't think we need to take a
16 recess. Thanks for the patience --

17 CHAIR RICHARDSON: Thank you.

18 DR. BRINES: -- while I get the
19 electronics organized.

20 Yes. We suggest that the minutes of
21 the meeting should note that Harold is
22 participating by phone to make sure his vote is

1 recorded, which I believe it is, electronically.

2 The Chair, which has already been
3 said, should announce that he is participating by
4 virtual means, and would just want to make sure
5 that Harold has the opportunity be recognized and
6 speak when appropriate.

7 So given if those parameters have met,
8 we don't have any objection to Harold
9 participating virtually at this time. Thanks.

10 CHAIR RICHARDSON: Thank you. So the
11 Chair rules that Harold Austin can participate in
12 the meeting provided that he can hear us and that
13 we can hear him as necessary when he needs to
14 make a vote, and that he has an opportunity to
15 ask questions and participate if he so chooses
16 and in between his physical therapy, which takes
17 place every three hours. And hopefully the
18 Percocet stays kicked in.

19 So we have a combination of legal and
20 a foolish reply here. All right. So we will
21 hear the reading of the vote from Tracy, please.

22 VICE CHAIR FAVRE: Thank you, Madam

1 Chair. I'm happy to say we have 15 yes, zero no,
2 zero absent. Motion passes.

3 CHAIR RICHARDSON: Thank you. Are
4 there any other matters? Carmela from the CACS
5 Subcommittee, please.

6 MEMBER BECK: Not at this time, Madam
7 Chair.

8 CHAIR RICHARDSON: Thank you. The
9 next item on the agenda is the Livestock
10 Subcommittee. Tracy Favre is the Chairperson of
11 this, and I would like to invite her to open up
12 her Committee's report at this time.

13 VICE CHAIR FAVRE: Thank you, Madam
14 Chair.

15 So, the first item on our agenda today
16 is methionine. And the proposal submitted by the
17 Methionine Working Group to amend the annotation
18 for methionine.

19 We spent, as a committee, a great deal
20 of time on this proposal. I think it's fair to -
21 - Dr. Brines?

22 DR. BRINES: Thank you, Tracy. Before

1 you jump in, I'll briefly introduce petition
2 substance. Thank you.

3 The petition for methionine was
4 submitted on April 8th 2011 by the methionine
5 Task Force, and the petition requests an
6 amendment to the current listing of methionine on
7 Section 205.603 of the national list under the
8 entries for feed additives.

9 The current listing reads as follows:
10 DL-methionine, DL-methionine hydroxy analogue,
11 and DL-methionine hydroxy analogue calcium, CAS
12 numbers 59-51-8, 583-91-5, 4857-44-7, and 922-50-
13 9, for use only in organic poultry production at
14 the following maximum levels of synthetic
15 methionine per ton of feed: laying and broiler
16 chickens, two pounds; turkey and all other
17 poultry, three pounds.

18 There are several technical reports
19 that have been prepared in support of the review
20 of this substance. The most recent one was
21 completed in 2011. This petition was also on the
22 agenda for the previous NOSB meeting in April

1 2014, a year ago today. Thanks.

2 VICE CHAIR FAVRE: See, I could have
3 saved myself some trouble if I'd let you speak
4 first.

5 I think most everybody in the audience
6 is aware of the debate and contention around this
7 material. We've struggled as a committee to try
8 to reach consensus on this. I think
9 fundamentally at issue is a concern that the
10 organic egg and broiler industry is not taking us
11 seriously in our insistence in phasing out
12 methionine.

13 I'll open it up here in a moment for
14 opportunity for discussion. But the proposal
15 itself took quite a bit of time to put together.
16 We had a proposal that we submitted in the San
17 Antonio meeting last year, spring of last year.
18 And after some parliamentarian wrangling over
19 some issues and being very clear that we were not
20 in consensus as a board we elected to take it
21 back to committee.

22 We've devoted an extraordinary amount

1 of bandwidth of the committee's time working on
2 this issue, trying to reach some resolution,
3 trying to get an understanding about what viable
4 natural alternatives are out there, including how
5 long it takes to bring something to market, what
6 it would take for the market to adopt alternative
7 substances.

8 In the end, we still were some
9 distance apart. I think you'll have an
10 opportunity to see and hear in discussion a
11 little bit later about a minority position on
12 some of the issues that have come up. But in the
13 end, we did submit and vote out of committee a
14 proposal to amend the annotation as follows:
15 DL-methionine, DL-methionine hydroxy analogue,
16 and DL-methionine hydroxy analogue calcium, CAS
17 numbers 59-51-8, 583-91-5, 4857-44-7, and 922-50-
18 9, for use only in organic poultry production at
19 the following pounds of synthetic 100 percent
20 methionine per ton of feed in the diet averaged
21 over the life of the flock: laying chickens, two
22 pounds; broiler chickens, two and-a-half pounds;

1 turkeys and all other poultry, three pounds.

2 There's been a considerable amount of
3 public comment, both written and oral, on this
4 material. Some of the comments were around the
5 fact that they felt like -- those against this
6 proposal felt that there was not enough
7 justification for the change in the rates,
8 particularly for the broilers. Some flat out do
9 not believe that methionine is necessary, and
10 that it's a reversal of the will of previous NOSB
11 Boards.

12 And there's a great deal of history in
13 the proposal, if you haven't had a chance to read
14 it, trying to go back and forth and capture what
15 that intent of that previous board was. But
16 having said that and kind of wrapped it up, I'd
17 like to open it up for discussion. Jean.

18 CHAIR RICHARDSON: Mine is more of a
19 procedural comment, is that I am on the record
20 that the Chair can observe on the computer screen
21 over there, next to Michelle, the virtual person
22 of Harold lying in the hospital bed, that he has

1 earphones on and that he's waving his hand and
2 listening to the conversation.

3 VICE CHAIR FAVRE: Thank you. Calvin?

4 MEMBER WALKER: I would like to
5 start by saying how we're glad to see you here.
6 And I hope that at the end of this particular
7 methionine issue that it works out for consumers,
8 past boards, and moving the industry along.
9 There's a word that I like to use is, ISLAGIATT.
10 It means that it seems like a good idea at the
11 time. When methionine was first brought to NOSB
12 it was the intent to phase it out, and 14 years
13 later we are still dealing with it. And today it
14 seems like we need to find a path to make this
15 work.

16 As it relates to the public comment,
17 we had 19 percent of those who commented -- it
18 was over 200 comments -- were in support of
19 averaging; 80 percent was against averaging.

20 I represent the consumer groups.
21 There was a total of six. Five out of the six
22 wanted an expiration date. When we left San

1 Antonio, that was the purpose of taking this
2 proposal back, was to deal with this particular
3 matter. And we did not.

4 And there was some on the committee
5 which I felt new members thought that some of the
6 things that was done was not appropriate. I
7 certainly apologize for it. And I hope that
8 prior to Harold coming on the phone, Skype, that
9 what we have been talking about via e-mail at
10 this meeting, that that would continue. That we
11 will take this particular proposal back and let's
12 see if we can find a path to make it right.

13 I looked yesterday. There's been
14 about 67 votes on methionine. None has been in -
15 - of the 67, 61 was for a cap, not an average.
16 That's roughly 91 percent of previous NOSB board
17 members since 2001 have voted against averaging.

18 If we are to respect the previous
19 Board members for what they intend, I think we
20 need to take this back and see if we can get it
21 right for the fall for the final time.

22 When I looked at 2010, April the 29th,

1 which was 365 plus 1, in Woodland, California,
2 averaging over the life of the bird as brought
3 up. Twelve Board members voted no to averaging;
4 2 voted yes. All of the environmentalists voted
5 no, the retailer voted no, all farmers voted no,
6 and all consumer advocates voted no.

7 VICE CHAIR FAVRE: Calvin, I'm getting
8 the hairy eyeball from Madam Chair, so I think we
9 need to get an opportunity for some other folks
10 to speak.

11 MEMBER WALKER: Okay.

12 VICE CHAIR FAVRE: Thank you for your
13 comments. I appreciate your passion on the
14 issue.

15 Any other comments? Mac. And then
16 did I hear -- Paula.

17 MEMBER THICKE: I agree, Calvin.
18 This is kind of an ad nauseam conversation. But
19 it's also, in my mind, not a very organic
20 conversation and it's become focused on one piece
21 of a more complicated puzzle.

22 So I guess I'd like to frame it rather

1 quickly, if I could, Tracy, that we have the
2 Methionine Task Force but maybe we need more of
3 an organic poultry working group.

4 Dan mentioned the other day in his
5 comments that they purposely pinched the industry
6 to feel the pain, and they have told us that they
7 are. And the birds are the hostage in this
8 little conversation, and I'm not really
9 comfortable with that.

10 So I'll put this more politely than I
11 really wanted to. But you can wish a wish upon a
12 star and wish things were different. So I guess
13 I'm kind of thinking that the committee, or the
14 broader community here, have more of a multi-
15 prong approach, that if the methionine is sort of
16 the lightning rod of the organic poultry system
17 that we have in this country, as its evolved to.
18 But we need to have a conversation with AFCO, and
19 what will they allow. Are we letting retail
20 drive farm policy in vegetarian diets?
21 Vegetarian diets are not normal for poultry. Has
22 this Board allowed use of vegetarian diets, which

1 excludes meat products or insects, which is more
2 normal for the chicken. How do we investigate
3 those things?

4 We heard this morning that it takes
5 six to seven years to bring a new variety of
6 corn, in this case, to market. Genetics, it's a
7 much longer growth curve for a change in that.
8 I heard concerns that if we don't want to go down
9 the rabbit hole of the pasture rule and undo
10 verification for those farmers that are not
11 averaging and what do certifiers have to require
12 of all poultry farmers. Do we allow a natural
13 source of methionine? It's not organic. It is a
14 feed ingredient. But can we find the natural
15 source?

16 So, there's a lot of work for this
17 Board. So, I can find plenty of work for the
18 committee to do, but I think it's bigger than our
19 community sitting on a telephone talking to each
20 other across the country. So, whether we take
21 this back to committee, or I could be
22 comfortable, I would vote in favor of the

1 recommendation to give ourselves five years to
2 work on this versus six months.

3 VICE CHAIR FAVRE: Thank you, Mac.
4 Paula and then Jean.

5 MEMBER DANIELS: Thank you. And I'll
6 ask for a little indulgence as I try to get my
7 thoughts together, because I am a new member and
8 this is my fourth month on the Board, and this
9 has been a very longstanding issue, so I've been
10 trying to get caught up.

11 And I want to say first, Calvin, no
12 apologies needed. I appreciate your saying that.
13 But he was referring to a discussion we had on
14 the Board about a minority report. And I'll just
15 say briefly that my concern there and my
16 frustration was that none of the views expressed
17 in the minority report were expressed in any of
18 our discussions.

19 So, as a new member, I was interested
20 in soliciting, hearing different viewpoints, and
21 I didn't hear them before we voted. So, that was
22 my frustration. So, you know, it seemed to me

1 odd to have something come in after the vote.

2 And, you know, I'm saying that now because I want
3 to say that I'm interested in hearing all points
4 of view and I have been paying very careful
5 attention to all of the comments that have been
6 made on this issue.

7 And I will say that my understanding
8 of the issue before us for vote today is whether
9 or not there should be an average. There's also
10 pending a resolution, you know, sending a strong
11 signal that we want a phase-out of this
12 synthetic.

13 On the question of the average, it
14 seems to me to be a reasonable change. If you're
15 just looking at average. I'm going to separately
16 talk about the use of this substance.

17 But if you're just looking at an average, I feel
18 that, you know, having a sort of arbitrary
19 maximum is not -- I believe in giving flexibility
20 to those who are using a substance. And this
21 happens in other regulatory settings. You see it
22 often in other scenarios. So, if that's the only

1 question, it seems a reasonable approach.

2 Obviously, there are larger questions
3 at stake that have been raised in the
4 conversation. But the other thing I'm convinced
5 about is that it is an essential amino acid. I
6 don't think anyone is disputing that.

7 One of the other facts is whether or
8 not there's a commercially available alternative.
9 And that question is more complex. One of the
10 things that I notice in all of the testimony we
11 heard is that there's reference to commercial
12 availability of other and non-synthetic
13 alternatives, but no producer of that non-
14 synthetic alternative was here to testify about
15 the commercial availability.

16 What I do know from my own research --
17 I've been mostly focused in on aquaculture -- but
18 that there's a very concerted effort to try to
19 find other forms of feed for fish, and black
20 soldier fly larvae is one of those that we've
21 been looking at and I've been looking at closely.
22 I had an intern over the summer from the UC Santa

1 Barbara Bren School of Environmental Science
2 who's working on that issue of producing black
3 soldier fly larvae, so I've been looking at that
4 for a while.

5 I know there are two companies, one is
6 EnviroFlight, the other is Enterra. But two
7 companies are not going to be able to supply this
8 market. They're not even able to supply the
9 aquaculture market right now. It's a \$38 billion
10 feed market.

11 I am sure the poultry feed market in
12 organic is larger than that. So, whether it's
13 currently commercially available, I'm not
14 convinced that it is at this moment. But could
15 it be? So, I'm going to come back to that
16 question.

17 The other argument was about
18 pasteurizing, and while that's -- you know, it's
19 certainly an ideal approach, I didn't hear any
20 testimony or see any public comment from someone
21 who actually raises chickens in a pasture who
22 were able to methionine and to get enough of a

1 production of fish -- I mean, excuse me, not fish
2 -- I'm not confusing the two, I promise -- of
3 poultry, I just didn't hear it.

4 It might be that it's done, but I'm
5 going to guess that it's less than 1 percent of
6 the market. I don't really know. Don't hold me
7 to numbers. But it just seems like it would be a
8 small amount of the market.

9 And that brings me to another point
10 which I find important, which is the availability
11 of organic products in general. And it's
12 something that, you know, I feel really strongly
13 is important to be available to as large a
14 consumer base as possible.

15 And at the moment, one of the things
16 that we're struggling with, too, in the food
17 policy work that I do, is the availability and
18 affordability of healthy food to all people. One
19 of the consumer groups that I work with are lower
20 income communities who don't have terrific access
21 to healthy food. It creates a public health
22 problem. And it's one of the areas we work in in

1 the Food Policy Council that I founded, which the
2 main goals are: local economies; sustainable
3 production, which includes organic; fair labor,
4 which we don't really talk about here but it's an
5 important part of the whole equation; animal
6 welfare; and healthy food access.

7 So, the question of availability of
8 organic production. If it's going to shrink to a
9 small amount, I think, is a question that tasks
10 me quite a bit.

11 So, the fact that we had so many
12 producers who are organic talk about the need for
13 this was quite persuasive to me. And one of the
14 things I wanted to point out, too, is that even
15 Cornucopia rates a number of egg producers. And
16 from what I saw in their rating, about 40 farms
17 were acceptable to them, given their own rating.
18 One of them was Egg Innovation, on their list,
19 and we had the person from Egg Innovation testify
20 here about the need for synthetic methionine at
21 the moment.

22 Now, this leads me to the final

1 question, which is, they've been given signals
2 for a long time about phasing out. And that was
3 the thing that I was concerned about most in what
4 sort of efforts could we put on making sure that
5 there's a really good faith effort to explore
6 these non-synthetic means.

7 I don't believe that black soldier fly
8 larvae is commercially available at the moment.
9 But with support, it does seem that that market
10 could develop -- I am not a venture capitalist so
11 I'm not in a position to be able to assess this -
12 - but within a few years.

13 So, what I'm really hoping to see --
14 and I really appreciate, Mac, your reference to
15 an organic poultry working group, because I think
16 it might get at that. But I was hoping to see
17 some more specific responses from the Methionine
18 Task Force about what exact conversations they're
19 having with whom, whether they're willing to find
20 pilot projects in using black soldier fly larvae
21 somewhere around the county.

22 And if they could report to us very

1 specifically, you know, at least once a year, but
2 maybe at our regular meetings have a very
3 specific report on the exact amount of
4 investment, and conversations that they're having
5 with the black soldier fly larvae industry, with
6 the FDA, and, you know, some very specific
7 responses to our questions.

8 I think that would be helpful and
9 really assure me, for one, that there is a good
10 faith effort to find a non-synthetic alternative.

11 VICE CHAIR FAVRE: Thank you, Paula.
12 Jean.

13 CHAIR RICHARDSON: Yeah. I'll be
14 brief because we've certainly talked about this
15 at the previous meeting too.

16 Obviously, I would be somewhat
17 disappointed if we do decide to send this back to
18 subcommittee, but understand our enormously
19 strong desire to reach a consensus from across
20 the subcommittee. And as a member of the
21 subcommittee, I hope that we will certainly vote
22 on the second motion, which is the resolution on

1 the phase-out. So, that would be my hope, Tracy,
2 as the chair of the subcommittee, that we could
3 at least vote on the resolution even if we decide
4 that we're going to try continue to get better
5 language for the main amendment motion.

6 VICE CHAIR FAVRE: Tom.

7 MEMBER CHAPMAN: This is not an easy
8 subject, and in weighing the various sides I am
9 leaning in favor of this proposal based on the
10 animal welfare argument.

11 I'm aware there are multiple
12 perspectives on the animal welfare issues,
13 including concerns from interest groups that the
14 animal welfare issues are not a product of the
15 methionine issues. I agree this issue is not
16 clear and I wish I had more definitive and
17 independent information on this subject.

18 That being said, if what the industry
19 has said is true, then I'm quite certain that
20 cannibalizing chickens and featherless birds are
21 not what consumers expect when it comes to buying
22 organic eggs and poultry.

1 We've already heard from the organic
2 community, and the Board has already attempted in
3 previous and different recommendations to deal
4 with animal welfare issues and organics.

5 In this current imperfect world with
6 imperfect information, at this time I think I'm
7 going to vote in favor of this issue based on the
8 animal welfare, and, thus, in favor of methionine
9 averaging.

10 I would like to echo Mac's call for
11 establishing an organic poultry working group,
12 and really approaching this issue for a more
13 holistic view for a more holistic and organic
14 solution. Thank you.

15 VICE CHAIR FAVRE: Ashley.

16 MEMBER SWAFFAR: So, to start off,
17 I wanted to tell you guys a little bit about my
18 background since I'm new to the Board.

19 So, I've been working for seven-and-a-
20 half years in the organic layer industry, and six
21 of those years I've been working with pastured
22 flocks. And I now work exclusively with pastured

1 flocks. And our flocks get about at least 1.75
2 square foot per bird inside and 108 square foot
3 per bird outside, with typical flock sizes
4 ranging from 2- to 4,000 birds. So, Paula, I'm
5 your pastured person that's going to comment.

6 And, you know, there are lot of
7 written comments saying that large flocks, lack
8 of outdoor access, and the management practices
9 of the organic egg farmers are leading to the
10 pecking and cannibalism, and not the lower
11 methionine levels.

12 And as a pasture-based producer, we're
13 still seeing these problems. And, you know, just
14 like the larger flocks in the smaller outdoor
15 areas, us with the highest, 108 square foot per
16 bird, we still see these issues.

17 And it's really concerning because I
18 have a great passion for advancing the welfare of
19 the laying hens in this country, and methionine
20 is so frustrating to me because I see a huge
21 problem with the fix. And due to the politics in
22 this room, we can't fix it. So, I really,

1 really, really would ask for your support on this
2 proposal. Thanks.

3 VICE CHAIR FAVRE: Nick, then Calvin.

4 MEMBER MARAVELL: Yeah. I tend to
5 fall in Mac's corner here, that we need to take a
6 holistic view of this and come back with
7 consensus. However, let me share a little bit of
8 my background, since you're new to the Board.

9 We raise pastured poultry. Our flock
10 sizes are 50 to 100. We had feather pecking in
11 one flock once. We grow our own grain, we grind
12 our own feed, we sell feed to other producers.

13 We said we fed the same feed to all of
14 our flocks and all of our other customers.
15 Needless to say, we tried everything with those
16 birds and what we had the most success with,
17 somewhat, in the welfare aspect, was reducing
18 their protein because they were getting egg bound
19 and the eggs were just huge.

20 Needless to say, we have never bought
21 that breed again. And we will probably sacrifice
22 egg production because they went up very fast and

1 then they started coming down very fast, and
2 higher, much higher mortality than any of our
3 other flocks. And we knew this was a new breed
4 for us.

5 So, we concluded to change our
6 management and cultural practices in that
7 instance. We have also gone without methionine
8 because we thought it was going to be phased out.
9 And with our practices, it did not affect animal
10 welfare.

11 We're just one farm. But all I'm
12 saying is, this is a complex issue. And we need
13 time to work on it and we need to provide some
14 relief for the industry, and we cannot hold the
15 birds as captives. And I perfectly agree with
16 that. But as we heard from the former NOSB
17 Chair, there was a reason to put the pinch on.
18 And so I was willing to vote for this in San
19 Antonio if simply were permitted to put a
20 particular time limit of five years and then make
21 sure we revisited it with vigor.

22 I think Mac's approach to let's start

1 working on it right now in a comprehensive way is
2 a good idea. So, that, I think, could bring
3 everybody on the Board together, and that would
4 be my preference.

5 Unfortunately, I find myself in a
6 slightly different chair. It looks like the same
7 conference room but a different city. And we
8 were not able for I'm not sure what reasons to
9 accomplish that in San Antonio and I thought we
10 would be able to move more expeditiously in that
11 direction again.

12 So, I think for the welfare of the
13 Board as well as for the welfare of the birds,
14 that we need to move expeditiously. We need to
15 give the industry the flexibility it needs.
16 Every operation is different. And we need to
17 look for viable alternatives. You know, an
18 omnivore diet, other sources of methionine that
19 would be acceptable. Why are we painting
20 ourselves into these corners?

21 So, I would ask your indulgence to
22 take one more look at this issue.

1 VICE CHAIR FAVRE: Calvin.

2 MEMBER WALKER: Madam Chair, before
3 Harold skyped in you sent an e-mail to the
4 Livestock Subcommittee asking for consideration
5 of taking this back to try to find a consensus,
6 and I think we still need to do that.

7 Paula, as I said before on the
8 Livestock call, that expiration is not new. It's
9 been brought up at least four or five times on
10 previous boards. The former Chair gave a
11 testimony Tuesday. He's an animal nutritionist,
12 and on that Board that voted no against
13 averaging. That person was an animal welfare
14 person. So, they said that they did not pull
15 those numbers out of the hat. I would like to
16 quote what the transcript said:

17 "The 2010 Livestock Committee talked
18 with feed mills, poultry producers, consumer
19 groups and respected the intent and work of
20 previous boards to derive their recommendation.
21 Subsequently, the full Board voted 12 to 2
22 against averaging."

1 Also the other issue that I have a
2 concern about is that we move broilers from two
3 pounds per ton to two-and-a-half pounds per ton
4 of synthetic methionine.

5 It was brought up again five years
6 ago. The Board did not entertain that. They did
7 not entertain it because there was no scientific
8 basis from going from two pounds per ton of
9 synthetic methionine to two-and-a-half. That's
10 in the transcript of 2010.

11 I would like to say that when we make
12 deals we should adhere to them. When the Board
13 on April the 29th 2010 voted down averaging less
14 than 12 months later another petition came.
15 Where is the science? And this is the thing that
16 we are trying to say. And I'm sure this
17 afternoon we talk about the sunset of methionine.
18 There was no one recommending that the current
19 stepdown be taken off the books.

20 So, that means that people are
21 perfectly okay with it. That was the lady that
22 testified. They have 67 growers, Paula. And

1 most of their birds was pasture-raised from Ohio.
2 She said that the stepdown was working, but they
3 prefer additional. I prefer to have another
4 million dollars. You know, I prefer to be the
5 President of the United States. But the bottom
6 line, she said she has outdoor poultry producers,
7 stepdown is working, minimum animal welfare
8 issues. Right? But they prefer. So that tells
9 me that is working.

10 And last thing -- Madam Chair, I don't
11 want you to cut me off again. I know you're
12 getting close. Just give me 15 seconds.

13 I would believe that no one is going
14 to take away synthetic methionine from the large
15 growers or the smaller ones. It's going to be
16 there probably for the next 50 years.

17 What the 2010 Board says, do a couple
18 things. We're going to reduce this, move the
19 pressure to do more research, come up with
20 different management schemes. Okay? You have to
21 do all that in global. You can't do one. Not
22 like Al Bundy, you can't have one without the

1 other.

2 The 2010 committee said two pounds for
3 layers, two pounds for broilers, three pounds for
4 turkeys, no averaging. Okay? And it said, come
5 up with other management strategies and find
6 other natural alternatives. Had to do all three.
7 And this is why we are still in this dilemma.

8 And I would hope, Madam Chair, that
9 you would fulfill or ask for a vote and we could
10 send this back. Because you said that to me,
11 one-on-one, and in the e-mails that we have
12 floated around while the other committee was
13 going on. I think we need to honor that. It may
14 be politics. But let's not make it politics. If
15 Mr. Harold Austin would not have appeared on
16 Skype, we might have had a different
17 conversation. So, don't walk away from what we
18 were talking about.

19 VICE CHAIR FAVRE: Thank you, Calvin.
20 Colehour.

21 MEMBER BONDERA: Thank you. I'm not
22 sure I have an incredibly lot to add to this

1 conversation, although, frankly, from the
2 subcommittee's conversations, I think it's
3 important to make sure that we are all speaking
4 the same with the whole NOSB.

5 And just to start, I think that the
6 truth is -- and it's already been said, but I'll
7 repeat it -- that we all realize that poultry
8 requires methionine in their diet. That's not
9 the question. And I think you reiterated that,
10 Tracy.

11 And I think the question really is
12 about -- it's, generally speaking, about the
13 synthetic methionine, not methionine
14 independently. And I think that that
15 differentiation is vital. And like was
16 mentioned, you know, natural sources versus
17 organic, et cetera, are parts of that potential
18 conversation. But I think it's critical to
19 recognize that.

20 And I think another thing to reiterate
21 that I think is extremely vital to recognize is
22 that we have the current listing of synthetic

1 methionine coming up for sunset.

2 So, it's not as if this vote, this
3 petition consideration, is going to eliminate or
4 change synthetic methionine being listed for
5 poultry on the national list. So, I just want to
6 make sure that it's extremely clear that it's not
7 either/or issue.

8 However, as also is referred to, we do
9 have the commitment, frankly, from past NOSB
10 decisions and endless discussions -- like Calvin
11 was even referring to numbers of votes -- to
12 strive to stepdown. That is what the NOSB over
13 time has come to the conclusion of, that they'll
14 continue to permit synthetic methionine use as
15 long as it's stepped down.

16 This petition is not a stepdown
17 petition. It's averaging. And if it were
18 averaging for what was currently being permitted,
19 that's a different question than increasing and
20 averaging. Those are two separate things. So,
21 we could try to separate them, but they're two
22 separate things. And I think it's important to

1 recognize that this isn't just averaging of what
2 is permitted; this is an increase and averaging.

3 And I will mention briefly the fact
4 that I still am not convinced, after all of the
5 testimony and input we've gotten, that the
6 certification burden would be nil for nobody and
7 not at all. I think that there will be some
8 impact on those people that are trying to certify
9 with averaging, even if it were permitted. I
10 don't think it's irrelevant and needs to be
11 disregarded.

12 And I think, you know, we did have
13 testimony from another former Chair of the NOSB
14 and a member of the Livestock Subcommittee, who
15 is very active. Jeff Moyer stated quite clearly
16 what the history has been, and like Dan, also,
17 you know, a former Chair, suggested. You know,
18 they went through the same processes we're going
19 through.

20 And finally, why -- well, I have two
21 more points. But why wouldn't those people
22 testify who do not want to increase or average

1 the use of synthetic methionine? Why wouldn't
2 those farmers come and testify either live and/or
3 written testimony?

4 I think that I see that as somewhat of
5 a shortcoming. But realistically and honestly,
6 who is this petition appealing to? And so it's
7 the people, like we saw, the long range of people
8 that came from the large production facilities,
9 who are the ones who want it, the people who
10 petitioned and are seeking it.

11 So I think that we have to recognize
12 that we need to pay attention to who we are
13 getting testimony from.

14 And, to wrap it up, I think that one
15 year ago, when -- and like Nick suggested, it
16 feels like the same room, same conversation, we
17 did go through this process, and we did conclude
18 that it needed to go back to Subcommittee to
19 discuss, consider, and address the discussion
20 that had come up to include an expiration date as
21 a compromise, as a way of, let's get to a
22 conclusion. Let's include an expiration date in

1 the recommendation that's put forth.

2 And I don't mean any ill will towards
3 the Subcommittee members or towards Tracy, but,
4 frankly, we did not have in depth and conclusive
5 discussions about including an expiration date in
6 this recommendation. It's a missing component,
7 and that's why it appears in the minority
8 opinion.

9 And like Paula suggested, you know, we
10 could and should and would like to re-have a lot
11 of those conversations, but reading the minutes
12 from all of those conversations, the meeting
13 notes, you know, we have had quite a extensive
14 conversations in that year, but we didn't have
15 conversations as a Subcommittee about let's
16 discuss and debate what it was sent back to
17 Subcommittee for, which was to include an
18 expiration date. I would say it needs to also
19 not included that increase as well. So, thank
20 you.

21 VICE CHAIR FAVRE: Tom, then Ashley.

22 MEMBER CHAPMAN: Actually, I had a

1 technical question, but then Colehour made a
2 comment I did want to briefly address.

3 Which is I made the certifier
4 argument. I have history of working at a
5 certifier in my past. I do believe the
6 certifiers are quite capable of handling an
7 averaging method. They do that already with dry
8 matter intake, and the vast comments -- the vast
9 majority of the comments from certifiers stated
10 that they could -- none of them stated that they
11 couldn't. One stated a preferred alternative.
12 And ultimately, at the end of the day, if a
13 grower did not want have to deal with averaging
14 they could just use two pounds and average two,
15 two with no variation will always be two.
16 Extremely easy to calculate.

17 With that being said, I had a question
18 about Sunset on this material. My understanding
19 is we're reviewing an annotation change and this
20 would not change the sunset date for this
21 material? It would still continue on the 2017
22 Sunsets. Is that a true statement?

1 DR. BRINES: Thank you. Yes.

2 Regardless of the outcome of this particular
3 proposal the Board still needs to review the
4 current listing for methionine under the 2017
5 Sunset review. Does that answer your question?

6 MEMBER CHAPMAN: But it's a touch
7 more specific than that. So even, I guess, given
8 a review and an approval an action later, if it
9 does occur by the program to publish a rule
10 change to add the sanitation, would at that point
11 the Sunset date for this material change or would
12 it still be part of this class as it is now?

13 DR. BRINES: In general, though, the
14 Sunset review of the listing would need to be
15 reviewed by the Board, five years prior to its
16 renewal date.

17 So I guess if you're asking if the NOP
18 were to take action on this recommendation if it
19 pass, that listing -- after our proposed rule,
20 evaluation of comments, but made it to final
21 rule. That final rule would have an effective
22 date and the Sunset review of that new listing

1 would need to be reviewed by the Board within
2 five years of that new effective date. So there
3 may be a new sunset date associated with the new
4 listing.

5 MEMBER SONNABEND: A point of
6 clarification on that. So this means this is
7 what we call resetting the clock. And if it gets
8 out on time before 2017 then the other review of
9 the 2017 sunset is moot? But in case it doesn't
10 get out we're still considering it sunset?

11 MS. BROWN ROSEN: Yes. I mean I think
12 what would happen -- we would undergo rulemaking
13 and -- but we still have to think of the sunset,
14 so depending, you know, depending -- whenever the
15 annotation change, rulemaking was completed, that
16 would supersede the old, renewed listing or if
17 they had been -- or replace it had been removed.
18 So that would be the next stage, and at that time
19 the sunset will be changed when that new
20 annotation change was made.

21 MEMBER CHAPMAN: So I would take
22 some issue with that being that the listing

1 itself of methionine has a date already in there,
2 and we're only changing the annotation portion of
3 it. And so the Sunset review of the material
4 should remain, in my opinion, on its original
5 listing time frame. Of course I'm not the one in
6 charge.

7 MR. McEVOY: We have discussed this
8 with OGC when there is an annotation change. We
9 can go back to them again and get clarification.
10 I would just say that in terms of the timing that
11 we're looking at right now -- what?

12 Yes, the timing we're looking at right
13 now, if there's a recommendation for an
14 annotation change that's made at this meeting or
15 at the fall meeting, either, we will not start on
16 a proposed rule for this until next year. So
17 we're doing one -- generally one national list
18 rulemaking each year. So the concept would be if
19 there was a recommendation that we could include
20 it in a proposed rule -- national list rule for
21 2016 and that would be completed before 2017. So
22 in some ways it could reset the clock earlier

1 than the renewal date that it currently has,
2 which is 2017, if we completed rulemaking on this
3 next year.

4 VICE CHAIR FAVRE: In practicality,
5 they're essentially going to happen at the same
6 time or very close to the same time. So if we're
7 resetting it, it would be only resetting it by a
8 very short amount anyway. But to Miles' point,
9 if the rulemaking goes through for the annotation
10 change we could actually have the effective start
11 date of resetting the clock of 2016 instead of
12 2017.

13 And conceivably if we have all agreed
14 that we're not going to sunset methionine, then
15 the renewal for the annotation change listing
16 would be five years from 2016 and the renewal
17 date from the current listing would be five years
18 from 2017. So to Miles' point, by approving a
19 proposed amendment we could conceivably be
20 shortening the length of time before we have to
21 consider it again.

22 MEMBER CHAPMAN: Thank you.

1 VICE CHAIR FAVRE: Ashley, and then
2 Harold after that.

3 MEMBER SWAFFAR: You know, so it
4 keeps getting brought up about what previous
5 Boards have done, and I was actually really
6 excited to see Dan Giacomini's comments, that he
7 said that, you know, we put a pinch on them but
8 told them to come back.

9 And, hey guys, the fence needs to be
10 moved back a little bit. And I just -- I really
11 like, you know, reading through the history of
12 how methionine happened. I was on the other side
13 of the fence when this was going on, giving
14 testimony, and you know, to see previous chairs
15 come back and say, hey, maybe we -- we just -- we
16 tried to get pressure on them and it obviously
17 didn't work.

18 And so, you know, I think we need to
19 keep that in mind when we, you know, talk about
20 that. And, you know, Colehour, I do want to
21 point out, we're smaller farmers in the scheme of
22 things in organics. So, you know, that's -- I'm

1 here kind of representing the smaller farmers.

2 Whereas you only heard from some of the larger

3 ones, so.

4 VICE CHAIR FAVRE: Harold, we're here
5 for your comments.

6 MEMBER AUSTIN: Okay. Can you hear
7 me?

8 CHAIR RICHARDSON: Yes.

9 VICE CHAIR FAVRE: Yes.

10 MEMBER AUSTIN: Okay. While I respect
11 what the previous Boards have gone through, and I
12 applaud their energies and their efforts, this is
13 really for us to deal with, the issues that are
14 before us based off of not only the historic
15 information but the recent information that's
16 presented to this Board, not only in this passing
17 but in the previous meetings, as we've had this
18 discussion on methionine.

19 I think one of the things you've heard
20 me state in the past is, while we are concerned
21 about environmental health and we're concerned
22 about human health on the issues, there also

1 needs to take and come to a point where we need
2 to take into true consideration, the health of
3 the flock.

4 And I still say that while we banter
5 back and forth, the ultimate ones that are paying
6 the price are the flocks that are taking and
7 being put into this position. And I think it's
8 up to us, as the organic Board, as those that
9 truly believe in the process, needing to take and
10 support this motion for the well-being of the
11 animal. And for us to not do so is going against
12 a very basic fundamental beliefs that we put in
13 what we all believe organics to truly be about.

14 So I don't -- we've heard this over
15 and over again. And I think it's now time for
16 this Board to step up and do the right thing and
17 move this forward. Thank you.

18 VICE CHAIR FAVRE: Thank you, Harold.
19 Zea, then Francis.

20 MEMBER SONNABEND: Okay. I'm going
21 to circle around back to reiterate some of what
22 Mac said to some extent. And I'm going to sound

1 an awful lot like a plant person who doesn't know
2 what they're talking about for animals. But,
3 when I -- this is clearly a multi-dimensional
4 problem and this is not just about methionine.
5 This is about the entire way that poultry is
6 produced in organics and conventionally for that
7 meaning it's the whole system.

8 And we need to take a whole system's
9 approach to deal with it. And what I saw and
10 have seen for many years now, because I've heard
11 these debates quite a few times is, the
12 Methionine Task Force and the others working on
13 it are using a more narrow view of it and put
14 substitution -- what we call in crops, input
15 substitution approach.

16 So in crops when we have a problem and
17 we're trying to deal with it we try to say, okay,
18 well, let's go back to what are the cultural
19 practices and preventative practices and things
20 like that that we can deal with, that we can
21 approach to try and solve this problem further
22 back before it becomes a problem.

1 And so clearly plant breeding is the
2 very clear step. So I just don't the feasibility
3 of chicken breeding, but I haven't heard an awful
4 lot of talk about it. And what I did hear was
5 like only breeding chickens to not peck each
6 other as much.

7 But maybe we should be breeding
8 chickens for better methionine efficiency or
9 maybe we should be breeding chickens who grow a
10 little slower and therefore can utilize their
11 methionine to spread it out over time.

12 And then, you know, the animal welfare
13 consideration are, I'm sure, playing into this a
14 great deal. If not the, you know, prescription
15 of a certain amount of pasture, maybe that
16 pasture could then be inoculated with more worms
17 -- and it's a good thing our worms got out of
18 here before I suggest this.

19 But inoculate those pastures with more
20 bugs and worms and stuff so the chickens could go
21 out and peck them and get their methionine that
22 way. And there are probably other aspects that I

1 don't really know about, about their living
2 conditions that could be worked on for a multi-
3 dimensional holistic approach.

4 So while I think a task force is
5 probably a good idea. But, you know, in the end
6 for me if one of my plants is drooping I can't
7 let it sit there without water, and so I go out
8 and give it water. And in seeing all those
9 chickens without feathers is -- you know what
10 trumps it for me. And I just feel like we have
11 to supply the chickens the most healthy
12 environment possible. And that would mean, in
13 this instance, allowing the methionine to keep
14 being given to them while we solve some of these
15 other more holistic problems. Thank you.

16 VICE CHAIR FAVRE: Francis, then Tom.
17 Calvin, we're going to wait and see about time as
18 to whether we get back around to you again.

19 MEMBER THICKE: Thank you, Zea.
20 Actually, you've mentioned things that I was
21 going to say. And it looks to me like we've
22 created a situation that organic crop farmers

1 call input substitution. We have a situation
2 where poultry growers can switch from
3 conventional to organic in one day, just by
4 starting to feed organic feed and bringing a new
5 batch of chickens in. Maybe a few adjustments
6 for a certified organic, but this is really input
7 substitution.

8 If we change the crop production to
9 organic we have to make major changes to the
10 system if we do livestock as well. And we heard
11 the other day from Heritage that says that today
12 we're, additionally, breeding birds that are
13 commercially selected for faster growth and
14 greater egg production. The level of certain
15 amino acids needed to support optimal bird health
16 and function has also increased.

17 So we've going in the opposite
18 direction. We're not really trying to look at a
19 systems kind of approach. We heard also that
20 there are 10 million organic chickens in this
21 country, but they all come from one supplier.
22 How are we going to change the genetics? It

1 seems to me this is a great opportunity for
2 somebody to come up with some new genetics of
3 chickens who are adapted for some of the things
4 that Zea talked about.

5 So I don't see that we have any
6 motivation today for the organic poultry industry
7 to go beyond input substitution, and that's what
8 really concerns me.

9 VICE CHAIR FAVRE: Calvin, Tom has
10 seceded his place in queue, and then Carmela's
11 next after that.

12 MEMBER WALKER: I will be brief to
13 avoid being cut off. I would like to ditto to
14 what Zea had mentioned. I did share with the
15 Subcommittee Chair, Tracy, a letter that I
16 received from the European Union on methionine
17 use in organics.

18 Essentially they have, as Miles
19 mentioned, 2017, 5 percent of the diet is from a
20 non-organic source. And the head of that unit
21 said that what they are doing is what Zea had
22 mentioned. They are looking at slower growing

1 birds as a way to get around this high methionine
2 requirement. And I hope that the Chair would
3 circulate that to the full Board. And also I
4 noted they had an expiration date.

5 And the last thing I would like to say
6 is just to read this: CCOF opposes averaging as
7 too complicated, posing problems for inspection
8 and verification. But support listing methionine
9 until natural, organic replacements are
10 commercially available. And as a part of
11 minority opinion we are not advocating taking
12 away methionine. It will always be on the books
13 in my case, and the way it's going.

14 But here's an organization, a
15 certifying organization, that I think is one of
16 the tops, is saying that it's very complicated.
17 And this was in their written comment.

18 So, it is a mixed thing. I personally
19 think that we need to take this back. And Harold,
20 I love you very much. I would certainly say that
21 if you was not here we would probably be talking
22 about bringing this back. I'm not sure if the

1 will of the Board is now to bring it back, since
2 you are present with us. But I am feeling very
3 disappointed that we -- I thought we had a deal
4 to take it back. And let's talk about expiration
5 of other things, and we didn't get that.

6 VICE CHAIR FAVRE: Carmela and then
7 Tom.

8 MEMBER BECK: So I'm probably just
9 going to reiterate what other people have said.
10 And I hadn't heard about the deal. I thought we
11 were moving forward with this today and I'm
12 absolutely in favor of moving it forward and
13 approving the amendment as written, so I'm just
14 going to read you my thoughts.

15 So, per the public comment by the egg
16 producers and with the help of trade and
17 certifier surveys, I am convinced that this is an
18 animal welfare issue. I'm also, like Tom and
19 others, extremely confident that certification
20 staff can manage the documentation requirements.
21 And regardless of whether it's complicated, it's
22 certainly manageable.

1 And what's really convincing to me is
2 that there are no viable alternatives right now.
3 So there's plenty of opportunities and options,
4 but they're not ready to go live. And so I think
5 we need this time to make sure that we prioritize
6 the research and get it done, and so we can
7 sunset methionine in the future and without the
8 use of arbitrary expiration dates, which we know
9 are not effective. That's all I have.

10 VICE CHAIR FAVRE: Tom.

11 MEMBER CHAPMAN: I call the previous
12 question.

13 CHAIR RICHARDSON: The question has
14 been called. This is a debatable motion that
15 requires a second. Is there a second to close
16 debate? Call the question. Second? Is there a
17 second?

18 MEMBER SONNABEND: I'll second it.

19 CHAIR RICHARDSON: Zea has seconded
20 the motion to call the question. Close debate.

21 MEMBER MARAVELL: Madam Chair?

22 CHAIR RICHARDSON: This is a non-

1 debatable motion.

2 MEMBER MARAVELL: Yes.

3 CHAIR RICHARDSON: This is a non-
4 debatable motion.

5 MEMBER MARAVELL: Madam Chair, I
6 don't choose to debate it, but I do want to just
7 let you know that I will be absent during this
8 vote. I don't want to place any pressure on
9 Harold, and I know that he's experienced, you
10 know, quite a trauma here.

11 And Harold and I have stood together
12 on many a controversial issue, such as
13 antibiotics in tree fruit. Here we do not stand
14 on the exact same side. I will withdraw and I
15 will leave it up to Harold how he would like to
16 proceed. But I certainly am not going to be
17 present.

18 CHAIR RICHARDSON: Thank you, Nick,
19 for your comments. There is a motion on the
20 floor. The motion on the floor is cut off debate
21 on this issue. It is a seconded motion. We
22 will start the voting. This voting is on the

1 motion to cutoff -- end debate.

2 MEMBER BONDERA: I'm sorry. Can you

3 --

4 CHAIR RICHARDSON: It's not a

5 debatable motion.

6 MEMBER BONDERA: I'm sorry. What's

7 the motion --

8 CHAIR RICHARDSON: The motion on the

9 floor is to end debate on this issue. You called

10 the question. It's a non --

11 MEMBER CHAPMAN: Point of order. Do

12 we need a vote if there's no objection to the

13 motion?

14 CHAIR RICHARDSON: No. Is there any

15 -- okay, you want me to do it that way? Is there

16 any objection to this motion?

17 (No audible response.)

18 CHAIR RICHARDSON: Seeing no objection

19 we will move to the main motion.

20 Colehour.

21 MEMBER BONDERA: I move that we send

22 this back to Subcommittee at this time.

1 CHAIR RICHARDSON: There is a motion
2 on the floor. The motion on the floor is to
3 accept the following the amendment at 205.603,
4 and I won't read the entire thing. That is the
5 motion that is presently on the floor. In order
6 to have another motion on the floor we would have
7 to have that motion withdrawn. And I don't
8 believe that we're going to withdraw that motion.

9 MEMBER CHAPMAN: Point of order.

10 CHAIR RICHARDSON: Yes.

11 MEMBER CHAPMAN: The question has
12 been called and it was not objected to.

13 CHAIR RICHARDSON: Thank you. The
14 question's been called and has not been objected
15 to. So we will therefore go back and we will
16 vote on the main motion. The main motion is on
17 the amendment at 205.603, which is there, written
18 before you, on the screen. The voting starts
19 with --

20 PARTICIPANT: The new member.

21 CHAIR RICHARDSON: Paula?

22 MEMBER DANIELS: Yes.

1 MEMBER BECK: No.

2 MEMBER SWAFFAR: Yes.

3 VICE CHAIR FAVRE: Yes.

4 PARTICIPANT: Yes.

5 CHAIR RICHARDSON: Sorry.

6 MEMBER CHAPMAN: Yes.

7 PARTICIPANT: No.

8 MEMBER SONNABEND: Yes.

9 MEMBER de LIMA: Yes.

10 MEMBER STONE: No.

11 MEMBER BONDERA: No.

12 MEMBER WALKER: Yes, ma'am.

13 CHAIR RICHARDSON: The Chair votes
14 yes. I'm sorry. Harold?

15 MEMBER AUSTIN: Yes.

16 CHAIR RICHARDSON: And the Chair votes
17 yes.

18 PARTICIPANT: There are 10 yes, 4 no,
19 zero abstentions, zero recusal, 1 absent. The
20 motion passes.

21 VICE CHAIR FAVRE: Madam Chair, for
22 the record, because of procedural twisting up, I

1 would like to state for the record that it was my
2 intention to send this back to Committee for
3 further discussion.

4 I am a very strong believer in
5 consensus. I don't like the feeling of
6 divisiveness that this puts to the Board. I
7 think that there are some issues that have come
8 up in discussion today as well as in the public
9 comments over the previous days, that I think we
10 could've gotten closer together.

11 I did have a couple of comments here
12 before the question was called that I wanted to
13 bring up. And since I am Chair of the Committee,
14 I'm going to take my prerogative to continue them
15 for just a moment. I would like to say that I do
16 think that this systems approach is absolutely
17 necessary. I very strong support Mac's
18 recommendation for an organic poultry working
19 group.

20 I think one of the reasons that we
21 have been struggling with this for so long is
22 because it's trying to put a square peg in a

1 round hole. Whether it's because of cultural
2 practices in management or because we got the
3 numbers wrong. I think it's probably a
4 combination of both.

5 I think regardless of the fact that
6 this proposal carried today, for all my strong
7 advocacy for this proposal I am not finding
8 myself with very mixed emotions because I did
9 want to have an opportunity to reach consensus.

10 But having said that I do think that
11 this is -- even this proposal is not going to
12 solve the bigger picture. I do think that I
13 would like to make sure that we, as a Livestock
14 Subcommittee continue to address this systems
15 approach issue.

16 I would very much like to encourage
17 those members of the Subcommittee, that were not
18 in favor of this proposal that had very strong
19 feelings otherwise, to continue to stay engaged
20 so that we can provide some recommendation for
21 not only the Livestock Subcommittee going
22 forward, but future Boards as well on how to

1 resolve this issue.

2 I'm an engineer by training and I find
3 not looking at the whole picture is one way to
4 solve a problem, but it only solves that very
5 small piece of the picture that you look at and
6 may have some unintended consequences, which I
7 believe is what's happened here. I'd like to
8 specifically address the comments about the flock
9 size that Nick had brought up about the 10 -- or
10 the 50 to 100 bird size of his flocks.

11 I think that -- I have a flock of 20
12 birds myself. I'd like to believe that my
13 experience directly translates to commercial
14 growers, but I'm not that naive. So I do
15 understand while I'm able to go out and hand feed
16 my birds on individual basis, if so be it, that's
17 not realistic or practical for a multi-million
18 dollar multi-million bird market for layers and
19 broilers.

20 So I do think we need to not
21 necessarily provide crutches for larger
22 producers, but to recognize that there's a

1 certain of economy, a scale that's possible with
2 small producers that's not with larger producers.
3 And not penalize one or the other. Having said
4 that I don't believe that the management
5 practices that allow larger poultry houses to get
6 by with very small porches is appropriate. It
7 doesn't meet my standards for animal welfare, and
8 I don't think it meets the public's.

9 In case it's not clear to this group,
10 even though I've said it multiple times, my line
11 in the sand is animal welfare. I'm very
12 distressed by what we are forcing upon growers
13 who care about their birds, and I'm very
14 distressed by what we forced upon the birds
15 themselves.

16 I think it's inappropriate as stewards
17 of animals that we bear an incredible
18 responsibility to make sure that they are well
19 cared for. And once the animal welfare
20 standards come out, I hope that we can build this
21 as a systems approach. But, given the fact that
22 they haven't come out yet and that we as a Board

1 cannot at this time, directly influence them, I
2 was prepared to support this proposal as a tool,
3 hopefully one of many, including cultural
4 practices, that will at least be somewhat
5 resolved when the animal welfare issues come out.

6 And finally, in regards to the comment
7 about expiration dates, I'd like to address that
8 directly. Because when we talked about this in
9 San Antonio, we talked about sending it back to
10 Committee to reach a compromise, one solution of
11 which was an expiration date.

12 It's not my recollection and it
13 certainly was not my intent to say that
14 absolutely the only way to reach a compromise was
15 to put an expiration date on it. We've been
16 informed by the program that that is very
17 difficult to get through clearance, and it does
18 behoove us to put together recommendations that
19 are actually practical to implement.

20 And there is no point in putting
21 together a recommendation from this Board to
22 solve a very tricky issue, if then it gets so

1 bogged down in clearance there's not a darn thing
2 we can do about it. So I'm not disagreeing with
3 the idea exclusively of an expiration date. But
4 we've already been told that it's probably a
5 viable tool. So, with that I'd like to wrap up
6 my comments.

7 And, unfortunately, I think we're
8 going to have to move on, Calvin. You and I can
9 have a great conversation over a glass of wine
10 about this later.

11 CHAIR RICHARDSON: There is a second
12 motion. There is a motion to adopt a resolution.
13 I believe we are ready to move on the motion the
14 resolution. Do you want to read it out,
15 Tracey?

16 VICE CHAIR FAVRE: Yes. Thank you,
17 Madam Chair. There is a Resolution for vote.
18 The National Organic Standards Board is committed
19 to the phase out of synthetic methionine for
20 organic poultry production and encourages
21 aggressive industry and independent research on
22 natural alternative sources of methionine,

1 breeding poultry that perform well on less
2 methionine, and management practices for improved
3 poultry animal welfare. I'd like to open it for
4 discussion. Calvin.

5 MEMBER WALKER: Thank you, Madam
6 Chair.

7 I always tell my boys that at the end of a day we
8 can -- my wife and I can fuss and fight and call
9 them all kinds of things, everything but a child
10 of God. But at the end of the day, you know, we
11 move forward.

12 I've advocated, I think, very
13 vigorously for previous Boards, the intent, as
14 well as organic producers and consumer groups.
15 So at this point I'm definitely willing to move
16 forward. You know, that kind of thing. And I
17 hope that this particular proposal work, and if
18 it does there will be nobody more pleased than
19 myself. As it relates to this particular
20 resolution, I was one that voted for it and today
21 I still am prepared to vote yes for it.

22 VICE CHAIR FAVRE: Tom.

1 MEMBER CHAPMAN: Just had a
2 question. Will this resolution put this item
3 back on the work plan for the Livestock
4 Subcommittee?

5 VICE CHAIR FAVRE: I think certainly
6 with the opportunities that have been raised and
7 the recommendation from Mac, it will because of
8 the systems approach in the Organic Poultry
9 Working Group that we're talking about. So, yes.

10 MEMBER CHAPMAN: Thank you.

11 VICE CHAIR FAVRE: Mac.

12 MEMBER STONE: Yeah, I just wanted
13 to follow up on that. That I appreciate the
14 effort to not hold the birds hostage, as I called
15 it earlier. But the work is not done here and I
16 think we need to structure a conversation.

17 Wendell Berry often says that we've
18 not having the right conversation. And the
19 effort put forth today, the sentiment and
20 feelings around this table I think drives us to
21 have that conversation. And as an outgoing Board
22 member, with just a few months left here, I very

1 much want to be engaged in a conversation to
2 promote this and move this in a positive way. So
3 I would very much like to see it on a work plan.

4 VICE CHAIR FAVRE: I'd also like to
5 recognize Nick has re-joined us. Thank you,
6 Nick. Just in case you didn't know, we've got
7 the motion for the Resolution for the adoption of
8 blabbity blah up there on the screen. Paula.

9 MEMBER DANIELS: I think I made it
10 clear in my prior comments. But being a member
11 of the Livestock Committee I want to fully
12 endorse the idea of an organic poultry working
13 group. I think I said that before, but I just
14 want to reiterate it at this juncture, that I
15 think it's important to continue to look at this
16 in the way that you all mentioned, systemically's
17 probably the more meaningful way to look at it.

18 VICE CHAIR FAVRE: Ashley.

19 MEMBER SWAFFAR: You know, I think
20 this is really important for us to pass this,
21 because we do need to find a way to replace
22 synthetic methionine. And I hope that my fellow

1 colleagues in the poultry industry see the
2 importance of this.

3 And, you know, I've been on several of
4 those task force calls, and they are taking this
5 seriously. But, you know, there was somebody who
6 commented about a systems approach, maybe we use
7 several different items. And I think that's
8 something that the Methionine Task Force should,
9 you know, look at and take back and passing this
10 would keep it on our radar.

11 MEMBER CHAPMAN: I call the
12 question.

13 VICE CHAIR FAVRE: The question has
14 been called.

15 CHAIR RICHARDSON: I second.

16 VICE CHAIR FAVRE: Is there any
17 objection to ending the discussion on the
18 Resolution?

19 (No audible response.)

20 VICE CHAIR FAVRE: Okay. Seeing none
21 we'll go ahead and move forward with a vote on
22 the Resolution. This comes to the floor as a

1 seconded proposal, and turn it back over to Madam
2 Chair.

3 CHAIR RICHARDSON: The motion on the
4 floor is the Resolution to phase out synthetic
5 methionine. As you see the wording on the
6 screen, this motion was made by Tracy Favre,
7 seconded by Colehour Bondera. We are ready to
8 start the voting which starts with Jennifer.

9 MEMBER TAYLOR: Yes.

10 MEMBER MARAVELL: Yes.

11 MEMBER BECK: Yes.

12 MEMBER SWAFFAR: Yes.

13 VICE CHAIR FAVRE: Yes.

14 MEMBER CHAPMAN: Yes.

15 MEMBER BONDERA: Yes.

16 MEMBER SONNABEND: Yes.

17 MEMBER de LIMA: Yes.

18 MEMBER WALKER: Yes.

19 MEMBER THICKE: Yes.

20 MEMBER STONE: Yes, ma'am.

21 MEMBER DANIELS: Yes.

22 CHAIR RICHARDSON: The Chair votes

1 yes. Sorry. Harold, I left you out again.

2 Sorry.

3 MEMBER AUSTIN: That's okay. I vote
4 yes as well.

5 CHAIR RICHARDSON: The Chair votes
6 yes.

7 MEMBER CHAPMAN: The motion passes,
8 15 yes, zero no, and zero abstentions, zero
9 recusal, zero absent.

10 VICE CHAIR FAVRE: Thank you. Well,
11 after that little episode, I'd like to move us on
12 to the next item.

13 CHAIR RICHARDSON: Let me just make a
14 brief comment. I know it's 12:30, we're supposed
15 to stop for lunch, but here is our dilemma.
16 Michelle has been trying desperately to get the
17 folks next door to shut up, and she says not so
18 politely. And so as you notice it's very quiet
19 right now. But we have been informed that at ten
20 minutes past 1:00 it will be so loud we won't be
21 able to hear ourselves breathe.

22 So, therefore, I would like to suggest

1 if you could just pop out as you need to and come
2 back in, and we'll just at just after 1:00,
3 another half hour. Does that make sense,
4 Michelle? Yes. Thank you. Back to you Tracy.

5 VICE CHAIR FAVRE: Fortunately, I
6 think the rest of our items are slightly less
7 controversial. The next item -- by the way, I
8 would just like to say I appreciate the
9 cordiality, whatever the word would be, of our
10 engagement on the Board here today. I know this
11 has been a very heartfelt and contentious issue
12 and I appreciate the courtesy with which all of
13 us have treated each other today. And, Nick, I
14 think that was an incredibly classy gesture.
15 Thank you. So, next up is Acidified Sodium
16 Chlorite, and I'll turn that over to Jean.

17 CHAIR RICHARDSON: All right.
18 Acidified Sodium Chlorite --

19 DR. BRINES: I'm sorry, Jean.

20 CHAIR RICHARDSON: So sorry. Lisa, go
21 right ahead.

22 DR. BRINES: Thank you. the Petition

1 for Acidified Sodium Chlorite was submitted on
2 April 30th, 2012. There were two subsequent
3 updates to the Petition. The first on July 29th,
4 2014, and the second on July 31st, 2014.

5 The Petition and the two Petition
6 Addendum are posted on the NOP website. The
7 Petition requests the addition of Acidified
8 Sodium Chlorite to Section 205.603 of the
9 national list for use as a teat dip.

10 And -- I'm sorry, my screen is frozen
11 so I don't have the status of the technical
12 report immediately available to me. But I do
13 believe that a technical report is available for
14 this substance. Thank you.

15 VICE CHAIR FAVRE: Jean.

16 CHAIR RICHARDSON: And I would
17 actually like to clarify the document that you
18 see up there on the screen. Owing to public
19 comment I shall be making the suggestion during
20 my comments that we put it only in Section
21 205.603(a) and not in 205.603(b). And, do you
22 have to add anything technically for the record

1 on that, Dr. Brines?

2 DR. BRINES: No. We don't consider
3 that to be a substantive change. Thank you.

4 CHAIR RICHARDSON: Thank you. So,
5 Acidified Sodium Chlorite is being requested for
6 pre- and post-milking teat dip treatment.

7 And handling subcommittee -- sorry,
8 handling subcommittee. Our Livestock
9 Subcommittee proposes to recommend this material
10 to be added to the national list for a number of
11 reasons. This material came to us in 2012 -- we
12 got it in 2013 and we developed a proposal not to
13 list it initially based on issues of non-
14 essentiality.

15 When we presented that the meeting we
16 received considerable public comment in April
17 2014 that more research was needed and the
18 material was tabled and returned to the
19 Subcommittee in order that we could get further
20 review, further input in response to all the
21 public comment.

22 In July 2014 the Petitioner submitted

1 further detailed and lengthy documentation with
2 references to address the concerns that have been
3 raised by the NOSB and by the public. And on
4 January 2015 the Livestock Subcommittee, as part
5 of the Sunset review of Iodine received a
6 technical report on Iodine, which is an
7 ingredient which is common in teat dips.

8 This report gave us some comparative
9 data on Acidified Sodium Chlorite and other teat
10 dips and was very helpful to us in our
11 deliberations. Preventive healthcare is an
12 essential and absolutely required aspect of
13 organic farming, and prevention of mastitis
14 through clean milking parlors and clean animals
15 is always a paramount importance on any dairy
16 farm.

17 Our organic farmers can't use
18 antibiotics, and so the use of this pre-milking
19 and post-milking teat dips may be one of the most
20 critical factors in preventing mastitis. It
21 causes inflammation, infection, and is very
22 painful to the animals. And organic standards

1 absolutely require farmers to care for their
2 animals. They can't withhold medical treatment.

3 There are several teat dips available
4 on the market. Some may be more irritating to
5 the animal than others, some bacteria may become
6 more resistant, and so a broader array of teat
7 dip ingredient choices is essential for organic
8 farmers. Research indicates that alternative
9 practice to teat dipping and spraying or udder
10 washing is not advised, as the exclusion of
11 disinfecting, a step for mastitis control, would
12 likely increase the likelihood of infection.

13 Small scale milk producers can use
14 homemade udder washers that contain things like
15 lavender essential oil water, apple cider
16 vinegar, acidic acid, as the active anti-
17 microbial agents, and we have citations for that.
18 Other procedures for pre- and post-milking
19 treatments could include warm water washing, or
20 with a splash of vinegar, and perhaps the use of
21 tree oil.

22 But Acidified Sodium Chlorite was

1 petitioned in order to have a more expanded use
2 or ability to address mastitis. ASC is currently
3 on the national list as an allowed disinfectant
4 for direct food contact under 205.605(b). So
5 it's not a new substance to us.

6 Animal health researchers have
7 recently found that ASC, chlorine dioxide
8 solutions, are equally effective in preventing
9 new inter-mammary infections in lactating cows
10 that are naturally exposed to mastitis pathogens
11 when compared to established iodiphor, iodine-
12 based teat dip products. And the results of
13 experimental challenge studies suggest that ASC
14 may actually provide enhanced microbial activity
15 against the mastitis staphylococcus aureus
16 bacteria compared again with iodine, the
17 iodiphors.

18 These studies also indicate that the
19 test at ASC products had no deleterious effect on
20 teat condition. Further, ASC components exhibit
21 minimal persistence in the environment and are
22 highly unlikely to contaminate milk from treated

1 animals. And that's a USDA study cited that.

2 In terms of public comment, two
3 organizations, Beyond Pesticides and Consumer
4 Reports, do not support ASC. The Beyond
5 Pesticides opposition comes from a desire for
6 organic production to be chlorine free. The
7 Consumer Reports said that it supported the
8 recommendation not to list, but provided no
9 reason. And so I wasn't quite clear on their
10 standing there. Cornucopia remains neutral on
11 this material.

12 Oral commenters that we heard
13 supported -- in the last two days supported the
14 use of ASC, as you recall from the last two days
15 of oral comment. National Mastitis Council
16 supported it, and there was indication that there
17 was no chlorine reaching the milk, which also
18 verified some of the earlier scientific research
19 documents that I'd read in connection with my
20 analysis of this material.

21 The vast majority of public comments
22 were strongly supportive of listing ASC and

1 demonstrate an essentiality which we hadn't been
2 able to determine when we looked at this back in
3 last April. Comments indicating support came
4 from 20 individual dairy farmers and
5 veterinarians, including Hugh Karreman, a well-
6 known and much respected veterinarian. We got a
7 response from Organic Dairy Farm Consultant, one
8 certifier, that was PSO.

9 We got a supportive response from
10 organizations directly representing dairy farms,
11 The Dairy and Beef Cooperative, over 6,000
12 producers, the Western Organic Dairy producers,
13 which has 250 producers in their group, and from
14 Crop Cooperative representing 2,000 producers.
15 The OTA also supports listing it.

16 So after reviewing the ASC Petition,
17 the technical evaluation report, recent
18 comparative data on the Iodine TR, and public
19 comments for this meeting, I would recommend that
20 the ASC satisfied that the OFP criteria related
21 to impact on humans and the environment and is
22 compatible with organic agriculture, and is

1 essential to organic production.

2 VICE CHAIR FAVRE: Thank you, Jean.

3 Is there any discussion? Francis.

4 MEMBER THICKE: Well, I just want to
5 say as a dairy farmer, I want to disclose that I
6 wouldn't -- I don't plan to use it. But I do
7 think that we should approve it, because I think
8 there's a need for it out there, and some farmers
9 could use it, especially in some situations.

10 VICE CHAIR FAVRE: Colehour.

11 MEMBER BONDERA: Thank you. Jean, I
12 don't know if you could further delve into or
13 address the -- I don't know if differentiation is
14 the right word. But the issue between
15 essentiality, necessity, and this adding to a
16 tool belt concept, because I am not sure that
17 I've concluded that it's necessary, even though,
18 like you mention, there are some potential
19 desires. I see those as different. If you could
20 address that further. Thank you.

21 CHAIR RICHARDSON: That's an excellent
22 question, Colehour, and it's one that's come up

1 before at this meeting on the other things. So
2 here's where I am in having looked at all of
3 research, and obviously being very familiar with
4 dairy farms, is that -- obviously I do dairy farm
5 inspections too.

6 So what's happening right now with
7 teat dips on farms that are larger than just the
8 wee small ones that are not going to be using it,
9 or perhaps even up to the 50 or 200 herd of cows,
10 is that on a lot of these farms they almost
11 entirely relying on iodiphor, or Iodine based
12 teat dips.

13 We know for sure that you've got to
14 have this protection -- this prevention of the
15 mastitis bacteria both pre- and post-milking.
16 And for Iodine out of 104 teat dips -- I think it
17 was PCO or a WSDA -- I can't remember which one
18 of the certifiers pointed out, because I'm also
19 working on Iodine as well, as you all will hear
20 later on -- is that they would lose -- let's see
21 -- a 92 out of I think 104 of the teat dips
22 contain NPEs, which we've already discussed in

1 our meeting yesterday as being something that we
2 don't want to see in the dairy industry. And
3 indeed the dairy industry is already moving
4 actively to remove NPEs from Iodine and the
5 iodiphor forms of teat dips.

6 So what this means at the present time
7 is that if a farmer doesn't want to be using teat
8 dips that have the NPEs in, then they're
9 extremely limited in the range of selection of
10 teat dips that they can use on their farm, and
11 they've got to really pay close attention. And
12 that's not always clear in the materials when
13 they buy them and use them, you know, unless
14 they're working perhaps closely with a
15 veterinarian -- an organic veterinarian that's in
16 touch with the complexities of these materials.

17 So -- and then you've got the -- so
18 therefore, their choices are limited. So it's
19 not just a case of adding something to the
20 toolbox.

21 So then you also look at the concerns
22 over little -- the small amounts of iodine that

1 might get into the milk. There are some issues
2 with that in some of the scientific literature.
3 So when we look at acidified sodium chlorite by
4 comparison, we see that not only do we have a
5 choice that might be a more effective choice
6 against some of the bacteria, but it also avoids
7 any question of the NPEs, which I -- you know,
8 from my point of view as organic inspector or
9 just as an interested organic person, I would
10 prefer to have the ASC available to them as
11 opposed to the iodiphor forms at the present
12 time.

13 And it would make it much easier for
14 the certifiers out there to know that they didn't
15 have to worry about NPEs if the farmers were to
16 move towards the acidified sodium chlorite as
17 opposed to the iodine.

18 So I think this is just a terrific
19 thing that the research is beginning to indicate,
20 that we have this material. So I don't just see
21 it as being a nice thing to have. I do see it as
22 being very necessary in meeting the OFPA

1 criteria.

2 Sorry for the long answer, Tracy.

3 VICE CHAIR FAVRE: Thank you. Tom.

4 MEMBER CHAPMAN: I think we have
5 Harold.

6 VICE CHAIR FAVRE: Harold.

7 MEMBER AUSTIN: Yes. Thank you, Tracy
8 Yes, I was just pretty much going to reiterate
9 what Jean had just said.

10 I think the information that has been
11 provided to us, and the discussions around it via
12 public comment, written comments as well, I think
13 does set the basis for this material being
14 necessary or the necessity of it.

15 It's not, I think, just something
16 merely being added to the livestock farmer's tool
17 belt, but I think there's definite need. And as
18 we look forward I think that need will increase
19 for it.

20 So I think this is a material that
21 would bode well for the farmers to have the
22 availability of this material. And that's all I

1 have, Tracy.

2 VICE CHAIR FAVRE: Thank you, Harold.

3 Is there any further discussion?

4 (No audible response.)

5 VICE CHAIR FAVRE: Seeing none, we'll
6 proceed to the vote.

7 CHAIR RICHARDSON: Tracy, since I'm
8 the lead person on this I would ask that you
9 would Chair the vote, please.

10 VICE CHAIR FAVRE: Okay. First off we
11 have a classification motion. Motion to classify
12 acidified sodium chlorite, CAS number 7758-19-2,
13 sodium chlorite, and CAS number 14998-27-7,
14 chlorous acid as synthetic.

15 The motion was made by Jean Richardson
16 and seconded by Francis Thicke.

17 MEMBER CHAPMAN: Nick.

18 VICE CHAIR FAVRE: Voting starts with
19 Nick.

20 MEMBER MARAVELL: Yes.

21 MEMBER BECK: Yes.

22 MEMBER SWAFFAR: Yes.

1 VICE CHAIR FAVRE: Yes.

2 MEMBER CHAPMAN: Yes.

3 MEMBER BONDERA: Yes.

4 MEMBER SONNABEND: Yes.

5 MEMBER de LIMA: Yes.

6 MEMBER WALKER: Yes.

7 MEMBER THICKE: Yes.

8 MEMBER STONE: Yes, ma'am.

9 MEMBER TAYLOR: Yes.

10 MEMBER AUSTIN: Harold votes yes.

11 CHAIR RICHARDSON: Chair votes yes.

12 MEMBER CHAPMAN: Okay. There are 14
13 yes, zero no, zero abstentions, zero refusals,
14 one absent, and the motion passes.

15 VICE CHAIR FAVRE: Okay. Next we have
16 a listing motion. Motion to list acidified
17 sodium chlorite, CAS number 13898-47-0, chlorous
18 acid, and 7758-19-2, sodium chlorite at
19 205.603(a) of the national list annotated as
20 follows: acidified sodium chlorite allowed for
21 use on organic livestock as a pre- and post-teat
22 dip treatment.

1 The motion was made by Jean
2 Richardson, seconded by Francis Thicke. And the
3 voting will start with Carmela.

4 MEMBER BECK: Yes.

5 MEMBER SWAFFAR: Yes.

6 VICE CHAIR FAVRE: Yes.

7 MEMBER CHAPMAN: Yes.

8 MEMBER BONDERA: No.

9 MEMBER SONNABEND: Yes.

10 MEMBER de LIMA: Yes.

11 MEMBER WALKER: Yes.

12 MEMBER THICKE: Yes.

13 MEMBER STONE: Yes, ma'am.

14 MEMBER TAYLOR: No.

15 MEMBER MARAVELL: Yes.

16 MEMBER AUSTIN: Yes.

17 CHAIR RICHARDSON: Chair votes yes.

18 MEMBER CHAPMAN: Twelve yes, two no,
19 zero abstain, zero recusal, one absent, the
20 motion passes.

21 VICE CHAIR FAVRE: Thank you,
22 everyone. I'd just like to remark for the

1 audience that this is an example of public
2 comment influencing the vote.

3 As any of you that will remember in
4 San Antonio, we actually had initially brought
5 this forward with the intention to not approve it
6 for the national list.

7 And so thank you for those that
8 brought us further information and letting us
9 know how it might impact you.

10 The next item on our agenda is a
11 petition for zinc sulfate. Lisa.

12 DR. BRINES: Thank you, Tracy.

13 The petition for zinc sulfate was
14 submitted on May 25th, 2014 by Vantage Dairy
15 Supplies, LLC. The petition requests the
16 addition of zinc sulfate to Section 205.603 of
17 the national list.

18 In support of the review the Livestock
19 Subcommittee did request the development of a
20 third-party technical evaluation report, and that
21 report was posted earlier this year. This is the
22 first meeting where this petition has been

1 considered. Thank you.

2 VICE CHAIR FAVRE: Thank you, Lisa.

3 Just a moment. I have a question here I need to
4 get clarity on.

5 All right. Lisa, we're going to make
6 a minor change to the annotation here, but you
7 can intervene for us if we've somehow screwed it
8 up.

9 Zinc sulfate had been petitioned for
10 use as a foot bath and for treatment for foot rot
11 and hairy warts and general anti-fungal treatment
12 for livestock.

13 Obviously the opportunities for use of
14 zinc sulfate to replace copper sulfate make this
15 material pretty intriguing, particularly as a
16 sheep producer myself I can't use copper sulfate
17 because of the toxicities for sheep.

18 Zinc sulfate is less -- slightly less
19 likely to accumulate in soils, primarily due to
20 the fact that it has some unique properties that
21 the accumulation in soils depends on things like
22 soil moisture, soil pH, and so the rate of

1 accumulation is not as clear cut as it is with
2 copper.

3 So having said that, you know, there
4 are some issues with the manufacture of zinc
5 sulfate, there's -- in regards to potential for
6 environmental degradation, and the disposal of
7 zinc sulfate typically, in foot baths anyway, is
8 that it's either dumped out or it's put into the
9 lagoon with other waste from the farm, which is
10 then potentially sprayed on the fields. That's
11 the mechanism by which we get the accumulation in
12 soils.

13 So some of the public comments. There
14 were concerns about the accumulation and one
15 group suggested an annotation similar to copper
16 in crops where it has to be limited. After
17 demonstrating requirements for it several --
18 actually several comments in favor of the
19 listing, given that it's ideal for sheep, it
20 doesn't stain fleece as copper sulfate does.
21 It's a great alternative to copper.

22 And furthermore, we received both in

1 written and oral comments, a request to allow for
2 direct application for a more targeted approach
3 rather than just foot baths.

4 So having discussed it with the
5 Livestock Subcommittee and after getting input
6 from the program yesterday, we found that we were
7 given the latitude to make a slight change in the
8 annotation, which I'll read to you the existing
9 annotation and then I'll tell you what we're
10 revising it to.

11 The motion was to list zinc sulfate
12 for use as a foot bath only at 205.603(b), and
13 after discussion we decided as a Subcommittee, to
14 change the annotation to say, for use in hoof and
15 foot treatments only.

16 So this keeps with the original intent
17 of using it as a foot treatment, but it doesn't
18 limit it exclusively to foot baths. We actually
19 feel, as a subcommittee, that that will probably
20 decrease the overall use of zinc sulfate or the
21 potential for accumulation of zinc sulfate, and
22 also excludes the use for it as a teat dip, which

1 we found out from the program that there is
2 potential for that.

3 So at this time I'd like to open it up
4 for discussion.

5 MEMBER CHAPMAN: Point of order.
6 Does that need to be made as a motion to change
7 the amendment? Lisa?

8 VICE CHAIR FAVRE: Lisa, can you give
9 us some feedback on that? Do we have to make a
10 motion to change that?

11 DR. BRINES: Yes. I think for clarity
12 it would be helpful to have a motion to amend the
13 motion. I would suggest before proceeding with
14 that motion to amend the proposal is the Board
15 may want to proceed with finishing the
16 classification motion first.

17 MEMBER CHAPMAN: Thank you.

18 VICE CHAIR FAVRE: Okay. So everybody
19 help me remember that we need a motion to amend
20 the motion when we get there.

21 So, discussion? Mac?

22 MEMBER STONE: Again, when we get to

1 the motion after classification. To your point
2 earlier, again, this is where help from the
3 community and conversation outside of the
4 committee work is helpful, and thank everyone's
5 input for helping us to produce a better product
6 so that we, the Board, look better when farmers
7 go to implement this, if it were to pass.

8 VICE CHAIR FAVRE: Agreed. Any
9 further discussion?

10 Okay. Colehour?

11 MEMBER BONDERA: Thank you. I think
12 in our Subcommittee discussions, and it's
13 actually somewhat revealed also in the checklist,
14 a lot of the issues considered and discussed are
15 dependent on specifics.

16 And so you see a lot of yes/no's
17 especially in category one in terms of a lot of,
18 it depends, and it's possible in terms of how the
19 use of this effects humans and the environment.

20 And I think it's important to
21 recognize that, you know, I think we're also
22 dealing with -- I think we had testimony that

1 stated that this, you know, might be better than
2 what's currently available.

3 However, we're still at the same place
4 of we add something to the list that doesn't give
5 us that opportunity to say, well, since we're
6 adding this we'll take this off simultaneously.
7 So this is still an addition of another
8 synthetic. Thank you.

9 VICE CHAIR FAVRE: Any further
10 discussion?

11 (No audible response.)

12 VICE CHAIR FAVRE: Okay. Madam Chair,
13 I think we're ready for the vote. Sorry. Zea?

14 MEMBER SONNABEND: So this is
15 probably a really stupid question, but that's, I
16 guess, my knowledge of livestock.

17 Is there any chance that this gets
18 absorbed -- well, it's sort of two questions.
19 Can this get absorbed into the meat and is there
20 ever any evidence that excess zinc would come in
21 the meat? And the secondary question is, do
22 people eat these hooves ever?

1 VICE CHAIR FAVRE: Gelatin ---- do you
2 want to address that? Okay, Mac.

3 MEMBER STONE: We have our ruminant
4 animals harvested at a USDA approved facility and
5 the inspector will not let us take the hooves
6 home because they feel like they can't clean
7 them, so they don't go in to the food supply if
8 they go through a USDA inspected facility.

9 You know, I'm not aware that it would
10 be used in a way that could access the meat
11 itself.

12 VICE CHAIR FAVRE: Yes. I was just
13 going to state, there wasn't any mention of that
14 in the TR, and so I can't speak to it directly.
15 But it seems logical to me that when you
16 slaughter the animal ---- or harvest it, as Mac
17 so euphemistically put it, you would be sort of,
18 you know, cutting off the part that had the stuff
19 on it. Nick?

20 MEMBER MARAVELL: Yes. Like Mac we
21 use a USDA facility and they don't let the hooves
22 out because they can't be -- they don't have the

1 equipment to clean it to a food safety standard -
2 --- I'm using abbreviation.

3 But I just wanted to let you know that
4 we have constant demand from customers for
5 hooves, but we do not -- we also have it for
6 other parts of the animal that we don't sell.

7 VICE CHAIR FAVRE: Calvin, then
8 Colehour.

9 MEMBER WALKER: I would like to
10 concur with what Mac and Nick have said. We have
11 a USDA approved meat processing plant, and the
12 inspector would not allow that to happen.

13 The only way -- if a person want
14 hooves, intestines, they will have to get it to
15 when we take it to the rendering plant, but we do
16 not allow it.

17 VICE CHAIR FAVRE: Colehour.

18 MEMBER BONDERA: Yes. I can't
19 comment from personal experience in this regard,
20 but the yellow flag that went up when Zea asked
21 her question, was our conversation yesterday
22 regarding gelatin and where that's coming from,

1 which is hooves, in terms of ingestion into
2 human body.

3 So I'm not saying that the ones that
4 are -- this is used on -- you know, where -- what
5 -- I don't know what that chain is, but I think
6 yellow flag goes up.

7 VICE CHAIR FAVRE: Well, just to
8 reiterate the comments of the people that
9 slaughter their livestock at USDA, which is
10 probably the only viable source for collection of
11 large amount of hooves, it's not allowed to get
12 into the food supply that way.

13 Any other --

14 MEMBER MARAVELL: Tracy --

15 VICE CHAIR FAVRE: Nick.

16 MEMBER MARAVELL: -- I'm not sure
17 that's not the point, no. You can't sell it to a
18 customer. It goes to the rendering plant and I
19 don't know what happens to it.

20 Calvin, do you know what happens after
21 it goes to the rendering plant? It could
22 conceivably end up in gelatin. I don't really

1 know, but we don't sell it for direct
2 consumption. Never would.

3 MEMBER WALKER: Nick, you're right.
4 We instruct customers -- we don't like to say
5 slaughtering plants, we say processing plants.

6 We just instruct customers to go to X,
7 go to Y, go to Z, and they generally -- you know,
8 they would allow customers to get their hoof --
9 whether it be a hoof or intestines, but we don't
10 at Southern.

11 VICE CHAIR FAVRE: Any further
12 conversation? Madam Chair, I think we're ready
13 for the vote.

14 CHAIR RICHARDSON: So Tracy, would you
15 like to verbalize the motion to amend?

16 VICE CHAIR FAVRE: I believe we have
17 to classify first.

18 CHAIR RICHARDSON: Oh, that's right.
19 That's what Lisa said. Okay.

20 So therefore, the first motion that we
21 have on the floor is a motion to classify zinc
22 sulfate as synthetic. Motion by Tracy Favre,

1 seconded by Jean Richardson. And the voting
2 starts with Ashley.

3 MEMBER SWAFFAR: Yes.

4 VICE CHAIR FAVRE: Yes.

5 MEMBER CHAPMAN: Yes.

6 MEMBER BONDERA: Yes.

7 MEMBER SONNABEND: Yes.

8 MEMBER de LIMA: Yes.

9 MEMBER WALKER: Yes.

10 MEMBER THICKE: Yes.

11 MEMBER STONE: Yes, ma'am.

12 CHAIR RICHARDSON: Harold?

13 MEMBER AUSTIN: Yes.

14 MEMBER TAYLOR: Yes.

15 MEMBER MARAVELL: Yes.

16 MEMBER BECK: Yes.

17 CHAIR RICHARDSON: Chair votes yes.

18 MEMBER CHAPMAN: 14 yes, zero no,
19 zero abstain, zero recuse, one absent, the motion
20 passes.

21 CHAIR RICHARDSON: Tracy, want to make
22 the motion to amend?

1 VICE CHAIR FAVRE: Yes. I'd like to
2 make a motion to amend the listing motion to
3 read, motion to list zinc sulfate for use as a
4 use in hoof and foot treatments only at
5 205.603(b) of the National List.

6 DR. BRINES: Second.

7 CHAIR RICHARDSON: Dr. Brines.

8 DR. BRINES: Thank you. Just a point
9 of clarification for the Board.

10 So this is a motion to amend the
11 current motion. So that amendment needs just a
12 simple majority to pass. If the amendment passes
13 then you would vote on the actual listing motion,
14 which will require a two-thirds majority. So
15 this is just the motion to amend the current
16 motion. Thank you.

17 CHAIR RICHARDSON: Is everyone clear
18 on the motion to amend? Motion to amend starts -
19 - voting starts with Tracy.

20 VICE CHAIR FAVRE: Yes.

21 MEMBER CHAPMAN: Yes.

22 MEMBER BONDERA: Yes.

1 MEMBER SONNABEND: Yes.

2 MEMBER de LIMA: Yes.

3 MEMBER WALKER: Yes.

4 MEMBER THICKE: Yes.

5 MEMBER STONE: Yes, ma'am.

6 CHAIR RICHARDSON: Harold?

7 MEMBER AUSTIN: Yes, ma'am.

8 MEMBER TAYLOR: No.

9 MR. ARSENAULT: Yes.

10 MEMBER BECK: Yes.

11 MEMBER SWAFFAR: Yes.

12 CHAIR RICHARDSON: Chair votes yes.

13 That's the motion to amend, remember
14 we just did -- yes.

15 MEMBER CHAPMAN: Thirteen yes, one
16 no, zero abstain, zero recuse, one absent, motion
17 passes.

18 CHAIR RICHARDSON: Thank you. Now, on
19 to the main motion. We are now voting on the
20 main motion to move to list zinc sulfate for use
21 in hoof and foot treatment only. It's 205.603(b)
22 of the National List.

1 MEMBER MARAVELL: As amended, Madam
2 Chair.

3 CHAIR RICHARDSON: As amended. The
4 voting starts with Tom.

5 MEMBER CHAPMAN: Yes.

6 MEMBER BONDERA: No.

7 MEMBER SONNABEND: Yes.

8 MEMBER de LIMA: Yes.

9 MEMBER WALKER: Yes.

10 MEMBER THICKE: Yes.

11 MEMBER STONE: Yes, ma'am.

12 CHAIR RICHARDSON: Harold?

13 MEMBER AUSTIN: Yes, ma'am.

14 MEMBER TAYLOR: No.

15 MR. ARSENAULT: Yes.

16 MEMBER BECK: Yes.

17 MEMBER SWAFFAR: Yes.

18 VICE CHAIR FAVRE: Yes.

19 CHAIR RICHARDSON: Chair votes yes.

20 MEMBER CHAPMAN: Twelve yes, two no,
21 zero abstain, zero recuse, one absent, motion
22 passes.

1 VICE CHAIR FAVRE: Thank you,
2 everyone. The next and final item of new
3 material, before we get to our Sunset, is a
4 review update report on the aquaculture -- what
5 we're calling the Aquaculture Legacy Document.

6 This document was in essence a bread
7 crumb trail that we put together in the Livestock
8 Subcommittee to offer sort of historical record
9 to future cohorts of the Board on the aquaculture
10 activities that had taken place.

11 The intent behind this document -- we
12 talked about this in Louisville briefly. But the
13 intent behind this document is not to make a
14 statement about whether the Committee is for or
15 against the standards or anything like that.

16 It really came out of the fact that in
17 our efforts to deliberate the materials that are
18 currently tabled in Livestock but were brought
19 forward in San Antonio, there were quite a few of
20 us, myself included, who didn't have the context
21 on how the regulations were put together and what
22 the issues were, that had come up.

1 So as such it's really sort of a
2 factual based, step-by-step through the meetings
3 and the documents that were passed and when they
4 were passed.

5 We did receive several comments in the
6 public saying that they felt like we did not give
7 equal time to the amount of public comment that
8 was in there. I will direct people to the
9 hyperlink that was included in the document. I
10 know some were not satisfied with that. But
11 there was an extensive list of public comments,
12 as well as a pretty detailed paragraph about the
13 written and oral testimony that did list in
14 detail the for and against positions for the
15 various issues in aquaculture.

16 We've heard from the program that
17 there is a chance that the aquaculture standards
18 will likely be coming out some time this year.
19 Hopefully sooner rather than later. And so maybe
20 a lot of this will be moot, because it will still
21 be the same cohort when we first bring this up.

22 But given the pace with which the

1 standards have been developed, we felt like it
2 was pretty important to capture this, not so much
3 because there was a need for action on the
4 Board's part at this point, but just so that --
5 for future reference -- future Committee members
6 and future Board members had one place to go to
7 gather the information rather than sort of have
8 us scrambling around through various proceedings
9 for that information.

10 So, I'd like to open this up to the
11 Committee for conversation, discussion -- or, I'm
12 sorry, to the Board for discussion.

13 Mac and then Paula.

14 MEMBER STONE: First, I just want to
15 say thanks for your due diligence. I think it
16 was San Antonio where we went through these, and
17 you were taking vigorous notes and I appreciate
18 all your time and effort to capture all of this,
19 because it was a little tricky when we first
20 started working on this a while back.

21 So, we'll shout out to you for
22 capturing this.

1 VICE CHAIR FAVRE: Thank you. Paula?

2 MEMBER DANIELS: Yes. I wanted to
3 make a similar comment. I was in the Livestock
4 Committee and we looked at this briefly. And
5 having -- you know, being a new member I didn't
6 really understand the history of aquaculture.

7 Obviously it's an issue I'm interested
8 in, as I've expressed before. And even though I
9 had been trying to track the activities of the
10 Board relative to aquaculture prior to my even
11 being involved as a Board, I had gotten pretty
12 lost in it.

13 So when Tracy offered that we should
14 have a document like this, it just lays a trail
15 for what specific activities happen. I thought
16 that was helpful. And I would say I agreed to
17 it, particularly in this form because it was
18 helpful just to lay out the chronology and to be
19 able to have access to more information.

20 And from looking at this document I
21 actually looked more than I'd been able to find
22 on my own.

1 So I know there are some comments from
2 folks about what else should have been in the
3 document. And while I share the views that there
4 are significant concerns about net pen
5 production, that cause me to favor more of the
6 land-based production, especially recirculating
7 tank production. But I know they're also
8 improving pond-based production.

9 I didn't think, myself, that this was
10 a place that I should put -- that all these
11 arguments should be recaptured because the
12 arguments had already been made in other places
13 and there were links to them. So I saw this as a
14 chronology and a listing, and it's valuable for
15 that purpose.

16 And Colehour did a really great job of
17 looking at the public comment and characterizing
18 it to a certain degree in terms of various points
19 of view. As hard as it was to synthesize it I
20 really want to compliment him and thank him for
21 that work as well.

22 VICE CHAIR FAVRE: Thank you, Paula.

1 Any other comments, discussion? Colehour.

2 MEMBER BONDERA: Yes. No. I
3 actually thank you for your comment, Paula. And
4 I think that from my experience working on this
5 topic, because it went through various iterations
6 since I've been on the NOSB in terms of being
7 divided up into different subcommittees and then
8 being brought together in various ways, I think
9 that sort of capturing the history, like Tracy
10 introduced, where we don't know exactly how fast
11 or what's going to unfold with the aquaculture
12 working groups' petitions, is very important.

13 And based on what time and energy that
14 Tracy and I have already put into it, I think
15 that it's an extremely useful kind of thing to be
16 able to have something to go to to work from.

17 However, I do think that at this point
18 in time, based on the input that has come in, I
19 would -- yes, I'm hurrying up -- I would suggest
20 that we -- that we take this back to our
21 Subcommittee to make a few corrections and
22 updates and maybe end up with a slightly modified

1 report rather than just roll with this one as the
2 final.

3 So my personal comment is I think we
4 could improve it, discuss it a little bit more
5 and improve it at least a little bit so that it's
6 a more complete, more full, final document. That
7 would be my suggestion at this time.

8 VICE CHAIR FAVRE: Thank you,
9 Colehour.

10 Calvin, you've got 15 seconds before
11 the roof blows off the room, so hurry up.

12 MEMBER WALKER: That's good. I'll
13 just get up and start dancing. A little two-
14 step.

15 I would like to say that we are in a
16 cloud of a lot of things being reversed. Sunset
17 being reversed, nano-technology.

18 I just certainly hope that
19 aquaculture, when the rules come out, I certainly
20 hope this Board -- I will not be on the Board. I
21 certainly hope that the previous Board's decision
22 will not be reversed.

1 MR. McEVOY: Yes. Just on the nano-
2 technology I'd really urge the Board and the
3 public to look at the recommendation on nano-
4 technology. The nano-technology policy memo
5 follows very very closely the recommendation from
6 the Board on nano-technology. So there's no
7 reversal at all within that policy memo.

8 VICE CHAIR FAVRE: Okay. Since this
9 is an update report there is no vote on this.
10 And so at this time I'd like to turn it back to
11 Madam Chair for a break for lunch so that we can
12 come back and do our Sunset materials.

13 CHAIR RICHARDSON: Go on. Okay, here
14 it is back. Mac, a quick comment. Very quick.

15 MEMBER STONE: Just for the record,
16 I'd like to -- Harold, we're very much sorry
17 about your accident and you hurt your hip and
18 surgery. But we're really glad you can't walk
19 around in that hospital gown. Thank you.

20 CHAIR RICHARDSON: Okay. We know it's
21 going to be noisy for about another 45 minutes,
22 so that's perfect timing. Please be back here at

1 exactly 2:00 because we have to go through 70
2 Livestock Sunset materials -- sorry, 40, 40, 40.
3 40 Sunset materials.

4 (Whereupon, the above-entitled matter
5 went off the record at 1:11 p.m., and resumed at
6 2:15 p.m.)

7 CHAIR RICHARDSON: It's 2:15 and we
8 have quite a bit of stuff to get through for the
9 afternoon, just in terms especially of reading
10 all of these Sunset materials into the federal
11 record.

12 So, I'd like us to get to work and we
13 do have 40 materials to get through, and then we
14 have the Agenda items to go through. The
15 Subcommittee work agendas and make presentations
16 of these plaques to the new members. And then a
17 few words about the Vermont meeting.

18 So I will, at this point, turn the
19 Agenda back to Tracy Favre, Livestock
20 Subcommittee Chair.

21 VICE CHAIR FAVRE: Thank you for
22 talking slowly at the end in order to give me

1 time to slide back into my seat.

2 Okay. All right. Next on our Agenda
3 today is a beginning of the discussion on -- wow,
4 the audience has really thinned out -- is a
5 discussion on 2017 Sunsets.

6 The first one up for discussion is
7 Ethanol, which is mine.

8 DR. BRINES: Excuse me, Tracy.

9 VICE CHAIR FAVRE: I'm so sorry.
10 Lisa, Dr. Brines.

11 DR. BRINES: Thank you. For purposes
12 of the groupings of Livestock materials this
13 morning, I'm going to proceed with introducing
14 all of the Livestock materials under 205.603(a)
15 as disinfectant, sanitizer, and medical
16 treatments, as applicable.

17 There's a lot of materials to get
18 through, so I'll do what I can to get through as
19 quickly as possible.

20 Starting with alcohol. It's ethanol,
21 disinfectant and sanitizer only. Prohibited as a
22 feed additive. Isopropanol, disinfectant only.

1 And in support of the review, new technical
2 reports were developed for both ethanol and
3 isopropanol.

4 Next up is aspirin, approved for
5 healthcare use to reduce inflammation. Atropine,
6 CAS number 51-55-8. Federal law restricts this
7 drug to use by or on the lawful written or oral
8 order of a licensed veterinarian, in full
9 compliance with the AMDUCA, and 21 CFR Part 530
10 of the Food and Drug Administration regulations.

11 Also for use under 7 CFR Part 205, the
12 NOB requires one use by or on the lawful written
13 order of a licensed veterinarian.

14 And, two, a meat withdrawal period of
15 at least 56 days after administering to livestock
16 intended for slaughter. And a milk discard
17 period of at least 12 days after administering to
18 dairy animals.

19 Biologics, vaccines. Butorphanol, CAS
20 number 42408-82-2. Federal law restricts this
21 drug to use by on the lawful order or oral order
22 of a licensed veterinarian in full compliance

1 with the AMDUCA and 21 CFR Part 530 of the Food
2 and Drug Administration regulations.

3 Also for use under 7 CFR Part 205 the
4 NOP requires use by or on the lawful written
5 order of a licensed veterinarian and a meat
6 withdrawal period of at least 42 days after
7 administering to livestock intended for slaughter
8 and a milk discard period of at least eight days
9 after administering to dairy animals.

10 Next, chlorhexidine allowed for
11 surgical procedures conducted by a veterinarian,
12 allowed for use as a teat dip when alternative
13 germicidal agents and/or physical barriers have
14 lost their effectiveness.

15 Chlorine materials, disinfecting and
16 sanitizing facilities and equipment, residual
17 chlorine levels in the water shall not exceed the
18 maximum residual disinfectant limit under the
19 Safe Drinking Water Act.

20 Calcium hypochlorite, chlorine
21 dioxide, sodium hypochlorite.

22 Electrolytes without antibiotics. And

1 in support of the 2017 Sunset review, new
2 technical reports were developed for both
3 chlorhexidine and electrolytes.

4 Next up is flunixin, CAS number 38677-
5 85-9, in accordance with approved labeling,
6 except that for use under 7 CFR Part 205. The
7 NOP requires a withdrawal period of at least two
8 times that required by the FDA.

9 Furosemide, CAS number 54-31-9, in
10 accordance with approved labeling. Except that
11 for use under 7 CFR Part 205 the NOP requires a
12 withdrawal period of at least two times that
13 required by the FDA.

14 Glucose and 12 Glycerin as a livestock
15 teat dip must be produced through the hydrolysis
16 of fats or oils.

17 Hydrogen peroxide, iodine, magnesium
18 hydroxide, CAS number 1309-42-8. Federal law
19 restricts this drug to use by or on the lawful
20 written or oral order of a licensed veterinarian
21 and full compliance with the AMDUCA and 21 CFR
22 Part 530 of the Food and Drug regulations -- Food

1 and Drug Administration regulations.

2 Also for use under 7 CFR Part 205 the
3 NOP requires the use by or on the lawful written
4 order of a licensed veterinarian.

5 Magnesium sulfate, oxytocin, use in
6 postparturition therapeutic applications. The
7 new technical report was made available for
8 iodine.

9 Next are parasiticides prohibited in
10 slaughter stock. Allowed in emergency treatment
11 for dairy and breeder stock when organic system
12 plan approved preventative management does not
13 prevent infestation.

14 Milk or milk products from a treated
15 animal cannot be labeled as provided for in
16 subpart (d) of this part for 90 days following
17 treatment. In breeder stock treatment cannot
18 occur in the last third of gestation if the
19 progeny will be sold as organic, and must not be
20 used during the lactation period for breeding
21 stock.

22 Fenbendazole, CAS number 43210-67-9,

1 only for use by or on the lawful written order of
2 a licensed veterinarian.

3 Ivermectin, CAS number 70288-86-7.
4 Moxidectin, CAS number 113507-06-5, for control
5 of internal parasites only.

6 In support of the 2017 Sunset review,
7 a technical report for parasitocides was
8 developed covering all three of these materials.
9 That report is currently under review by the
10 Livestock Committee and has not yet been posted
11 for the public.

12 Next is peroxyacetic acid/peracetic
13 acid, CAS number 79-21-0 for sanitizing facility
14 and processing equipment. Phosphoric acid
15 allowed as an equipment cleaner, provided that no
16 direct contact with organically managed livestock
17 or land occurs.

18 Polaxalene, CAS number 9003-11-6 for
19 use under 7 CFR Part 205 the NOP requires that
20 poloxalene only be used for the emergency
21 treatment of bloat.

22 Tolazoline, CAS number 59-98-3.

1 Federal law restricts this drug to the use by or
2 on the lawful written or oral order of a licensed
3 veterinarian, in full compliance with the AMDUCA
4 and 21 CFR Part 530 of the Food and Drug
5 Administration regulations.

6 Also for use under 7 CFR Part 205, the
7 NOP requires use by or on the lawful written
8 order of a licensed veterinarian. Use only to
9 reverse the effects of sedation, an analgesic
10 caused by xylazine. And a meat withdrawal period
11 of at least eight days after administering to
12 livestock intended for slaughter and a milk
13 discard period of at least four days after
14 administering to dairy animals.

15 Xylazine CAS number 7361-61-7.

16 Federal law restricts this drug to use by or on
17 the lawful written or oral order of a licensed
18 veterinarian in full compliance with the AMDUCA,
19 and 21 CFR Part 530 of the Food and Drug
20 Administration regulations.

21 Also for use under 7 CFR Part 205 the
22 NOP requires use by or on the lawful written

1 order of a licensed veterinarian. The existence
2 of an emergency, and, finally, a meat withdrawal
3 period of at least eight days after administering
4 to livestock intended for slaughter and in milk
5 discard period of at least four days after
6 administering to dairy animals.

7 Tracy, it's back to you. Thank you.

8 VICE CHAIR FAVRE: Thank you, Dr.
9 Brines. So, now we're back.

10 Ethanol is one of the alcohols. As
11 discussed it's generally used for antiseptic
12 cleaning, disinfection. In some cases it's used
13 for precleaning a teat in preparation for a test,
14 a milk test.

15 Public comments came in and said it
16 was necessary. In general there was no
17 objections to relisting. All the public comments
18 were supportive of the listing.

19 Is there any discussion on ethanol?

20 (No verbal response.)

21 VICE CHAIR FAVRE: Seeing none, next
22 up is Isopropanol. That's Calvin.

1 MEMBER WALKER: Thank you, Madam
2 Chair. I would like to edit something I said
3 before. Talking about reversal. The nano-
4 technology was error, and C. Reuben Walker would
5 like to walk that back. But I was just
6 expressing the fact that Sunset has been reversed
7 from what we've known.

8 And, number two, I just certainly hope
9 that the aquaculture legacy document, previous
10 Boards wanted net pens and they wanted land
11 based. So I would hope that future Boards will
12 respect the history and concur with the rule when
13 it comes out. Hopefully I got that right.

14 Okay. Isopropanol. First, I would
15 like to say that as Dr. Brines mentioned, this
16 was to be added at 205.603(a), is used as a
17 disinfectant.

18 In my look at the public comments
19 there were eight, there was a total of nine; one
20 was against. It was a general comment of no
21 synthetics in organics. OTA, Center for Food
22 Safety Crops, Pennsylvania Certified Organics,

1 National Organic Coalition, CCOF, and Linda, I
2 can't pronounce her last name, was in support.

3 So that's roughly about eight or nine
4 percent of the public comment were in favor of
5 maintaining this material on the list. And in
6 April of 2010 all NOSB Board members voted to
7 keep this material to be used as a disinfectant.

8 VICE CHAIR FAVRE: Is there any
9 discussion on Isopropanol?

10 (No audible response.)

11 VICE CHAIR FAVRE: Hearing none, next
12 item on the list is aspirin. Jean.

13 CHAIR RICHARDSON: Aspirin. Obviously
14 there was an enormously broad support for
15 aspirin. We received no public comment
16 suggesting that we did not leave Aspirin on the
17 national list.

18 VICE CHAIR FAVRE: Any discussion on
19 Aspirin?

20 (No audible response.)

21 VICE CHAIR FAVRE: Seeing none, next
22 on the list is atropine, and that's Paula.

1 MEMBER DANIELS: Yes. So -- I'm
2 sorry, let me get this up. So atropine is used
3 as an antidote to organophosphate poisoning and
4 as a pre-medication preparation for anesthesia so
5 the mechanism of action is that it inhibits
6 salivary and bronchial secretions.

7 So the prior history, with respect to
8 atropine, is that in 2002 there was a technical
9 advisory panel review, but there was a split
10 recommendation. The concern raised at that time
11 was that an animal requiring atropine might have
12 had its organic status compromised due to
13 exposure to organophosphate.

14 So the other believed it should be
15 allowed and another believed it should be allowed
16 without restriction. So the following year there
17 was another review and recommendation that it be
18 allowed in these rare emergency cases. And the
19 concern about the animals' status was addressed
20 by the fact that it had already been poisoned.
21 So I think the decision then was not to have the
22 status be bundled in with the use of the

1 substance.

2 So it has been brought forward for
3 public comment with the two questions that you
4 see there: How common is its use as a pre-
5 medication before anesthesia, and is it still
6 common practice to use atropine to treat eye
7 infections?

8 I am not aware of any public comments
9 on this issue, other than there was support for
10 it from three trade associations: Crop
11 Cooperative, the Western Organic Dairy Producers
12 Alliance, and a vet. And there I'm not aware of
13 any opposition.

14 VICE CHAIR FAVRE: Is there any
15 discussion on atropine?

16 (No audible response.)

17 VICE CHAIR FAVRE: Seeing none, next
18 on the list is Biologics/Vaccines. Jean.

19 CHAIR RICHARDSON: There was, again,
20 broad support for Biologics/Vaccines and no
21 suggestion that it should be removed from the
22 list.

1 VICE CHAIR FAVRE: Any discussions on
2 vaccines?

3 (No audible response.)

4 VICE CHAIR FAVRE: Seeing none, next
5 on the list is butorphanol, and that's Colehour.

6 MEMBER BONDERA: Okay, thank you.

7 Butorphanol -- we did put forth some
8 questions to the public based partly on the
9 background that's included in terms of the fact
10 that the somewhat older -- I'm sorry -- 2002
11 technical review and whatnot that we have to
12 address the use of it as a drug, but there were
13 some questions about its impacts on metabolites.
14 And when excreted and things crossing over --
15 actually we had some discussion about it in terms
16 of crossing over, if it were pregnant. Although,
17 hypothetically that's not an issue.

18 So I don't have a lot of commentary to
19 discuss in terms of what got back. I think, you
20 know, butorphanol is the equivalent to morphine,
21 and I think that I liked one quote -- that I
22 can't remember where it's coming from. But it

1 keeps animals on their feet when they're having
2 surgeries that need them to be on their feet.

3 So I think that's a pretty important
4 kind of reality and I think that the relisting
5 didn't seem to receive any adamant opposition.
6 So, I don't have more to say on that.

7 VICE CHAIR FAVRE: Any discussion on
8 butorphanol?

9 (No audible response.)

10 VICE CHAIR FAVRE: Hearing none, up is
11 chlorhexidine. Jean.

12 MEMBER THICKE: Isn't that mine?

13 VICE CHAIR FAVRE: Sorry. Francis.

14 MEMBER THICKE: Okay, thank you.

15 I don't want to take it away from you,
16 Jean.

17 Okay. Chlorhexidine is a teat dip and
18 also used for surgical procedures as a
19 disinfectant. Organic Valley supported it saying
20 it's an excellent alternative for when iodine has
21 lost its effectiveness as a teat dip, and for
22 surgical procedures OTA supported it, good for

1 when iodine's not effective.

2 Hugh Karreman said it's especially
3 good for cold weather temperatures. The Western
4 Organic Dairy Producers Association also
5 supported it as an alternative teat dip.

6 So I would support keeping it on.

7 VICE CHAIR FAVRE: Any discussion on
8 chlorhexidine?

9 (No audible response.)

10 VICE CHAIR FAVRE: Seeing none, next
11 on the list is calcium hypochlorite -- do we want
12 to all three of the chlorines at once?

13 Okay. We've got three chlorine
14 materials; calcium hypochlorite, chlorine
15 dioxide, sodium hypochlorite. Ashley.

16 MEMBER SWAFFAR: So the chlorine
17 materials, they're used as a sanitizer. There
18 was support for this. One wrote in, it would do
19 permanent damage and harm to the organic
20 livestock industry if it was delisted.

21 And there wasn't opposition to it, so
22 I would really think that we should relist it.

1 VICE CHAIR FAVRE: Any discussions on
2 the chlorine materials?

3 (No audible response.)

4 VICE CHAIR FAVRE: Seeing none. Next
5 on the list is electrolytes. Calvin.

6 MEMBER WALKER: Thank you, Madam
7 Chair.

8 Electrolytes. This is a material that
9 certainly I would recommend being used,
10 maintaining on the list, as long as it do not
11 have antibiotics. And this has been a previous
12 recommendation of previous Boards.

13 As far as the public comments. There
14 was a total of 12 that I located. Those in
15 support: Center for Food Safety, Hugh Karreman,
16 Crops, PCO, NARC, and a couple of western organic
17 dairy alliances.

18 And there was one person against,
19 generally just saying synthetics should not be in
20 organics.

21 And three entities, OTA and MOSA -- I
22 got PCO here, was neutral and it was a good thing

1 that I seen on one of the documents, they had put
2 out an informational material asking producers,
3 do they use it, and any alternatives. So the OTA
4 report was quite well.

5 So, electrolytes, basically there was
6 really no public comment against not keeping it.

7 VICE CHAIR FAVRE: Any discussion on
8 electrolytes.

9 (No audible response.)

10 VICE CHAIR FAVRE: Seeing none, the
11 next one up is flunixin. Ashley.

12 MEMBER SWAFFAR: Flunixin is an
13 anti-inflammatory drug related to aspirin. It
14 helps with pain relief, fever reduction, and
15 keeping inflammation in check. There was support
16 for it. Hugh Karreman even said it was
17 critically important because it can help animals
18 eat their way of a problem. And there was no
19 opposition. A couple were neutral. So, I would
20 propose that we relist.

21 VICE CHAIR FAVRE: Any discussion on
22 flunixin?

1 (No audible response.)

2 VICE CHAIR FAVRE: Seeing none, next
3 on the list is furosemide. Ashley.

4 MEMBER SWAFFAR: Furosemide reduces
5 edema, which is swelling and fluid buildup in
6 cattle. There was a couple of folks that
7 supported it and a few neutral.

8 There was one opposition. Hugh
9 Karreman did say that he originally submitted it
10 and it thinks that it can be Sunsetting because
11 its use is very limited, and there are natural
12 compounds that can offset it, such as coffee.

13 I would ask for the public to submit
14 comments if they use this or if any members of
15 your groups use this. It is a possible
16 Sunsetting item.

17 VICE CHAIR FAVRE: Any discussion on
18 furosemide?

19 (No audible response.)

20 VICE CHAIR FAVRE: Seeing none, next
21 on the list is glucose. Calvin.

22 MEMBER WALKER: Thank you, Madam

1 Chair. Glucose. Public comments. As usual --
2 11; eight was for, two -- one was against and OTA
3 and MOSA was neutral.

4 This material is certainly something
5 that need to be on the list. We often see it in
6 dairy cattle with ketosis. There is a need to
7 have this particular material sometimes. And I
8 would certainly recommend that it stay on the
9 list.

10 VICE CHAIR FAVRE: Any discussion on
11 glucose?

12 (No audible response.)

13 VICE CHAIR FAVRE: All right. Seeing
14 none, next on the list is glycerin. Glycerin is
15 typically used as a component in teat dip. It
16 has a tendency to help with chapping and cracking
17 of the teats, particularly in cold weather.

18 Overall support was there, no negative
19 comments. Is there any discussion on glycerin?
20 Jean.

21 CHAIR RICHARDSON: It's also needed as
22 an oral supplement as a follow up to dextrose.

1 Glucose IV for ketosis, and it is really -- it's
2 important in conditions of the room.

3 VICE CHAIR FAVRE: Yes. Thank you.

4 Any other comments?

5 (No audible response.)

6 VICE CHAIR FAVRE: Okay. Seeing none,
7 next on the list is hydrogen peroxide. Calvin.

8 MEMBER WALKER: Thank you, Madam
9 Chair.

10 Hydrogen peroxide. A total of 28
11 public comments; 23 favored keeping hydrogen
12 peroxide on the list. Hugh Karreman, CCOF,
13 Crops, NARC, Center for Food Safety, Cornucopia,
14 to name a few, and Amy's Kitchen.

15 I would certainly like to say, we
16 mentioned this morning. It is good to actually
17 make sure we're not taking something off the list
18 that is needed.

19 I remember calling Amy, the lady that
20 owns Amy's Kitchen, to see if she still had a
21 need for this particular material, about three or
22 four months ago. And she called me back and said

1 it was absolutely. So I certainly hope to see
2 this particular material stay on the list.

3 VICE CHAIR FAVRE: Thank you. Any
4 discussion on hydrogen peroxide?

5 (No audible response.)

6 VICE CHAIR FAVRE: Seeing none, next
7 up is iodine. And just making the remark that
8 it's actually listed at 603(a) and 603(b). Jean.

9 CHAIR RICHARDSON: Yes. My comments
10 would apply to either of those two listings.
11 Iodine is a critically important material that's
12 used in teat dips in an iodoform. The iodoform
13 means that it needs to have some sort of material
14 that would allow it -- as a surfactant so that it
15 will stay on the teats of the cow, both before
16 and after treatment -- before and after milking.

17 The main concern with the use of the
18 NPEs, as I said earlier in regard to the
19 materials, is that it's -- the NPE surfactants
20 are a serious concern, health concern, human
21 health concern. And initially we were thinking,
22 as we discussed this in our subcommittee, that we

1 would be suggesting that someone needs to submit
2 a -- or we would propose an annotation that would
3 allow those surfactants -- in which would say we
4 could only want iodine without the NPE being
5 used.

6 However, the public comment that we
7 received from several different sources indicates
8 that the industry's already very much on top of
9 that, since it's both not just a simple livestock
10 concern. It's a national, an international
11 marketing concern in terms of NPEs.

12 So presently I don't think, based on
13 everything I know now, when I prepare the
14 document for the second round, presently as I
15 see, with the information that I have at hand is
16 that it doesn't look like an annotation -- a
17 separate annotation separate from Sunset would be
18 needed.

19 And certainly iodine is critically
20 important, and all the public comments supported
21 the fact that it should stay on the national
22 list.

1 VICE CHAIR FAVRE: Any discussion on
2 Iodine?

3 (No audible response.)

4 VICE CHAIR FAVRE: Okay. Seeing none,
5 magnesium hydroxide. Paula.

6 MEMBER DANIELS: The same group of
7 commenters supported magnesium hydroxide, and
8 actually there's three that I'm going to be
9 commenting on that have the same effect in terms
10 of being a digestive aid in animals, so there's
11 this one and the next two, with the same set of
12 comments. No opposition and support by two trade
13 associations and a veterinarian.

14 So in this one it's used as an antacid
15 and a laxative. It's naturally occurring, but in
16 terms of its production it is done through
17 seawater extraction and natural brines for the
18 most part. There's no known environmental
19 impacts.

20 VICE CHAIR FAVRE: Any discussion on
21 magnesium hydroxide?

22 (No audible response.)

1 VICE CHAIR FAVRE: Seeing none,
2 magnesium sulfate. Paula?

3 MEMBER DANIELS: Very similar in
4 terms of public comment. No opposition. Same
5 groups in support. This is a type of Epsom salt,
6 common form of magnesium sulfate is easily
7 dissolved in water and it's used for the same --
8 similar purpose, but additionally as an anti-
9 convulsant.

10 VICE CHAIR FAVRE: Any discussion on
11 magnesium sulfate?

12 (No audible response.)

13 VICE CHAIR FAVRE: Seeing none we'll
14 move on to oxytocin. Calvin?

15 MEMBER WALKER: Thank you, Madam
16 Chair.

17 Oxytocin is used as a postparturition
18 injection of animals. This is a good product. I
19 have used it many times with animals that are
20 having problems giving birth, and sometime,
21 especially with piglets. They should come out of
22 the birth canal at a pretty regular rate, and

1 sometime we have to give them a little oxytocin
2 to loosen the pelvic.

3 The number of commenters I counted was
4 nine; six was for, Center for Food Safety,
5 Pennsylvania -- PCO, National Organic Coalition,
6 and Linda Gazzola and one person was against.

7 This -- and OTA was neutral. And I
8 also noted that Huge Karreman was somewhat -- he
9 was neutral. And I think one of the things that
10 -- we asked four questions about oxytocin and we
11 got a comment back from Hugh.

12 He said that some individuals was
13 using oxytocin to cause milk let down, which is
14 not what it's for. And I did see one person say
15 they were using it that way. So sometimes you
16 can ask a question, you know, it might get them
17 into trouble.

18 But its use is only as a
19 postparturition application.

20 Up to me, if I'm on the Board,
21 certainly I would recommend that this material
22 stay.

1 VICE CHAIR FAVRE: Thank you, Calvin.
2 Any discussion on oxytocin? Francis.

3 MEMBER THICKE: Just a comment. I
4 think that is true that sometimes it can be
5 misused. In conventional dairy farms I've
6 astoundingly seen some farms where they shoot
7 every cow with an injection of oxytocin before
8 they milk it, to get milk let out, which is mind-
9 boggling.

10 But it can be easily misused. So,
11 just for the record.

12 VICE CHAIR FAVRE: Any other
13 discussion?

14 (No audible response.)

15 VICE CHAIR FAVRE: Seeing none, next
16 on the list are three parasitocides;
17 fenbendazole, ivermectin, moxidectin. Francis.

18 MEMBER THICKE: So we didn't get as
19 many comments as I hoped we'd get on this.

20 The Western Organic Dairy Producers
21 Association recommended relisting all three of
22 them. And the only other comment was from Dr.

1 Hugh Karreman, who actually was involved in
2 getting some of these on the list.

3 Originally, it's a long converted --
4 convoluted process. But ivermectin was the first
5 one that got on, and then eventually moxidectin
6 and the last one to get on was fenbendazole. And
7 that one that they tried to get on because it was
8 less toxic to dung beetles in the soil life.

9 And so Hugh Karreman is recommending
10 removing either ivermectin and/or moxidectin.
11 And I hope we can get some more comments on that
12 next time around.

13 VICE CHAIR FAVRE: Any other
14 discussion on parasiticides. Jean?

15 CHAIR RICHARDSON: Yes. I've been
16 very interested in looking at the parasiticides
17 for some time now. And I was also somewhat
18 disappointed not to see some feedback that we had
19 from the public. And I'd certainly like to see
20 more of it.

21 And I guess I'm particularly concerned
22 by the comments that Hugh Karreman made that the

1 impact of ivermectin on dung beetles, which are
2 an integral part of the pasture land ecology, and
3 also the fact that both ivermectin and moxidectin
4 act as a type of antibiotic.

5 And so, you know, fenbendazole is
6 obviously really important, and I have some
7 serious questions about continuing to list both
8 ivermectin and moxidectin. And, for me, I'm
9 looking to perhaps not have them stay on the
10 list.

11 And so in an effort to get some
12 additional public comment I -- so I was invited
13 to write an article for the Northeast Organic
14 Dairy Producers Association, which obviously is a
15 large group of farmers spread from like
16 Pennsylvania to the Maine coast, and so on -- so
17 it covers a large area.

18 So hopefully we will get some specific
19 feedback from them. That article will go out in
20 May. So hopefully we will get some specificity
21 that will allow us to be able to make a reasoned
22 decision when we get there later this fall.

1 VICE CHAIR FAVRE: Francis.

2 MEMBER THICKE: That would be great
3 if you could do that, Jean.

4 The thing that we need to get to the
5 bottom of, I think is, do they all have the same
6 -- are they effective against the same parasites
7 and for the same species?

8 And we just got the TR in -- the
9 technical review -- last week, and I looked
10 through it quickly. And there's a lot of tables
11 and technical, and maybe we can find some of that
12 out in these tables as we study that more next
13 week.

14 VICE CHAIR FAVRE: Jean.

15 CHAIR RICHARDSON: Yes. I've looked
16 at those tables. It's really excellent
17 information on TR. I think it's really well done
18 and I think it will probably support some of our
19 concerns for the breadth of the pasture ecology
20 that are negatively impacted, by ivermectin
21 especially.

22 VICE CHAIR FAVRE: Nick.

1 MEMBER MARAVELL: Yes. Francis, I
2 just want to add to your comments that it's not
3 only what they're effective against -- I mean the
4 other side of that is if you start to develop
5 resistance are these classes of anthelmintics so
6 similar that you're likely to develop the same
7 resistance?

8 VICE CHAIR FAVRE: Any further
9 discussion?

10 (No audible response.)

11 VICE CHAIR FAVRE: Seeing none, next
12 on the list is peracetic acid. Paula.

13 MEMBER DANIELS: This material was
14 also discussed as part of handling, and in that
15 instance it was a sanitizer. For this category
16 it's the same. It's used in sanitizing facility
17 and processing equipment.

18 It is similarly benign in the
19 environment as it breaks down in to -- it's --
20 like acetic acids and it breaks down similar to
21 the way hydrogen peroxide breaks down.

22 I there was -- there was no opposition

1 to it that I'm aware of.

2 VICE CHAIR FAVRE: Any discussion on
3 peracetic acid?

4 (No audible response.)

5 VICE CHAIR FAVRE: Seeing none, next
6 up is phosphoric acid. Jean?

7 CHAIR RICHARDSON: Phosphoric acid is
8 widely used as an equipment cleaner and it is
9 annotated so that there's no direct contact with
10 organically managed livestock or land occurs.

11 And there was broad support for it and
12 no one suggested that we should delist it.

13 VICE CHAIR FAVRE: Any discussion?

14 (No audible response.)

15 VICE CHAIR FAVRE: Okay. Next up is
16 polaxalene. Francis.

17 MEMBER THICKE: This is a material
18 used for -- to counteract bloat. It could be
19 prophylactically to prevent bloat.

20 Hugh Karreman said that there are
21 other alternative, like olive oil and other oils.
22 And I'm inclined to think that this may be one

1 we'd consider, that we may not want to relist.

2 I don't know that prophylactic use is
3 a good thing. It kind of helps mask good
4 management. And since there are other
5 alternatives -- I've never used it and use other
6 things. But it would be nice to get more
7 comments on it. I didn't see any comments on it.

8 VICE CHAIR FAVRE: Any discussion on
9 poloxalene? Jean.

10 CHAIR RICHARDSON: Yes. I agree with
11 Francis. I think that it just may be a material
12 that could be removed from the national list.

13 VICE CHAIR FAVRE: Any further
14 discussion?

15 MEMBER THICKE: I'm sorry. I think
16 that I misoverlooked a -- there was one comment
17 from the Western Organic Dairy Producers
18 Association that did recommend relisting it, but
19 gave no reason. They went down the list and
20 relist everything, basically.

21 VICE CHAIR FAVRE: Okay, thank you.
22 No further comments?

1 (No audible response.)

2 VICE CHAIR FAVRE: Okay. Next up is
3 tolazoline. Francis, that's also yours.

4 MEMBER THICKE: Tolazoline is
5 something that's used in conjunction with
6 xylazine, which Colehour is going to cover later.
7 Xylazine is used as an anesthetic for sedation of
8 large animals during surgery and so on. And
9 tolazoline is a material that brings them out of
10 that state, so the two kind of work together.

11 I didn't see any comments against it.
12 Let's see. I think the only comment -- no.
13 Beyond Pesticides did say it's not approved by
14 FDA and should be delisted.

15 I can't remember the details. I was
16 going to look that up. I think that there was a
17 -- that it's allowed to be used or else of course
18 we wouldn't be using it. But I need to track
19 that detail down.

20 Organic Valley supported relisting it,
21 and Hugh Karreman thought it was critical for
22 surgical procedures for humane treatment of

1 animals, and to protect the people working with
2 the animals, as you're trying to do surgery on
3 them, that it would be kind of hard to not get
4 hurt.

5 VICE CHAIR FAVRE: They're celebrating
6 dung beetles next door.

7 Any discussion on tolazoline?

8 (No audible response.)

9 VICE CHAIR FAVRE: Seeing none,
10 xylazine. Colehour.

11 MEMBER BONDERA: Yes. I think it's
12 like Francis just suggested. It's actually a
13 little bit hard to separate tolazoline and
14 xylazine.

15 Xylazine is used for sedation of large
16 animals and actually I was going to say what he
17 said, which is actually on the xylazine line of
18 that commentary in terms of, you know, keep the
19 animals so that the humans working with them
20 aren't getting injured, I think.

21 So it's mainly a sedative, it has some
22 other properties, it's widespread use. But I

1 think that there is this question that comes up
2 in terms of interpretation and I have to say, I'm
3 not there. But interpretation of whether or not
4 it is actually permitted by FDA to be used.

5 And I, unfortunately, am not ready to
6 -- to say that it is, but I think that we need to
7 continue to consider that question that's brought
8 up. If it's an off-label use FDA doesn't allow,
9 then we have to consider delisting it. But I
10 don't know about that and I didn't see a lot of
11 input onto the inquiries of alternatives, which
12 we were looking for a little bit of input on.

13 VICE CHAIR FAVRE: I'd like to -- I'm
14 sorry Colehour.

15 MEMBER BONDERA: Yes. Anybody else
16 have something, please.

17 VICE CHAIR FAVRE: I'd like to get
18 feedback from Emily Brown Rosen, please.

19 MS. BROWN ROSEN: Yes. I saw that
20 comment also. Colehour had looked it up. It is
21 allowed under -- and that's the way -- if you
22 look at the proposed -- the final row that

1 amended the list in 2007 to add all those animal
2 livestock medications.

3 You'll find a detailed description of
4 the FDA approval process, which is why its -- it
5 does not have a new animal drug label for its
6 purpose, but it's covered under AMDUCA, which
7 allows veterinarians to prescribe specific uses
8 of these drugs. So it is widely used, but it has
9 to be under a veterinarian's care and
10 prescription.

11 VICE CHAIR FAVRE: Any further
12 discussion on xylazine?

13 (No audible response.)

14 VICE CHAIR FAVRE: That concludes the
15 listing of materials at 205.603(a). We'll turn
16 it over to Dr. Brines for two -- I'm sorry.
17 Jean?

18 CHAIR RICHARDSON: My apologies.
19 There was something that I neglected to mention
20 with the parasitocides came up, that I'm seeking
21 some further input on from my perspective, and
22 that would be, there's been some suggestions that

1 the withholding period for the parasitocides be
2 reduced down from the lengthy period that it is
3 now to about seven days.

4 And so I'd like to be sure that we
5 will get some -- that when you do the write up
6 for the second template, Francis, that you be
7 sure to put in that we're still, -- we're
8 interested in really understanding whether that
9 withholding period should be reduced.

10 And if so, in the meanwhile we should
11 be perhaps encouraging someone to stop, you know,
12 the petition or proposal process for reducing the
13 withholding.

14 VICE CHAIR FAVRE: Thanks, Jane.
15 We'll turn it over to Dr. Brines.

16 DR. BRINES: Thank you. Thank you.
17 The following substances are under review for
18 Sunset 2017, under Section 205.603(b) as topical
19 treatment, external parasitocides or local
20 anesthetic as applicable, copper sulphate, formic
21 acid, CAS number 64-18-6 for use as a pesticide
22 solely within honeybee hives, iodine and new

1 technical reports are available for both copper
2 sulfate and iodine.

3 Lidocaine as a local anaesthetic, use
4 requires a withdrawal period of 90 days after
5 administering to livestock intended for slaughter
6 and seven days after administering to dairy
7 animals.

8 Lime, hydrated as external pest
9 control not permitted to cauterize physical
10 alterations or deodorize animal wastes, mineral
11 oil for topical use and as a lubricant and new
12 technical reports were prepared for both lime,
13 hydrated and mineral oil.

14 Procaine as a local anesthetic. Use
15 requires a withdrawal period of 90 days after
16 administering to livestock intended for slaughter
17 and seven days after administering to dairy
18 animals.

19 Sucrose octanoate esters, CAS numbers
20 49 -- 42922-74-758064-47-4 in accordance with
21 approved labeling. That's the final listing
22 under 205.603(b). Thanks.

1 VICE CHAIR FAVRE: Thank you, Dr.
2 Brines.

3 First material on that list is copper
4 sulfate. Copper sulfate is used to treat foot
5 fungal diseases. There are some concerns about
6 accumulation in the environment as we've
7 discussed during the discussion on zinc sulfate
8 and there were some comments presented about the
9 alternatives, some being dietary supplements,
10 hoof trimming, keeping animals on drier pasture,
11 keeping them confined when it's wet conditions
12 outside, but generally there was widespread
13 support for relisting and some went as far as to
14 say it was a very important tool in the toolbox.

15 Any discussion on copper sulfate?
16 Mac?

17 MEMBER STONE: Just a footnote, I
18 was advised at the break that to Zea's question
19 on the zinc sulfate, it can be fed to animals so
20 I don't think meat is a problem.

21 VICE CHAIR FAVRE: Thank you. Any
22 further discussion? Paula.

1 MEMBER DANIELS: I just want to
2 signal that I do have concerns about this
3 substance. It's something that I'm looking into
4 further in terms of this use -- this type of use.

5 But I do know from being involved in
6 water quality issues, copper is quite a
7 significant problem when it accumulates both in
8 soil and in water. So I just wanted to signal
9 that, for what it's worth, that I'm quite
10 concerned about this substance.

11 VICE CHAIR FAVRE: Thank you. Any
12 further? Francis.

13 MEMBER THICKE: I guess I would say
14 too, as a topical and I -- you know, I never use
15 it. They use it for foot care, I guess and --
16 oh, wait it's in a foot bath, isn't it. That's -
17 - yes. Okay, never mind.

18 VICE CHAIR FAVRE: Anything else?

19 (No audible response.)

20 VICE CHAIR FAVRE: Okay, seeing none.
21 Next step is formic acid, Colehour.

22 MEMBER BONDERA: Thank you. Yes, so

1 formic acid is used to -- with honeybee hives and
2 we didn't get a lot of input on whether or not it
3 should be relisted.

4 You have to remember how it came about
5 to be listed though, was sort of a pretty urgent
6 pre-technical review decision that happened, I
7 think actually at the meeting in Woodlands,
8 California. I'm not positive, I wasn't there.

9 But it was because of -- in reaction
10 to in desperation of what was happening in Hawaii
11 with the varroa mite attacking the largest scale
12 honey producer in the State of Hawaii, who
13 happens to be a neighbor of mine.

14 So I honestly should have more
15 personal information on this than I'm going to be
16 presenting and I'm frankly -- apologize that I
17 didn't fit that into my schedule, to get him
18 either to -- I actually had mentioned to him, I
19 think I sent him an e-mail asking him to comment
20 on you know, since that time should it be
21 relisted.

22 We did get, like I said, a little bit

1 of comment. Western Organic Dairy Producers
2 Alliance suggested that we should relist. I
3 think we have one opposition, Beyond Pesticides
4 that says that we should really look at the
5 information in the TR and get input from
6 beekeepers to determine whether or not
7 alternatives are effective and/or the hazards
8 that are relative to it are worth dealing with.

9 You know, it deals with a couple of
10 mites, the varroa mite and the tracheal mite and
11 there are other options available, but like --
12 like my neighbor says, they aren't functionally
13 effective. Although, frankly, my one-on-one
14 interaction with him about a year ago suggested
15 that he was moving on from formic acid and
16 considering having to not be organic, because
17 formic acid wasn't as effective as anticipated.

18 That's why I was hoping for more
19 comments. So I'll be harassing him more in the
20 next few months to see, you know if it has
21 utility in terms of being the answer sought and
22 effective as necessary.

1 But I don't have more information at
2 this time and if anybody else has anything to
3 add, please do.

4 VICE CHAIR FAVRE: Any discussion on
5 formic acid?

6 (No audible response.)

7 VICE CHAIR FAVRE: Seeing none, next
8 up is lidocaine. Jane.

9 CHAIR RICHARDSON: Before lidocaine,
10 I should give you an update on Harold, who had
11 been trying to get in on our meeting for this
12 afternoon, but he's now in physical therapy, poor
13 guy, and he may or may not be able to join us
14 this afternoon, so he apologizes.

15 And I have also been told that he will
16 be leaving the hospital tomorrow at 1:00 p.m. and
17 if there's any of you still around, it would be
18 great to get together to give him a sendoff at
19 the hospital.

20 Then on to lidocaine. Lidocaine is a
21 local anesthetic. The use requires a withdrawal
22 period of 90 days after administering to

1 livestock intended for slaughter and 70 days --
2 sorry, seven days after administering to dairy
3 animals.

4 This material is fairly critical
5 material. We got strong support for it from the
6 broad community. We did have some strong
7 suggestions that there should be a shorter
8 withholding period of seven days and not the 90
9 days. Seven days for both the slaughter stock as
10 well as for the dairy animals.

11 Hugh Karreman urged us to look at that
12 and so I am hoping that we will get -- be able to
13 persuade someone such as Hugh Karreman, from his
14 veterinarian experience to either help the
15 Subcommittee develop a proposal or that he would
16 develop a petition as appropriate.

17 Because the research clearly indicates
18 that the -- that lidocaine is gone from the
19 system within something like 48 hours, so seven
20 days is going to give you plenty of time for that
21 material to be out of the system of the animal.

22 And so otherwise, it's a strongly

1 supported material.

2 VICE CHAIR FAVRE: Any discussion on
3 lidocaine?

4 (No audible response.)

5 VICE CHAIR FAVRE: Okay, seeing none.
6 Next up is lime, hydrated. It's a topical
7 treatment, external parasitocides or local
8 anesthetic as applicable.

9 I'm sorry, I was looking at the wrong
10 spot. And it's basically used for external pest
11 control, quite often used to control flies in
12 litter and bedding.

13 There was actually not a great deal of
14 comment that we received on this. We did receive
15 comment from Western Organic Dairy Producers
16 Alliance in support of it.

17 And Dr. Hugh Karreman said that it's
18 a much needed compound for its stated use as well
19 as, as it came up in our conversation earlier
20 about copper sulphate, very very helpful to
21 prevent hoof problems when used as a walk through
22 box and it can reduce the use of copper sulphate.

1 Is there any further discussion on
2 lime, hydrated?

3 (No audible response.)

4 VICE CHAIR FAVRE: Seeing none, next
5 on the list is mineral oil --

6 MEMBER DANIELS: I'm sorry, I have a
7 question.

8 VICE CHAIR FAVRE: Yes.

9 MEMBER DANIELS: And I'm sorry I
10 wasn't here for the zinc sulphate discussion. I
11 had to pack, I had forgotten that I needed to
12 check out, when we went through lunch.

13 But zinc also has similar problems
14 with copper in terms of accumulation in the soil
15 and in the water.

16 VICE CHAIR FAVRE: Yes.

17 MEMBER DANIELS: And in some, you
18 know, folks that I know of who work with
19 landscaping, zinc is more toxic for certain
20 plants than copper.

21 So the question I have here about
22 hydrated lime, it says that it can be used as an

1 alternative for copper. It might be the same
2 case for zinc sulphate as well, I would think.

3 VICE CHAIR FAVRE: Yes.

4 MEMBER DANIELS: Thank you.

5 VICE CHAIR FAVRE: Any other questions
6 or comments?

7 (No audible response.)

8 VICE CHAIR FAVRE: The next step is
9 mineral oil. Paula.

10 MEMBER DANIELS: As I mentioned
11 earlier, this has a similar function as the
12 magnesiums that we discussed. It's used as a
13 lubricant, but primarily and topically, but it's
14 also used, I think -- well, sorry. I think in
15 the context and we're looking at it now, it's
16 topical use and a lubricant, not for a
17 digestive.

18 So the thing about mineral oil is it
19 is a petroleum distillate and it's created partly
20 by use of chemical solvents. So historically,
21 there had been some split on whether or not it
22 could be used.

1 But it was noted also in 2003, that
2 the -- in a livestock committee report that the
3 European Union does not allow mineral oil as an
4 ingredient in livestock feed or as a dust
5 suppressant.

6 So the question, I think, is whether
7 or not there are alternatives to mineral oil in
8 the form of fruit- or vegetable-based oils in
9 this use.

10 There were no comments in opposition.
11 In support was the veterinarian and the Western
12 Organic Dairy Producers Alliance.

13 VICE CHAIR FAVRE: Okay. Any
14 discussion on mineral oil? Jean.

15 CHAIR RICHARDSON: Just my question
16 back to Paula. You're not suggesting it would be
17 removed though, right?

18 MEMBER DANIELS: I'm just -- I think
19 that the question to -- for comment, is that is
20 there a viable alternative in terms of vegetable
21 or fruit oil, that would be interesting to hear
22 about from the public.

1 I'm not suggesting removal at this
2 time.

3 CHAIR RICHARDSON: Okay. Because I
4 mean, it's so widely -- it's widely used and I
5 see that it's fairly critically important and I
6 can't imagine that it's going to be -- it
7 couldn't be -- I don't believe from all the stuff
8 I've read that it could be really replaced by,
9 not on a broad scale, by all those alternatives.

10 MEMBER DANIELS: That is a question
11 that I would like to hear comment on. I've used
12 mineral oil myself and I've replaced it with a
13 fruit or vegetable oil-based products myself.

14 But that's a personal choice. This is
15 a different setting.

16 VICE CHAIR FAVRE: Thank you. Nick
17 first and then Francis.

18 MEMBER MARAVELL: Yes, I think that's
19 worth looking into. I suspect there are
20 functional differences between mineral oil and a
21 vegetable or fruit oil, in these applications.

22 VICE CHAIR FAVRE: Francis.

1 MEMBER THICKE: Yes, mineral oil is
2 used for fly spray and I've discovered that I can
3 use organic soybean oil and get the same effect.

4 So I would like to know more about
5 what uses cannot be replaced by vegetable oils.
6 Maybe we can try to get that solicited from other
7 comments.

8 VICE CHAIR FAVRE: Yes. Tighten up,
9 people. Okay, any further discussion?

10 (No audible response.)

11 VICE CHAIR FAVRE: All right. Next up
12 is procaine. Jean.

13 CHAIR RICHARDSON: So procaine is, you
14 know similar to lidocaine. In fact they're
15 virtually the same materials as Hugh Karreman
16 says in his comments to us, "Lidocaine is easy to
17 come by whereas procaine by itself is not in the
18 United States."

19 Like lidocaine, for example, you use
20 this when the animal is being de-horned as a
21 calf. And similar to lidocaine, there is a
22 strong recommendation that the withholding

1 period, which presently set at 90 days after
2 administering to slaughter livestock, should be
3 reduced to seven days, the same as for dairy
4 animals.

5 And again, along with lidocaine,
6 hopefully Hugh Karreman will help us to develop a
7 petition that would allow us to address that
8 issue.

9 VICE CHAIR FAVRE: Any other comments
10 on procaine?

11 (No audible response.)

12 VICE CHAIR FAVRE: Seeing none, next
13 up is sucrose octanoate esters. Francis?

14 MEMBER THICKE: This is a surfactant
15 that's made from sugar and fatty acids and
16 basically it's used for soft bodied insects and
17 it dissolves a waxy coating on the insects and
18 causes them to dry up and die.

19 And it's used in mite control. So
20 Colehour, when you talk to your friend, why don't
21 you ask him about this one too.

22 MEMBER BONDERA: Okay.

1 MEMBER THICKE: One comment from the
2 Western Organic Dairy Producers Association, they
3 said we list it.

4 VICE CHAIR FAVRE: Any comments on
5 sucrose octanoate esters? I just like saying
6 that. I'll say it again. Sucrose octanoate
7 esters.

8 Okay. That concludes our listing of
9 materials at 205.603(b), turning it over to Dr.
10 Brines.

11 DR. BRINES: Thank you. We'll take up
12 the three listings under Section 205.603(d) next.
13 That's paragraph D as feed additives.

14 First DL-methionine, DL-methionine
15 hydroxy analog and DL-methionine hydroxy analog
16 calcium. CAS number is 5951-8583-91-54857-44-7
17 and 922-50-9, for use only in organic poultry
18 production at the following maximum levels of
19 synthetic methionine per ton of feed. Laying in
20 broiler chickens, two pounds, turkey and all
21 other poultry, three pounds.

22 Continuing as feed additives, trace

1 minerals used for enrichment or fortification
2 when FDA approved. Vitamins, used for enrichment
3 or fortification when FDA approved and a new
4 technical report was developed in support of the
5 vitamins listing for the Sunset 2017 Review.

6 Thank you.

7 VICE CHAIR FAVRE: Thank you, Dr.
8 Brines.

9 First up is DL-methionine. I suspect
10 you all are sick to death of hearing me talk
11 about methionine.

12 But as we as we discussed ad nauseam
13 previous today, it's used as a feed additive,
14 particularly in poultry. And the discussion was
15 widespread both for and against in the public
16 comments.

17 Is there any -- please God, no --
18 further discussion? Mac.

19 MEMBER STONE: Here's everything I
20 didn't say this morning, no. But just to
21 clarify, we need to proceed with relisting this
22 in case the other gets hung up somewhere in the

1 pipe, right.

2 VICE CHAIR FAVRE: Yes. Good to know.

3 Thank you. Seeing no further discussion, I
4 probably want that on the record as the fastest
5 discussion on methionine we've ever had on this
6 Board, by the way.

7 Next up is trace minerals. That's
8 also mine. Trace minerals crucial to overall
9 animal health, widespread support, many many
10 comments in regards to the fact that it's
11 absolutely critical to healthy animals and
12 prevention of disease and proper growth, animal
13 welfare, et cetera.

14 Is there any discussion about trace
15 minerals?

16 (No audible response.)

17 VICE CHAIR FAVRE: Seeing none. Next
18 up is vitamins. Calvin?

19 MEMBER WALKER: Thank you, Madam
20 Chair. My last one, thank God. Vitamins, just
21 like trace minerals are very essential for
22 special monogastrics and we all know that

1 monogastrics are those animals that have simple
2 stomachs. One stomach.

3 And one of the things, if you don't
4 have minerals and vitamins -- normally it's one
5 to two pounds per hundred pounds and if that's
6 not in the diet, you will really have animal
7 welfare issues in terms of issues with animals
8 not performing.

9 So this particular product is
10 certainly needed. Of the public comments, we had
11 a total of 14. Ten out of the 14 was in support.
12 CROP, Hugh Karreman, OAI, Western Organic Dairy
13 Producers, Hugh Karreman, CCOF, National Organic
14 Coalition.

15 Consumer Report had a concern of
16 indiscriminate use that we might have to look
17 into in Food and Water Watch, suggested that only
18 those vitamins that are essential as listed by
19 FDA.

20 But overall there was a high support
21 for vitamins and certainly I would support it. I
22 feel it's essential for good animal welfare.

1 VICE CHAIR FAVRE: Any discussion on
2 vitamins?

3 (No audible response.)

4 VICE CHAIR FAVRE: Seeing none, that
5 concludes our listing at 205.603(d), turning it
6 back to Dr. Brines.

7 DR. BRINES: Thank you. We'll take up
8 the paragraphs E and F next. The following
9 substance is listed under Section 205.603(e), as
10 synthetic inert ingredients as classified by the
11 Environment Protection Agency, EPA, for use with
12 non-synthetic substances or synthetic substances
13 listed in this section and used as an active
14 pesticide ingredient in accordance with any
15 limitations on the use of such substances.

16 EPA lists four inerts of minimal
17 concern. And as previously mentioned under the
18 crops discussion a limited scope technical report
19 that addressed a subset of the EPA list for
20 nonylphenol ethoxylates was prepared for the
21 Sunset 2017 Review.

22 I should mention it was a full

1 technical report for a subset of the materials.
2 And under paragraph F, excipients, only for use
3 in the manufacture of drugs used to treat organic
4 livestock when the excipient is identified by the
5 FDA as generally recognized as safe, approved by
6 the FDA as a food additive or included in the FDA
7 Review and approval of a new animal drug
8 application or new drug application.

9 And a new technical report was
10 developed for the category of excipients in
11 support of the Sunset Review. Thank you.

12 VICE CHAIR FAVRE: Thank you, Dr.
13 Brines. First up is EPA lists for inerts of
14 minimal concern. As discussed previously in this
15 meeting, we are looking at working with EPA on
16 design for the environment Safer Choice protocols
17 to help us assess the inerts.

18 There is obviously a pretty wide
19 spread concern in the community about the use of
20 inerts and so we definitely need to move
21 ourselves forward with some sort of analysis of
22 these.

1 Any comments or discussions on lists
2 for inerts?

3 (No audible response.)

4 VICE CHAIR FAVRE: Seeing none, next
5 up is excipients and that's a joint discussion
6 starting with Jean and then followed by Colehour,
7 if he's got anything to add.

8 CHAIR RICHARDSON: Yes. Excipients is
9 a wonderful group. Just so we all get reminded
10 and especially you know, for folks on the other
11 subcommittees, is that examples of these might be
12 fillers, extenders, dilutents, sweetening agents,
13 solvents, emulsifiers, preservatives, flavors and
14 so forth, which are ingredients that are
15 intentionally added to livestock medications, but
16 don't exert any therapeutic or effect, et cetera.

17 There are about 8,000 substances that
18 qualify as excipients and I repeat, 8,000 and at
19 the present time, given the fact that APHIS does
20 not publish a comprehensive list of excipients,
21 and there is no central list of all non-synthetic
22 substances, it's actually impossible to really

1 provide a complete list of all the excipients
2 that would be eligible for organic production.

3 So it's a really complicated one to
4 have to deal with. Nonetheless, the public
5 comment that has come in supports the use of the
6 excipients, which are obviously important to be
7 able to deliver the drug at a therapeutic level
8 as required.

9 And no one has expressed that I noted
10 in terms of direct opposition of them. Several
11 people did however, raise the same kinds of
12 issues that I'm obviously indicating, is that
13 they're very difficult to deal with, find,
14 interpret to know whether we should keep them or
15 not.

16 And there is nonetheless, as many of
17 the MROs and the certifiers pointed out, that
18 there is presently a need for greater consistency
19 between the MROs and the certifiers as to how
20 they interpret the excipients that are in some of
21 the materials that they are reviewing.

22 So I'm not at all suggesting that

1 excipients would be taken off the list, but just
2 as sort of a reminder that in general we need to
3 continue to seek adequate guidance to make sure
4 that we're consistent in the interpretation.

5 VICE CHAIR FAVRE: Colehour, you have
6 anything you would like to add?

7 MEMBER BONDERA: Thank you, Jean,
8 because I think that Jean did a very fine job of
9 summarizing what is an overly complex issue.

10 I think equate in my mind this topic,
11 even though it's not the same with this whole on-
12 going and sort of endless discussion about inert
13 ingredients. There's just so many things, it's
14 hard to wrap your brain around and wear what is
15 used I think is pretty concerning.

16 And I think that I'll just repeat what
17 she said in terms of you know, how is something
18 added to the list, what is what thing used for on
19 the list. I think that it's confusing and
20 cumbersome and I think that it would be much
21 better for all involved if there was some more
22 functional organization.

1 I'm not sure that I concretely have an
2 idea of how to do that, but I want to bring that
3 up. That's all I want to add. Thank you.

4 VICE CHAIR FAVRE: Any further
5 discussion on excipients?

6 (No audible response.)

7 VICE CHAIR FAVRE: Seeing none, that
8 concludes the listings through 603(f). We'll
9 turn it over to Dr. Brines for 205.604(a)

10 DR. BRINES: All right. One more.
11 The following substance is listed under Section
12 205.604, non-synthetic substances prohibited for
13 use in organic livestock production, strychnine.

14 VICE CHAIR FAVRE: Strychnine, that
15 would be Jean.

16 CHAIR RICHARDSON: Or strychnine, you
17 might say. Everybody agrees that it's a good
18 idea to keep this prohibited.

19 VICE CHAIR FAVRE: Any discussion?
20 Seeing none. Madam Chair, that wraps up the work
21 for the livestock sub-committee and I'll turn it
22 back over to you. Thank you.

1 CHAIR RICHARDSON: Good job, Ms.
2 Favre.

3 All right. So we are actually
4 catching up with ourselves here. There are no
5 deferred proposals or final votes for us to deal
6 with and therefore, Michelle, we could move into
7 the sub-committee work agendas.

8 No. Do people want a break or do you
9 want to finish? Keep going. Okay. We're
10 keeping going.

11 So the subcommittee work agendas, as
12 you recall, Michelle will put them up and each of
13 the Chairs of the individual Subcommittees will
14 comment on their work agendas for their
15 individual subcommittees, so that members of the
16 other subcommittees can ask questions and
17 determine and make sure that we all understand
18 that we're on the same work agendas that we think
19 we are.

20 Mind you, and again you all recall
21 that work agenda items have to be approved by the
22 NOP before they can go onto our work agendas.

1 You know, it used to be the word Work
2 Plan. It was so easy, I had just learned to do
3 that and now it's an agenda.

4 All right. Are we ready? Okay, so
5 the first one up then is Carmella with the CACS
6 Certification Subcommittee. These are your
7 Agenda items, so we'd like to talk about them.

8 MEMBER BECK: Well, at this point and
9 time we delayed the delivery of the assessment of
10 soil conservation practices for the fall and Lisa
11 de Lima will be leading that along with the rest
12 of the subcommittee. But that is our only item
13 at this point and time.

14 Are there any questions?

15 (No audible response.)

16 CHAIR RICHARDSON: Okay. No questions
17 for that. Then let's move to the Crops
18 Subcommittee. Zea.

19 MEMBER SONNABEND: Unfortunately I
20 don't have this on my computer and so I have to
21 turn around. Because I can't see that small
22 print, so I have to turn my back to the audience,

1 okay. Which makes it hard to speak into the
2 microphone. Or I could keep swinging around or
3 something.

4 But usually we have a version of this
5 already. How about this. Usually we get it sent
6 to us ahead, but Sunset has been rather taking up
7 our attention.

8 Hopefully everyone else can just read
9 this, so I'm just repeating what it says up
10 there. Okay, we have petitions. We have
11 laminarin, which has been out a long time and
12 should be back any day.

13 So I do expect it to be on the fall
14 agenda, but we haven't committed to that yet. We
15 have a petition to remove lignin sulfonate for
16 floating fruit that we also hope to get done by
17 fall.

18 We have brand new petitions, the last
19 four are seaweed extracts, anaerobic digest, ash
20 for manure burning and sulfuric acid for
21 solublizing micro-nutrients, and those are so new
22 we haven't even determined whether we need a TR

1 on them yet.

2 So I doubt if they will be on for
3 fall. They're probably going to be longer.
4 Other project include a change to the inerts
5 annotation if we decide to take that up in the
6 course of Sunset, and we may also have a further
7 update on the design for environment at the next
8 meeting.

9 We will just have to see how it
10 proceeds. Contamination issues in farm inputs.
11 We're not sure what the next step will be yet.
12 And I just, you know, let everyone know what
13 should be pretty obvious, is that anything that
14 is not essential besides the Sunset 2017 votes,
15 we're going to push all the way to the end of our
16 agenda next time, which make them not on the
17 Agenda next time, because we have to complete the
18 Sunset process.

19 Okay. So then the rest is Sunset
20 2017, which goes on for a while and I'm not going
21 to read them all out. We heard them the other
22 day. And I believe that covers it.

1 CHAIR RICHARDSON: Okay. What comes
2 after C. Oh right, handling. Oh, poor old Tom.
3 He hasn't seen this bit before, so it's all brand
4 new to him. He just learned three seconds ago
5 that he has to present this. So go for it.

6 MEMBER CHAPMAN: Can we get Harold on
7 the line? So handling, we have -- I guess that's
8 three petitions before us. Sodium lactate to add
9 to 205.605, potassium lactate to 205.605 and a
10 flavor petition to change the annotation
11 205.605(a).

12 Other projects are packaging
13 substances used in organic food handling,
14 including BPA and sodium substances for
15 microorganisms that was referred back at this
16 Committee.

17 And bacteriophages. And then Sunset
18 2017 materials, as read on Tuesday morning. Yes,
19 that's Tuesday. It's only 104. There we go.
20 Not too bad.

21 Zea, do you want to say anything about
22 bacteria flush?

1 MEMBER SONNABEND: Well, just that
2 it actually hasn't been officially approved by
3 the program, but people's heads were nodding when
4 I asked if we could take it off, of the proposal
5 that we passed the other day and so I'm assuming
6 that that means the Department will allow us to
7 put forward a separate proposal letter, next
8 meeting.

9 MEMBER CHAPMAN: Any questions on the
10 handling materials?

11 (No audible response.)

12 MEMBER CHAPMAN: Seeing none. Back
13 to you, Madam Chair.

14 CHAIR RICHARDSON: Thank you. The
15 next Subcommittee is Livestock.

16 VICE CHAIR FAVRE: Thank you. We have
17 petition materials. Aluminum sulfate at 603 and
18 601. Sodium bisulfate at 603 and bentonite acid
19 activated at 603. And additionally, while it's
20 not up there, but obviously has come out of this
21 discussion.

22 We need to have a conversation at the

1 program about the possibility of an organic
2 poultry working group or a task force or whatever
3 form that will take and find out how we might get
4 that on our work plan.

5 I see Miles taking notes, so that's a
6 good sign, perhaps. Depending on what he's
7 writing, I guess.

8 And then we also have the 2017 Sunset
9 materials for us to go through. Any questions
10 about -- yes.

11 CHAIR RICHARDSON: Would you just like
12 to just say a few words about the back burner
13 items of all those aquaculture materials and --

14 VICE CHAIR FAVRE: I was really kind
15 of hoping not to.

16 CHAIR RICHARDSON: Yes, they're right
17 there and we should at least mention the fact
18 that they are on the back burner of our work
19 agenda.

20 VICE CHAIR FAVRE: Yes. I believe the
21 total number of materials is eleven materials
22 that we have on the back burner for materials

1 that were petitioned for use in aquaculture.

2 Depending on what happens with the
3 proposed standards, if whether they come out this
4 year or not. Miles actually asked me the other
5 day if we were going to take them up in livestock
6 for the fall meeting. I told him, "no."

7 So obviously we've got a pretty
8 significant load with the 2017 Sunset materials.
9 So look for it on our work, what are we calling
10 it, work plan?

11 CHAIR RICHARDSON: Work agenda.

12 VICE CHAIR FAVRE: Work agenda, at
13 some point in the near future. Any other
14 questions? Thank you.

15 CHAIR RICHARDSON: Next Subcommittee
16 is Materials.

17 MEMBER WALKER: Thank you, Madam
18 Chair. We have two items that are not on the
19 work plan that we hope to do a proposal for.

20 One would be to comment on APHIS, part
21 304, Regulation on GMOs. And certainly we have
22 to get that approved by the program.

1 And the second item that is not up
2 there that we hope to try to do for Miles, is to
3 see if he can give a pay raise to Emily, Michelle
4 Aresenault and Emily and the rest of his staff.

5 Okay. The other items we have here is
6 for the fall agenda, is the research priorities.
7 We will be bringing that back up. We do this
8 every year. Dr. Taylor, Jennifer Taylor will be
9 leading that and we will be getting solicitation
10 from all the committee to prioritize their
11 research needs.

12 Petition and TR tracking is another
13 item we're looking for, as related to the GMO or
14 seed purity for GMO. Excluded method terminology
15 and preventative strategy guidelines for excluded
16 methods in crops and handling.

17 And I think I just want to mention,
18 talking with Zea yesterday, I'm not sure if you
19 all heard that meeting, but I thought it was
20 encouraging. She was to be meeting with a group
21 from one of the major agricultural universities
22 on -- about research.

1 So I would definitely be interested in
2 seeing that because these 1890's and 1862's have
3 one, two, three billion dollars' worth of
4 research dollars, so we need to tap into that.

5 CHAIR RICHARDSON: Any questions from
6 anybody on that?

7 (No audible response.)

8 CHAIR RICHARDSON: Okay. I'm never
9 quite sure why it is that GMO ad hoc is not just
10 part of materials. Why we have to have it as
11 separate. But you guys tell me why one of these
12 days.

13 The next Subcommittee is Policy and
14 that's Tracy.

15 VICE CHAIR FAVRE: Yes, Policy
16 Development Subcommittee has had previous to
17 about two months ago, been a pretty long extended
18 hiatus. We, I guess, probably about two months
19 ago -- maybe a month and a half ago, received the
20 most updated version of the PPM, Policy and
21 Procedures Manual back to the committee.

22 It took a while to get everything sort

1 of collated from all the various changes that had
2 been recommended. And we started meeting again
3 on a monthly basis to discuss that.

4 Had a real good conversation with the
5 program about how to move forward in
6 collaboration to make sure that we aren't making
7 recommendations and changes to the PPM, that
8 actually conflict with where our authority lies
9 and what can and cannot be done under those
10 restrictions and I think we're going to find that
11 to be a very collaborative process.

12 And we do have a couple of other key
13 issues that have come up as part of that PPM that
14 we need to put some extra emphasis to. The first
15 being the minority opinions procedure.

16 We had a little bit of wrangling with
17 that on the livestock committee earlier this
18 year. I don't think it was because of any ill
19 will anywhere, it was just very confusing.

20 The PPM is not particularly clear. It
21 leaves a lot open to interpretation and so we
22 want to sort of provide some language to clarify

1 that.

2 The withdrawal of petitions we've
3 seen, I think it was a total of three petitions.
4 Maybe it was only two, but a couple of petitions
5 that had been withdrawn after deliberations and
6 work and money had been spent by the program and
7 effort had been put in by the Subcommittees and
8 the Board.

9 And so we want to see if there is some
10 way that we can provide some recommendation on
11 how to handle withdrawal of proposals, whether
12 it's to limit the withdrawal beyond a certain
13 point in the deliberations or what, we don't know
14 yet.

15 We need to update the member guide.
16 As it currently stands right now, we're thinking
17 part of the problem with the PPM is that there is
18 a lot of static material in there, material that
19 shouldn't change very regularly and then there
20 are certain things that do, like forms and
21 templates and things like that.

22 So we're talking about perhaps

1 splinting some of that information off and
2 putting it in a member guide, formally known as
3 the new member guide, so that it becomes more of
4 a living document.

5 And whether that will take the form of
6 being an appendix to the PPM or whether it will
7 be a second document, we're not exactly sure yet.

8 And then finally, the general
9 revisions that need to take place. There are
10 certain things that are sort of time bound, that
11 don't really lend themselves to that including
12 some things like how much money is allowed for
13 meetings and things like that, that would require
14 an update of the PPM as time went on.

15 And so we're trying to make that a
16 little bit more flexible in regards to that. But
17 that is the only current item on the work agenda
18 for the PDS.

19 CHAIR RICHARDSON: Thank you, Tracy.

20 Are there any other issues about work
21 agenda items that anyone wants to bring up? Any
22 questions or concerns? Any agenda items that you

1 think should be added that are not being
2 addressed adequately by either the Subcommittees
3 or the NOP is not letting us do or whatever?

4 This has been a concern before. Yes,
5 Paula.

6 MEMBER DANIELS: I just wanted to
7 come back to a comment I made, and I forget now
8 which day it was. But it was about the question
9 about public input in the period between now and
10 our September meeting.

11 And understanding that it is fairly
12 complex and we're attached to a federal process,
13 which attempts to be fair to the entire country,
14 which requires notice and so forth, for most
15 public comment.

16 So it's a complex and time consuming
17 process. So that may be not being the best
18 avenue, one thing that I'd like to throw out for
19 consideration, and we don't have to discuss it
20 now, but something to maybe talk about in
21 committees or otherwise, is if we could add some
22 informal types of ways to gather public comment,

1 perhaps by a web-based listening session on
2 specific topics.

3 And my thought would be to have it
4 sometime in the summer. So for example, for the
5 ones that we've all clearly indicated, in terms
6 of the Sunset materials, the ones that we are
7 considering removal, to have a web based
8 listening session on so people can dial in from
9 anywhere, on those removed petition or those
10 subject to removal or being considered for
11 removal, I should say.

12 And then perhaps one on aquaculture,
13 that sort of thing. There may be other topics.
14 But not an extended array. Obviously there takes
15 a lot of staff support for this and our staff are
16 already quite overloaded with work, as are our
17 Board members.

18 So just limited in focus and time is
19 what I was thinking, just to check in at some
20 point during the summer.

21 CHAIR RICHARDSON: Miles, is that
22 something you would like to reply to before I

1 move on to another point?

2 MR. MCEVOY: Yes, I think there's a
3 lot of different things to think about, as we get
4 ready for the fall meeting.

5 The fall -- this meeting is a four day
6 meeting, a bit long. We're kind of planning for
7 the fall meeting to be four days as well, but
8 there's a lot of materials, a lot of substances
9 to review, a lot of votes that will need to
10 occur.

11 And there is always a lot of public
12 comment, which is really really good. So how do
13 you do all those things, where you want all that
14 public comment to be able to be considered and
15 enough time for the Board to consider all these
16 various items.

17 So there's been a lot of different
18 ideas that have come up over the last few days
19 and I'd encourage you, if you have any specific
20 ideas of how we can get creative with meeting all
21 of those different competing interests, I guess.

22 They're not necessarily competing, but

1 all those desires when we only have a limited
2 amount of time. We're very interested in that.

3 So just to throw out some of the
4 ideas. There's the idea of having this Webinar
5 sessions during the summer on particular topics.
6 We could do one on crops, one on livestock, one
7 on handling materials to get some additional
8 input.

9 There would be other ideas of having
10 a Webinar session for the public, for the oral
11 comments to occur through a Webinar before the
12 Board actually meets in person, so that the
13 public comment could come in and be considered
14 before the Board actually meets.

15 And then have anyone -- they don't
16 have to travel to Vermont to be able to give that
17 oral comment. And I'm just throwing out ideas
18 here, because as this industry continues to grow
19 and there's lots and lots of people interested in
20 commenting and participating, it gets
21 challenging.

22 Because as I presented on Monday, the

1 Board only has \$190,000 that can be used for
2 operating the Board on a yearly basis. That's a
3 cap. We can't have additional physical meetings
4 that incur costs that would go above that cap.

5 So we have to look at other ways of
6 facilitating public comment into this whole
7 process. So we'll continue to look at that and
8 look forward to folks ideas on how we can do
9 that.

10 CHAIR RICHARDSON: Thank you.

11 Jennifer.

12 MEMBER TAYLOR: Along the same lines
13 that Paula mentioned, I as a member of the Board,
14 I would like to encourage other Board members to
15 encourage the program to bring to their agenda.

16 As Miles said earlier, it's not quite
17 on the agenda, to have the docket concept of
18 communication between the public and the Board
19 members brought to the work plan of the program.

20 CHAIR RICHARDSON: Thank you,
21 Jennifer. Other comments? Yes, Zea.

22 MEMBER SONNABEND: I realized having

1 not seen the crops work agenda quite before, that
2 there's two other on-going crops things that I
3 should probably at least mention.

4 They have been touched on here, and
5 probably won't be for fall, but you never know.
6 One of them is the hydroponic task force that is
7 forming and that will definitely not be on the
8 agenda for fall, but it will be a task force that
9 will hopefully complete its work in the next year
10 or so

11 And the nominations for that are still
12 open. I can't remember the date, but I think it
13 closes fairly soon, right?

14 MR. MCEVOY: Yes.

15 MEMBER SONNABEND: And so anyone who
16 wants to get into the debate over hydroponics,
17 you know, please put your name in for that. Do
18 you know the date off the top?

19 MR. MCEVOY: It's May 8th, I think.

20 MEMBER SONNABEND: Okay.

21 MR. MCEVOY: May 8th, so it's a week
22 away.

1 MEMBER SONNABEND: That's one thing
2 and then the other that Miles touched on briefly
3 in his report, the issue of the bio-based, bio-
4 plastic mulches may come back before the crops
5 committee.

6 We're not sure how, we're not sure
7 when, but that's a "stay tuned for further
8 development."

9 And then while we're on the subject of
10 nominations, there are five seats coming open on
11 the Board and I'm sure we would like more
12 nominations for that and especially if you would
13 like to really review a lot of ancillary
14 substances in the future, or inerts, put your
15 name in that.

16 CHAIR RICHARDSON: Okay. Any other
17 comments?

18 (No audible response.)

19 CHAIR RICHARDSON: The next item --
20 that completes our discussions on Subcommittee
21 work agendas.

22 The next item on our agenda is the

1 presentation of plaques to the incoming members.
2 And the incoming members have the opportunity at
3 this time to let us know and give us a few ideas
4 on what are their goals.

5 You know, why are they here, what
6 would they like to see happen in the five years
7 in which they're on the Board. And so, let's
8 see. How are we going to do this?

9 MR. MCEVOY: Okay. So this is the
10 official presentation of the plaques. There is
11 also a letter from Secretary Vilsack to the new
12 members of the National Organic Standards Board.

13 So first I'll present the plaque to
14 Paula Daniels, for her accepting the call to
15 serve the nation and the United States Department
16 of Agriculture as a member of the National
17 Organic Standards Board.

18 MEMBER DANIELS: I'm supposed to say
19 a few words here.

20 CHAIR RICHARDSON: You don't have to.

21 MEMBER DANIELS: I think the one
22 thing I would want to say is how grateful I am to

1 be part of this process.

2 I never imagined I would learn as much
3 as I have in the time that I've been a part of
4 this group. And among the things I've learned,
5 aside from the various uses of a number of
6 materials that I'd never even heard of before in
7 ways I'd never even thought of before, is how
8 valiant this struggle is for some kind of
9 fairness in managing this process.

10 There are differences of opinion, but
11 the point of being a Board, the point of having
12 public input, the point of everything that we're
13 struggling to do, is to try to arrive at some
14 sort of fairness and balance in a country that
15 has 320 million people and a lot of other
16 organizations and processes, all of which need to
17 be somehow managed in a way that's most fair.

18 And it's not an easy process, but the
19 struggle is really important and it's a different
20 context in which this quote was uttered, but I
21 often think of this statement from Martin Luther
22 King, "The arc of the moral universe is long but

1 it bends towards justice," meaning that it takes
2 a while and it's a struggle.

3 But if you keep your eye on the goal,
4 you will eventually get there. So I appreciate
5 the struggle of everybody who participates in
6 this and I thank you very much for the
7 opportunity for that.

8 MR. MCEVOY: Again, thank you for your
9 service.

10 The next one I'm going to give is to
11 Ashley Swaffar, for her accepting the call to
12 duty to serve the nation and the organic
13 community. So thank you, Ashley. We're going to
14 do the photos after.

15 MEMBER SWAFFAR: Okay. So I'm
16 really excited to be on the Board and the one
17 thing that I hope to see during my term is maybe
18 not necessarily Board related, but industry
19 related.

20 And that's some broad based promotion
21 of the organic label. And you know I want to
22 challenge several organizations to find a way to

1 come together, work together to promote the
2 organic industry.

3 So OTA, NOC, OCA, Cornucopia, Center
4 for Food Safety, Consumer Reports, Beyond
5 Pesticides, I'm challenging you and I'm hoping
6 that you can work together to promote the organic
7 products to each of the millions of consumers and
8 members that you represent.

9 Now I'm not asking you to sit down and
10 be quiet and clap louder, because I know we'll
11 all still have our differences when it comes to
12 proposals and Sunsetting of materials and I truly
13 love each of your passions for this industry.

14 But just imagine what we could do if
15 we put the brightest minds in this industry
16 together to promote organics. So, that's me.
17 Thanks.

18 MR. MCEVOY: Okay. Next is Tom
19 Chapman and Secretary Vilsack is pleased to
20 appoint you to your five year term to serve as a
21 member of the USDA's National Organic Standards
22 Board. So thank you so much, Tom, for your

1 service.

2 MEMBER CHAPMAN: Thank you. The
3 reason I'm here, I think is shared by many in
4 this room. It's that I want to change what I see
5 as a broken food and agricultural production
6 system, that's come to look more like an outdoor
7 chemistry lab than a complex network of soil,
8 water, air, plants, animals and people that
9 healthy farms truly are.

10 I have the honor to hold the seat that
11 represents organic food manufacturers and we're
12 in a unique spot between farmers and consumers.

13 Organic value is value added at the
14 farm. Food makers hold the unique position to
15 protect that integrity of the farm level value
16 ad, while maintaining and promoting consumer
17 confidence in this label and movement.

18 Food makers also play a critical role
19 in providing greater access to organic products,
20 to that end.

21 My goals while on this Board are to
22 continue to maintain and emphasize the organic

1 value added at the farm level, to continue to
2 maintain and improve consumer confidence in that
3 organic label, to continue to grow the food and
4 organic food in agriculture so we can offer a
5 viable alternative to chemical agriculture while
6 increasing access to organic food to more
7 communities.

8 And lastly, I look forward to keeping
9 the NOSB a thriving form for diverse democratic
10 debate for the future of this passionate organic
11 movement. Thank you.

12 MR. MCEVOY: Okay. And last, but not
13 least, Lisa De Lima. So congratulations for your
14 service on behalf of Secretary Vilsack. We'll
15 present you with this plaque.

16 MEMBER de LIMA: So I'll be brief.
17 I hold many of the same sentiments that my three
18 peers just expressed. With Ashley, definitely.

19 I would like to see us, while still
20 having a healthy debate, be able to walk out of
21 here and continue to grow the movement and
22 inspire confidence in the end consumer, so that

1 they can continue to help us in the growth of
2 organics.

3 Over the next five years specifically,
4 I really just want to work to bolster that trust
5 that consumers have and continue to have in the
6 label.

7 I do worry with all the different
8 labels out there, and when I'm talking to
9 customers in our stores, there is starting to be
10 a lot of confusion out there.

11 And I want to make sure that the
12 integrity of the label stands and doesn't get
13 watered down.

14 CHAIR RICHARDSON: Okay. Thank you
15 very much all of you and welcome to the Magical
16 Mystery Tour for the next five years.

17 The next item on our agenda is to
18 attend to both other business and some closing
19 remarks. I know I just have a very few closing
20 remarks, and so shall we see first if there's any
21 other items that anyone wants to throw out there
22 for discussion while we're all together?

1 It's always so nice to see everybody's
2 faces, than being on phone calls all the time.
3 Anything else? Because then I'll have Miles --
4 do you have any closing remarks that you'd like
5 to make?

6 No? Oh, okay. He's all talked out.
7 So let me just say a couple of things. First, we
8 have the Board and the NOP has clearly heard that
9 you need to have more time to get your comments
10 in when we put out our Sunset materials.

11 And I agree that that's a very serious
12 item that we need to try to work out a date well
13 ahead of time, so that stuff can be on the
14 Federal Register, so you can give us timely
15 written feedback.

16 And the detail of the written feedback
17 that we received for this meeting, as I said in
18 my opening comments, was absolutely astounding
19 and was enormously and is enormously helpful.

20 So I really encourage the written
21 materials. That's the most helpful stuff to us
22 and several of us on the Board are happy when you

1 send it in to the Federal Register. Some of us
2 on the Board are very happy to receive that in
3 directly to us at the same time as you send it in
4 to the Federal Register.

5 I know that some people say it's not
6 a good thing to do, but boy, it's so helpful
7 because that way I get it as soon as it's on the
8 Federal Register so that I have time to really
9 analyze it because there's going to be so much of
10 it.

11 And the other thing that we clearly
12 heard that was already discussed a little bit, is
13 that we need to look at more efficient ways to
14 get more oral input from the public as our
15 industry or organic community grows larger and
16 larger.

17 I know that the NOP has had listening
18 sessions in the last year, sort of
19 experimentally. I have to admit they weren't
20 super attended, so if we do in fact do a
21 listening session such as the one that Paula was
22 suggesting, that it would be great to get the

1 word out to make it economically sort of
2 worthwhile and time worthwhile.

3 I certainly would encourage that as a
4 way to do it, as a way just to express what needs
5 to be expressed that can't be done in writing.

6 And the other thing that I would
7 strongly urge for people that really feel they
8 have to come and talk, is for many points of
9 view, what happens, and I've seen it over the
10 last four years, is that when we get all our
11 commenters, if they're just repeating what
12 they've already sent in, in writing, it's a
13 little bit frustrating, because we know we've
14 read it, and we really do read it.

15 And so if you're an oral commenter out
16 there, it's really good if you could write it
17 down on paper and send it in, rather than just
18 sort of trying to rush through those four minutes
19 of time.

20 So that way, in a way, you have more
21 time if it's already printed and sent and
22 distributed through the usual Federal Register

1 system.

2 Because I have a horrible feeling that
3 we're going to make the decision that we will
4 have to reduce the public comment to three
5 minutes in the fall. You understand I know how
6 many materials we have to get through to vote.

7 So we have to take this extremely
8 seriously and for that fall agenda also, we will
9 reduce the amount of time that we're going to let
10 the NOPs speak on the agenda. And I already
11 warned Miles of this, and we're going to not have
12 any panels, so that the emphasis can be that we
13 have adequate time to, as a Board, to be able to
14 thoughtfully debate the complexities, especially
15 around those materials that we might consider
16 removing from the National List.

17 Because for some of them, it might be
18 straightforward, but I'm not sure it's going to
19 be straight forward for any of them.

20 Let's see, so the other next thing is
21 that I'd like to thank all of the Board and the
22 public for listening to each other. That's just

1 enormously appreciated.

2 There is tension, there's politics,
3 there's all kinds of stuff going on and it's all
4 absolutely normal what we're doing. It's just a
5 normal cycle of things that we're all going
6 through.

7 Urging us to seek common ground and
8 remembering the context as I did in my
9 introductory comments. All the context within
10 which we work. A changing federal government
11 coming up not too long from now, maybe, along
12 with climate change, I mean, which is more
13 important. But both are important.

14 Because then they'll all effect what
15 we do and how we do it. And be patient. A lot
16 of things take a long time. I've been around for
17 more years than I care to say, and so I've --
18 it's only 20 years ago since I remember telling
19 people that cows could eat grass. They didn't
20 have to be in a barn all the time.

21 And so we have come a long way. We
22 have to be patient. So listening to each other,

1 working through it, nothing is simple, is
2 incredibly important.

3 And if when we're getting mad at each
4 other or the issues, because we want our agenda
5 item to move forward, so to speak, is to remember
6 that just before we say, "I really don't agree
7 with you on that," is to say, "I really love
8 organic farming, organic agriculture, organic
9 products and the industry, and also I would like
10 this thing to improve."

11 So that the broader public knows that
12 all of your organizations are actually really in
13 favor of organic, even though you're really
14 anxious to get something changed that you know in
15 your hearts is something that needs to be
16 changed.

17 And we've also heard the concerns of
18 everybody at this meeting, both through written
19 comments and oral on all the various Sunset
20 materials. And you've heard back from us, the
21 pieces of the puzzle that is still missing to us,
22 the things that would give us greater confidence

1 as we go through our voting in the fall.

2 And I again repeat that I don't think
3 that any Board has ever done as much work on
4 analysis of the materials as this Board of 15 has
5 been able to do and including the four that have
6 already finished their term in the last few
7 months.

8 So tell us more. Tell us more about
9 the things that we're concerned about on those
10 materials that are critically important. Because
11 we really want to do a good job.

12 I think I was quoted in the Washington
13 Post as saying that I think of us all as being
14 "romantic realists." You know, we know we can't
15 get everything, but we really in our hearts would
16 like to do the right things. All of us.

17 From my perspective, you can, of
18 course, contact me as an individual any time you
19 want. You have all my phone numbers and e-mails
20 and any time you need to talk to me, I am
21 available to you, to hear your worries, your
22 concerns, no matter how trivial you might think

1 they are.

2 Some board members don't like to
3 always be being contacted, but I'm the kind that
4 really likes to hear everything so that if I can
5 make a difference quickly, I will do.

6 Then on to Vermont, a much more
7 exciting topic. We won't have a noisy thing like
8 this behind us in Vermont, because we have the
9 entire resort -- I'm not allowed to say this on
10 the record, I'll put my head across here and tell
11 you it's also a spa.

12 And so we have the whole conference
13 center to ourselves for that four-day period of
14 time. So I hope it will be a relaxing
15 environment within which to discuss these amazing
16 complexities.

17 And so we'll be able to enjoy each
18 other's company. The evening reception on the
19 Tuesday night, which will be a taste of Vermont
20 with a bonfire and hay bales, will be right there
21 at this conference center, so that we don't have
22 to get into buses and go tramping around all over

1 the place.

2 Hopefully it will be an atmosphere
3 that will engender further collaboration and
4 community building and celebration of 25 years of
5 organic agriculture.

6 And clothing in Vermont it's a dress
7 down event. We don't need to wear our Washington
8 suits when we're there. In fact, I think Ashley
9 has some plans for us having themed clothing
10 days, so she may be sending out some sort of
11 agenda as to what we're going to wear.

12 Skirts for the guys, is that what you
13 had in mind?

14 MEMBER SWAFFAR: Lots of flannel,
15 Jean.

16 CHAIR RICHARDSON: Oh, flannel.
17 Flannel. Okay, there's a Vermont flannel company
18 and some of it's organic. So you could always
19 think of that.

20 So it will be, I hope a very pleasant
21 environment within which to work and again, I
22 encourage my fellow members of the National

1 Organic Standards Board to please go to the NOC
2 meeting, if you are able to, which will I assume,
3 take place on the Sunday.

4 Because our meeting will start at 8:30
5 on the Monday morning and extend through. I'm
6 sure it will cover all four days and ending up on
7 the Thursday.

8 We're not planning field trips again,
9 just so that we can concentrate on the serious
10 work that we have to do during those four days.

11 Michelle, there's something I'm
12 missing out, right?

13 MS. ARESENAULT: I was just wondering
14 how much maple syrup it would take you to make
15 candy for 150 people.

16 CHAIR RICHARDSON: Organic maple syrup
17 is extremely expensive. But it could be done.
18 Yes, I'll speak to the kids. I'll make them do
19 it.

20 Although actually I'm the one that
21 usually makes all the candy. But yes, you'll get
22 some nice things when you're there.

1 Does anyone have any questions about
2 the fall meeting before we go out of here? Oh,
3 you want the group photo? Oh, yes, for Board
4 members and for the new members, we will do a
5 group photo, so don't run off immediately, Board
6 members.

7 And so what I'm going to do is just
8 I'll see you all in Vermont. And was that a very
9 good southern accent? It wasn't really was it,
10 no. Terrible. It was terrible.

11 Well, I'll try the English one. I
12 look forward very much to seeing you in Vermont
13 in the fall.

14 MS. BROWN ROSEN: Do you want Ashley
15 and I to show you how to do that?

16 CHAIR RICHARDSON: You could. You
17 could.

18 MS. BROWN ROSEN: Or Matt too.

19 MEMBER SWAFFAR: You've got to be a
20 real like drawn out y'all. We'll see y'all in
21 Vermont.

22 CHAIR RICHARDSON: Well, there you go.

1 That's lovely.

2 MS. BROWN ROSEN: Bless your heart.

3 CHAIR RICHARDSON: Now wait a minute,
4 we have one more thing. I'm not allowed to close
5 the meeting, but I guess, let's see, I have my
6 little wand. Are we going to do it together?

7 MR. MCEVOY: The meeting is now
8 adjourned.

9 (Whereupon, the above-entitled matter
10 went off the record at 4:01 p.m.)

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